ADDIS ABABA UNIVERSITY
COLLEGE OF HEALTH SCIENCES
SCHOOL OF NURSING AND MIDWIFERY
DEPARTMENT OF NURSING

ASSESSMENT OF KNOWLEDGE AND SELF-CARE PRACTICE TOWARDS HYPERTENSION MANAGEMENT AMONG ADULT HYPERTENSIVE PATIENTS IN SELECTED GOVERNMENTAL HOSPITALS IN ADDIS ABABA, ETHIOPIA, 2023

BY: FREWEINI GEBREMESKEL (BSC)

A THESIS SUBMITTED TO ADDIS ABABA UNIVERSITY, COLLEGE OF HEALTH SCIENCES SCHOOL OF NURSING AND MIDWIFERY, DEPARTMENT OF NURSING IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTERS OF SCIENCE IN CARDIOVASCULAR NURSING

JANUARY, 2023
ADDISABABA, ETHIOPIA

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APPROVAL SHEET

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STATEMENT OF DECLARATION

By my signature below, I honestly declare and confirm this thesis is my own work. I have followed all the ethical principles in the preparation, data collection, data analysis and completion of this thesis. All scholarly matters that are included in this thesis have been given recognition through citation. I confirm that all sources have been cited and referenced.

This thesis is submitted in partial fulfillment of the requirement for a graduate degree from Addis Ababa University at College of Health Science School of Nursing and Midwifery Department of Nursing. The thesis will be deposited in the digital library of Addis Ababa University. I declare that this thesis has not been submitted to any other institution anywhere for the award of any academic degree, diploma or certificate.

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This thesis by **Freweini Gebremeskel** is accepted in its present form by the board of examiners as Satisfying thesis requirement for the degree of masters in Cardiovascular Nursing.

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List of Acronyms and Abbreviation

AAU	Addis Ababa University
BP	Blood Pressure
CHD	Coronary Heart Disease
CHF	Congestive Heart Failure
CI	Confidence Interval
CVD	Cardio Vascular Disease
DASH	Dietary Approaches to Stop Hypertension
DBP	Diastolic Blood Pressure
HTN	Hypertension
IRB	Institution Review Board
JNC	Joint National Committee
KAP	Knowledge attitude and practice
MGMT	Management
NCDs	Non-communicable diseases
RN	Registered Nurse
SBP	Systolic Blood Pressure
SD	Standard Deviation
SMBP	Self-monitoring blood pressure
SPHMMC	St. Paul's Hospital Millennium Medical College
SPSS	Specialized Hospital Statistical Product and Service Solutions
TASH	Tikur Anbessa Specialized Hospital
UN	United Nations
WHO	World Health Organization

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ABSTRACT

Background: - Noncompliance in hypertension management is a common trend being seen in healthcare settings. It is one of the major risk factors for cardiovascular disease that affects a high proportion of people worldwide, and it is leading to more life-threatening complications. According to the World Health Organization's report, complications of hypertension account for 9.4 million of the annual 17 million worldwide deaths from cardiovascular disease.

Objective: To assess knowledge and self-care practice management among adult hypertensive patients under follow-up in governmental hospitals in Addis Ababa, Ethiopia.

Method: An institutional-based cross-sectional study design was conducted from March 15 to April 15, 2022, among 413 hypertensive patients in four government teaching hospitals: teaching hospitals often have a stronger emphasis on research and education, Data was coded and entered in EPI Data Version 3.1 and exported to SPSS Version 20.0 for analysis. Descriptive statistics such as percentage and frequency of patients' knowledge of hypertension and their self-care practices were computed. To distinguish between dependent and independent variables, binary logistic regression was used ($p < 0.05$).

Results: The study involved 413 participants with a 97.8% response rate. The average age was 57.22 ±13.38 years. 45.3% of the respondents had good knowledge about managing hypertension, and 52.5% had good self-care practices. Participants aged 41 to 60 were found to be 10.47 times more likely to be knowledgeable about hypertension management than those under 40 ($p = 0.008$, AOR = 10.47, 95% CI: 1.830-59.902). Women were 0.17 times less likely than men to engage in self-care practices (AOR = 0.17, 95% CI: 0.80-0.382, $p = 0.000$), and homemakers were found to be 3.17 times more likely to practice self-care than civil servants (AOR = 3.17, 95% CI: 1.073-9.3213%, $p = 0.036$). Those with secondary or higher education were 5.32 times more likely than illiterates to engage in self-care practices (AOR = 5.32, 95% CI: 1.079-26225, $p = 0.040$).

Conclusion and Recommendation: This study revealed that the overall knowledge and self-care practices of hypertension management among hypertensive patients were very low. Age, gender, monthly income, occupation, educational status, regular BP checks, heart exams, and dietary practices were determinants of self-care practice. The findings suggest that Patients with hypertension who were seen in the hospital every month rather than every three to six months report better health and satisfaction. Hypertension prevention educational programs may have paramount importance to improve the quality of care.

Keywords: knowledge, self-care practice, and hypertension management.

CHAPTER ONE: INTRODUCTION

1.1. Background

Hypertension, also known as high blood pressure, is a common medical condition characterized by elevated blood pressure in the arteries or veins.

Blood pressure is created by the force of blood pushing against the walls of blood vessels (arteries) as it is pumped by the heart (1)

In a healthy person, blood pressure should be within a normal range, typically around 120/80 mmHg. However, if the blood pressure consistently exceeds 140/90 mmHg, it is considered high and can be classified as hypertension (1).

It is termed as a "silent killer" due to its nature, significance on public challenge, high prevalence and strong association with cardiovascular disease and premature death in the world (2). It is also a rise of 15mm Hg pressure above the client's normal blood pressure that varies among individuals (3).

Sustained raise in blood pressure damages blood vessels in kidney, eye, brains, heart and results in renal failure, blindness, stroke, heart failure and dementia (4).

Non-communicable diseases (NCDs) are the major cause of death in the world, accounting for more than 36 million (63 %) of the 57 million deaths that happened in 2008and almost half, (48 %) of NCD deaths are due to cardiovascular diseases (CVD) (5).

Hypertension is one of the main modifiable risk factors for cardio vascular diseases (CVD). Prevalence of raised blood pressure (BP) and adverse impact on cardiovascular morbidity and mortality are increasing globally, irrespective of income (6). Hypertension or high blood pressure is the leading global health problem which is prevalent in all regions and countries of the world. It is one of the three leading risk factors for global disease burden accounting for 7% of the global disability-adjusted life years. About 31.1% of the world adult population lives with hypertension, and 28.5% are in high-income countries while 31.5% are in low-and middle-income countries (7).

In Africa only 25% of countries have hypertension guidelines and in many instances these guidelines are adopted from those of high-income regions(6) However, the adoption of guidelines from high-income regions are sometimes impractical as low resource settings are confronted with a substantial number of obstacles including severe lack of trained healthcare professionals, , low access to basic office blood pressure(BP) devices and limited ability to

conduct basic recommended diagnostic procedures and poor access to affordable high-quality medications. In both low and high-income regions, the ambiguities of latest guidelines are often met with confusion among healthcare providers, anxiety among patients, and they resulted in a call for global harmonization (8).

Hypertension is major risk factor for cardiovascular disease and mortality. According to the World Health Organization's (WHO) report, complications of hypertension accounts for 9.4 million of the annual 17 million worldwide deaths from cardiovascular disease (9). The report further explains that hypertension is responsible for approximately 45% of deaths resulting from heart disease and 51% of deaths from stroke. In addition, hypertension is a risk factor for renal and eye diseases (10). Hypertensive knowledge is information that an individual is aware of what hypertension is, factors that predisposes to it, the ability to identify and respond to meaning, risk factors, and preventive measures of hypertension. It is vital that the patients are given knowledge about the term hypertension and are counseled on lifestyle changes when they visit their health center (11). A lack of knowledge about hypertension adversely influences patients' awareness and behaviors, and is a major challenge in controlling hypertension (12).

The self-care practices for prevention of complication of hypertension includes Lifestyle changes such as maintaining a healthy weight, exercising regularly, reducing salt intake, and quitting smoking can help prevent and manage hypertension and being adherent to anti hypertension medication (13).

Self-care is introduced in healthy behavior are vital in management of hypertension. But barriers to hypertension self-care and control are well studied and exist at the patient, provider and health institution levels. These barriers include lack of knowledge about the seriousness of untreated hypertension and the benefits of controlling hypertension, unemployment, alcohol and illicit drug use, cost of care and medications and drug side effects (14).

The aim of this study is to assess the knowledge and self-care practice on adult hypertensive patients on the management of hypertension in Addis Ababa governmental teaching hospitals under follow up. Given the fact that hypertension has been rising in developing countries including Ethiopia, this cross-sectional study is designed to consolidate the available data to determine the current knowledge and self-practice on the management of hypertension adult hypertensive patients in Addis Ababa (15).

1.2. Statement of the Problem

Hypertension is a silent killer disease that it affects one billion people worldwide (20). It is one of the most crucial cardiovascular risk factors but its control is still a challenge all around the world (22). An estimated of almost a third of BP related deaths occur from coronary heart disease, and a 3 mm Hg reduction in systolic blood pressure could lead to an 80% reduction in stroke mortality and a 5% reduction in mortality from coronary heart disease (23). Hypertension is a disease that progressively and permanently damages target organs, leading to life-threatening complications and death. (24).

A lack of knowledge about hypertension negatively influences patient's awareness and behaviors, and is a major obstacle in controlling the disease (12).

A descriptive study conducted to assess the up-to-date information on knowledge, awareness and self-care practices of hypertension among cardiac hypertensive patients found inadequate knowledge of patients (22). On the other hand, Health facility-based study in Botswana on knowledge and lifestyle practices of hypertensive patients showed that only 37% of the participants scored greater than 75% and cumulatively 59% can be rated as having acceptable knowledge of lifestyle practices (38)

A study in Malaysia indicates that self-monitoring blood pressure (SMBP) requires careful training on blood pressure measurement, instruction on recording and interpretation of blood pressure reading (44). This shows that self-care practice is associated with knowledge towards of management hypertension.

A hospital-based survey in South Africa suggests that many factors may contribute to poor level of self-care practice among hypertensive patients which are not limited to perceived benefit of exercise, level of education, access to recreational facilities and neighborhood environment (48). A hospital-based cross-sectional survey in southwest Ethiopia on the prevalence of hypertension and its risk factors shows that only 44.1% of previously known hypertensive patients had their BP controlled at the time of study (63).

Addressing the knowledge gap in hypertensive patients may contribute to a change of behavior leading to improved BP control and hypertension related complication reduction. Therefore, this study was aimed to assess the knowledge level and self-care practice of hypertensive patients and its associated factors in the study settings.

1.3. Significance of the study

Lack of knowledge and self-care practice among hypertensive patients on management of hypertension and related diseases accelerates the danger and damages resulting from it (59). Hypertension is considered as a silent killer with no pains and symptoms easily identified to take proactive and preventive measures before it kills us or results in huge damages like stroke, and disabilities making many people bed-ridden (60).

Hence, the study result will provide information regarding ways to develop awareness and knowledge about hypertension (HTN) and how much self-care practice could save patients from it sever impact. Governmental bodies and policy makers could get constructive recommendations to be considered on redesigning their policies which could bring about improved health condition of the population. This study will also be good reference for other researchers who conduct studies on similar areas.

CHAPTER TWO: LITERATURE REVIEW

2.1. Introduction

Hypertension, also known as the silent killer disease, is a major risk factor for several other illnesses such as cardiovascular diseases, stroke, renal diseases, and many others. This is one of the most important reasons why people visit their physician. The 8th Report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure (JNC-8) reports that it affects one billion people worldwide (20). A 55-year-old normotensive person has up to a 90% lifetime risk of developing hypertension, and it is the number one reason listed for office visits. It also causes or contributes to 457,000 hospital admissions per year and is a leading cause or contributor to death (21). Hypertension is an important public-health challenge worldwide. Prevention, detection, treatment, and control of this condition should receive high priority. Hypertension is one of the most crucial cardiovascular risk factors, but its control is still a challenge all around the world. Control Hypertension, an iceberg disease, could be described as the "sleeping snake," which bites when it wakes up (22). The prevalence of hypertension has varied greatly around the world. It has been estimated that almost a third of B.P.-related deaths occur from coronary heart disease. It is also estimated that a 3 mm Hg reduction in systolic blood pressure (B.P.) could lead to an 80% reduction in stroke mortality and a 5% reduction in mortality from coronary heart disease (23).

Chronic diseases, such as hypertension, necessitate lifelong drug intake and changes in lifestyle. Hypertension progressively and permanently damages target organs, leading to life-threatening complications and death (24). A lack of knowledge about hypertension negatively influences patients' awareness and behaviors and is a major obstacle to controlling the disease (12).

2.2. Knowledge of patients towards management of hypertension

Knowledge is facts, information, and skills acquired through experience or education that move towards a theoretical or practical understanding of the subject. A descriptive study conducted to assess the up-to-date information on knowledge, awareness, and self-care practices of hypertension (HTN) among cardiac hypertensive patients in Karachi found that the knowledge of cardiac hypertensive patients in general is inadequate. The patients are not informed about recently recommended guidelines, cutoff values of systolic blood pressure

(SBP), or the association of their SBP levels with cardiovascular disease. Consequently, 48% of the patients could not recall their BP value and were unable to report whether their BP value was elevated or normal (22).

Another survey conducted in Asia demonstrates that 70% of the hypertensive patients in the sampled population are aware of their disease. There were, however, knowledge deficits identified, including the definition of normal blood pressure and the fact that hypertension has a lifelong duration (26).

A study in New York suggests that most of the sample of hypertensive patients were knowledgeable about the meaning of "hypertension" and the seriousness of the condition to their health.

Ninety percent of people knew that lowering their blood pressure (BP) would improve their health, and 96% believed that people could do things to lower their high BP. When asked more specific questions about BP, patients were less knowledgeable. Thirty-four percent of patients correctly identified systolic blood pressure (SBP) as the "top" number of their reading; 32% correctly identified diastolic blood pressure (DBP) as the "bottom" number; and, overall, only 30% of the patients were able to correctly identify both systolic blood pressure (SBP) and diastolic blood pressure (DBP) measures. Patients were generally unaware that SBP is important in BP control; when asked which measure is more important, they reported that 41% said diastolic is more important, 13% said systolic is more important, 30% said both systolic and diastolic are important, and 17% did not know. Thirty-nine percent were either unaware of the normal SBP level or reported that it was 140 mm Hg or higher. Conversely, more than 69% of patients identified normal DBP as less than 90 mmHg. Patients were knowledgeable about the cut point for DBP, with only 8% reporting that 90 mm Hg or greater was normal (27, 71).

Research in Pakistan on knowledge, awareness, and self-care Hypertension management practices among cardiac hypertensive patients in relation to hypertension risk factors and complications (61);

The risk factor most commonly identified by the participants was too much salt intake. Heart attack and stroke as complications were recognized by 374 (56.3%) and 185 (27.3%) participants, respectively (28).

Research in Malaysia to assess knowledge on self-blood pressure monitoring among hypertensive patients demonstrates that 40 (61.5%) respondents were able to recall their recent blood pressure and 44 (67.7%) were aware of the target blood pressure, which showed that the majority of the respondents were interested in their blood pressure readings (29).

Research on knowledge and lifestyle practices of hypertensive patients attending a primary health care clinic in Botswana reveals that the level of knowledge varied from average to high, as almost all of them (96.4%) and 96.6%) gave the correct response for practices related to prohibiting or preventing smoking and reducing the levels of stress, respectively. However, almost equal proportions were noted for the knowledge related to restricting alcohol intake (65.2%), dietary requirements (66.3%), and physical activity in the form of exercise (62).

study in India on the assessment of knowledge, attitude, and practice (KAP), risk factors, and associated co-morbidities in hypertensive patients shows that dizziness was the most common symptom, while a heart problem was the most common complication known to patients (29).

A cross-sectional study on the prevalence and associated factors of hypertension in Nepal found that more than half (56%) of hypertensive patients knew what hypertension was and that 34% thought it was caused by hereditary and stress factors. Another 34% believed it was due to a combination of factors such as age, obesity, smoking, alcoholism, stress, and heredity.58% believed that the middle age group (40-59 years) was the most susceptible to hypertension. factors. Most of them (84%) were aware of the signs and symptoms of hypertension (30).

Another study in India suggests that study subjects had knowledge deficits identified, including the definition of normal blood pressure and the fact that hypertension has a lifelong duration. Most of the patients depend on their cardiologist for information about hypertension. The results of the study point out that without education, patients' levels of knowledge about the cause, treatment, and application of the hypertensive drug were inadequate (31).

A health literacy survey in rural areas of China about hypertension knowledge shows that only a small proportion of respondents correctly answered questions about hypertension complications, i.e., 36.5% for stroke, 38.9% for heart attack, 18.0% for kidney disease, and 27.9% for eye disease among hypertensive respondents.

A study was conducted in Ghana's capital city to assess hypertension knowledge, attitudes, and lifestyle practices.

Patients revealed that knowledge about the causes of the condition was taken seriously. Similarly, 295 (73.8%) knew that stress could lead to hypertension. About 73% of the participants did not know that a lack of physical activity could increase one's risk of acquiring hypertension as well as drinking too much alcohol (67.8%). In addition, only a few of the participants (27.5%) knew that cardiovascular diseases could occur as a result of this condition or hypertension. For signs and symptoms of hypertension, it was observed that the majority of the participants (n = 348; 82.1%) mentioned that the condition had no signs and symptoms, while the remaining (n = 71; 17.9%) correctly pointed out that hypertension had several signs and symptoms. Headache and dizziness, fainting, and stroke were among the signs and symptoms identified. The main signs and symptoms of the condition specifically mentioned by the participants were headaches or dizziness and stroke, while minimal knowledge of the consequences of untreated hypertension was shown. A hospital-based cross-sectional survey in southwest Ethiopia on the prevalence of hypertension and its risk factors shows that only 15 (44.1%) of previously known hypertensive patients had their BP controlled at the time of study. The overall knowledge of hypertension was 35.1%, and the rates of hypertension treatment and hypertension control were 23.7% and 15.5%, respectively (32, 63).

2.3. Self-care practice of hypertensive patients

Self-care is the process of engaging individuals to take full responsibility for managing aspects of their health by adopting skills and behaviors that prevent disease, limit illness, and restore health. Self-care practices for hypertension include taking medicine as prescribed, monitoring blood pressure response to therapy, and adopting lifestyle recommendations (such as increasing exercise and decreasing salt intake) (33).

A study in India on the assessment of KAP, risk factors, and associated co-morbidities in hypertensive patients shows that most of the patients do not have their blood pressure measured or their eyes checked regularly. In hypertensive patients, blood pressure should ideally be measured every 15 days or once a month (64, 72).

Another study in Nepal reveals that 80% of study subjects had the habit of doing self-care related to their own disease, were not smokers, and almost 84% did not have the habit of taking alcohol. Most of them (74%) had the habit of eating a low-salt and low-fat diet. More than half (64%) had the habit of doing regular physical exercise, and 62% were using different measures to reduce stress. Similarly, 92% of them were taking their

medication regularly, but some of them (10%) were changing their doses of their medication by themselves. Thirty percent of them were discontinuing their medicine at any time. It was very good practice that 70% of them were doing regular follow-up and 74% were checking their blood pressure regularly (34).

Regarding the cause of hypertension, 34% thought that it was hereditary and due to stress. Another 34% believed it was due to a combination of factors such as age, obesity, smoking, alcoholism, stress, and heredity. The middle age group (40 to 59 years) was thought by 58% to be the most susceptible to hypertension. Most of them (84%) were aware of the signs and symptoms of hypertension (30). An institutional-based study in Thailand shows that only 3.72% of study subjects reported a sedentary lifestyle, and nearly 70% of the population were smokers. The smoking rate was 76.23% in males and 61.93% in females. More than half of the population consumed alcohol (61.48% of males and 40.91% of females) (36).

One hospital-based study in Pakistan on knowledge, awareness, and self-care practices of hypertension among cardiac hypertensive patients showed that 69.1% of the study subjects claimed to check it regularly, with most of them checking it monthly (35.2%). (51.7%) patients get their blood pressure checked at the nearest health care facility. Eighty-two percent of Americans do not have a sphygmomanometer at home, and 33.1% say they do not see the need for one. Most of the patients, 265 (39.9%), consulted a doctor of hypertension every 3–6 months, and 180 (27.1%) consulted their cardiologist more than every 12 months. The majority of participants, 213 (32.1%), have their electrocardiogram (ECG) checked more frequently than every 6 months, and 239 (36%) have their cholesterol checked more frequently than every 6 months. Taking medication was the single most important practice carried out by most of the cardiac hypertensive patients (37).

In a health facility-based study in Botswana on knowledge and lifestyle practices of hypertensive patients regarding acceptable lifestyle practices for persons with hypertension, the results showed that only 37% of the participants scored greater than 75%, and cumulatively, 59% can be rated as having acceptable knowledge of lifestyle practices in relation to their chronic disease (38). Another study in the United States, the Dietary Approaches to Stop Hypertension (DASH) trial, demonstrated that a diet that

emphasizes fruits, vegetables, and low-fat dairy products; that includes whole grains; poultry; fish; and nuts; that contains only small amounts of red meat, sweets, and sugar-containing beverages; and that contains decreased amounts of total and saturated fat and cholesterol lowers blood pressure substantially both in people with hypertension and in those without hypertension, as compared with a typical diet in the United States (39).

2.4. Associated factors that affect knowledge towards management of hypertension

Studies in Israel suggest that knowledge transferred from medical staff is an important factor in inducing patients to comply with lifestyle recommendations to control hypertension (40).

A study in rural China demonstrated that hypertension knowledge levels were associated with marital status, education, health status, periodically reading books, newspapers, or other materials, the history of blood pressure measurement, and attending hypertension educational sessions provided by clinicians (32).

A study in Cape Coast reveals that the low score for knowledge was mainly due to illiteracy and the low socioeconomic class of the patients. Also, it was found that the knowledge score was lower in females when compared to males. It implies that patients are generally knowledgeable about hypertension, but that knowledge is often incomplete, particularly in terms of specific factors related to their condition and good blood pressure control. Patients with a high school education were found to be significantly more likely to understand the normal blood pressure value (32).

2.5. Associated factors that affect self-care practice towards hypertension

A study in India shows that there was a significant association between self-care management practices and the sex and bad habits of the research subjects but no significant association with their age, educational status, marital status, diet consumed, medications followed, or previous knowledge regarding self-care management (41);

A study in Saudi Arabia reveals that the interpersonal communication process in the patient-physician relationship has a potentially positive impact on patients' health outcomes; physicians usually do not ask their patients about medication-taking behavior or may use ineffective communication approaches (42); it is argued that non-collaborative communication on the part of healthcare providers results in poor patient adherence to antihypertensive treatments, poor lifestyle modification, a lack of awareness of risk factors for HPN, and not recognizing the complication of hypertension (43).

Another cross-sectional study in Malaysia indicates self-monitoring blood pressure (SMBP) requires careful training on blood pressure measurement and instruction on recording and interpreting blood pressure readings. This shows that self-care practice is associated with knowledge about managing hypertension (44).

A Korean study suggested that social support is consistently related to adherence to medications, exercise, and diet and might have beneficial effects in buffering the stress experienced due to chronic diseases such as hypertension (45).

A study in Ghana showed that people tend to walk more in rural settings than in urban settings because the distances between places are shorter and there is less public transport, unlike in urban areas where people travel long distances and cannot do without transport. This shows that exercise is associated with self-care practices (46).

The reasons for intentional non-adherence are less straightforward and include problems experienced as a direct result of taking medicines (such as adverse drug reactions), inability to pay for medicines, disagreement with the need for pharmacological treatment, or other patient-specific issues associated with complex behavioral characteristics.

One clinical-based study in Botswana by Zenga suggests that knowledge is a critical determinant of behavior change and lifestyle practices. Other factors play an important role in translating this knowledge into actual practices. The social, economic, and environmental factors are also important. Raising knowledge through health education and health promotion heavily influences lifestyle change, which means that people should adapt to behaviors or lifestyles that help them maintain an optimal health status (47).

A hospital-based survey in South Africa suggests that many factors may contribute to a poor level of self-care practice among hypertensive patients, which include but are not limited to the perceived benefit of exercise, level of education, access to recreational facilities, and neighborhood environment (48). Study of traditional and faith healers in the Northern Province, South Africa Most traditional healers (92%) and faith healers (90%) indicated that hypertension is curable. Traditional healers mainly used different herbs and faith healers' prayers for the treatment of hypertension (2). The change of diet, bloodletting, and rituals were mentioned by both traditional and faith healers (49).

A study in Egypt showed that young and middle-aged adults had significantly higher self-care practices as compared to older ones. Because cognitive impairment usually occurs in older persons, this affects their ability to communicate and understand the guidelines (50).

Information coming from a study conducted in Gondar Hospital, Northwest Ethiopia, showed that as the distance from the hospital decreased, the adherence to treatment of HTN improved, which means hypertensive patients near the hospital had good self-care practices (51).

2.6. Research Framework

After reviewing different literature (27, 28, 44, 29) about knowledge and self-care practices towards the management of hypertension, I developed this research framework. Independent variables such as socio-demographic factors, behavioral factors, family history of hypertension, sources of information, and lifestyle can affect knowledge about the management of hypertension and the self-care practices of patients. For example, individuals with a lower socio-economic status or less education may have less access to information and resources for managing hypertension. Behavioral factors such as smoking can make hypertension harder to control. Family history can indicate a genetic predisposition to hypertension; information from healthcare professionals can increase trust and the effectiveness of actions taken; a longer disease duration means more understanding of disease management; and lifestyle plays a crucial role in managing hypertension. Changes such as healthy eating, regular physical activity, maintaining a healthy weight, and stress management can help lower blood pressure and reduce the risk of heart disease and stroke. It's important for hypertensive patients to work with their healthcare provider to develop a personalized lifestyle plan.

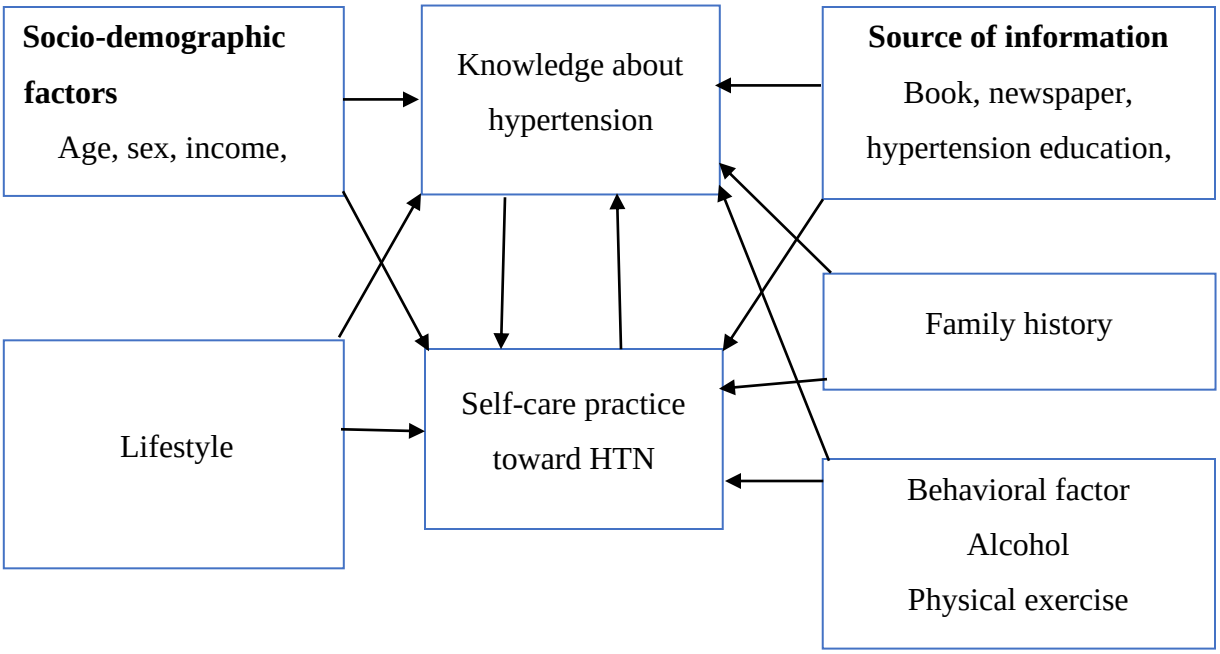

Figure 1 A research framework indicating factors related to knowledge and self-care practice in hypertension management.

CHAPTER THREE

3. Objective

3.1. General Objective

To assess the knowledge, self-care practices, and associated factors among adult hypertensive patients under follow-up towards hypertension management at governmental teaching hospitals in Addis Ababa, Ethiopia, in 2022

3.2. Specific Objectives

- To determine the level of knowledge of adult hypertensive patients under follow-up to wards hypertension management at Addis Ababa governmental teaching hospitals
- To examine the self-care practice of adult hypertensive patients under follow-up at Addis Ababa governmental teaching hospitals.
- To identify factors affecting knowledge and self-care practice among adult hypertensive patients on hypertension management under follow-up at Addis Ababa governmental teaching hospitals.

CHAPTER FOUR

4. Materials and Methods

4.1. The Study Area and Period

The study was conducted in Addis Ababa, the capital city of Ethiopia and it is where the African union is headquartered.

Addis Ababa is a home to almost all ethnic groups in Ethiopia with the current population of 5,228,000, according to the metro area population of Addis Ababa in 2022 (65). Its area is estimated to be 530Km^2 with altitudes ranging from 2200 to 3000m above sea level, average temperature of 22.8C° and average rainfall of 1,165mm (53,54). The city has more than 52 hospitals of which 13 are public hospitals namely Tikuranbesa specialized hospital, St. Paul's Hospital Millennium Medical College (SPHMMC) Zewditu Memorial Hospital, ALERT Hospital, Yekatit 12 Hospital, Ras Desta Damtew Memorial Hospital, St. Peter's Hospital, Menelik II Hospital, Tirunesh Beijing Hospital, Armed Forces Hospital, Federal Police hospital, Emanuel Hospital, Yeka-Kotebe Hospital, and Gandhi Hospital. This study involves 4 public hospitals as they teaching hospitals and have hypertension follow up services. The study was conducted in chronic follow up units of St Paul's Hospital Millennium Medical College (SPHMMC), TikurAnbessa Specialized Hospital, Yekatit 12 hospital and Menelik II referral hospitals from February15-March15, 2022.

The background for those selected hospitals was that Tikur Anbessa Specialized Hospital, School of Medicine, College of Health Sciences, Addis Ababa University is the largest referral hospital in Ethiopia. It was established in 1964. Later, Tikur Anbessa Specialized Hospital (TASH) opened in 1972, and the hospital became the only site for training medical doctors.

The Tikur Anbessa Specialized Hospital is now the main teaching hospital for both clinical and preclinical training in most disciplines (66). has different departments, including an outpatient department; one of them were hypertensive follow-up units, with about 640 patients checked or treated per month at the time of the interview, and the program was two times per week.

St. Paul's Hospital was built in 1969 (it was named St. Paul General Specialized Hospital until 2008) by Emperor Haile Selassie in collaboration with the German Evangelical

Church as a source of medical care for underserved populations. The Medical School opened in 2007, the new millennium era of the Ethiopian calendar. It is intended to alleviate the severe shortage of medical doctors in the country (67). most recently launching its new hemodialysis unit and the country's National Kidney Transplant Center (68). St. Paul's Hospital Specialized Hospital is now the main teaching hospital for both clinical and preclinical training and has different types of patient services departments, including outpatient units; one of them is hypertensive follow-up, which involves about 400 patients per month at the time of the interview.

Dagmawi Menelik Referral Hospital is a government hospital found in the capital city of Ethiopia, Addis Ababa. It was the first hospital built in 1909 by Menelik II. was established and staffed by Russian health personnel (69).

Menelik II Hospital is one of five referral hospitals under the supervision of the Addis Ababa City Administration.

Menelik II Hospital is a teaching hospital for both clinical and preclinical training. has various departments, including an outpatient department; one of them is hypertensive follow-up; according to this study, the number of patient flows is second to Tikur Anbessa Specialized Hospital, with nearly 620 patients per month.

Yekatit 12 Hospital was established in 1923 B.C. as one of the modern medical service delivery centers in the country.

At Sidist Kilo, Addis Ababa, Ethiopia, Yekatit 12 Hospital was known as Haile Selassie I Hospital. Yekatit 12 is a date in the Ge'ez calendar that refers to the massacre and imprisonment of civilians on February 19,1937. This has been described as the worst massacre in Addis Ababa, Ethiopia (70).

After many decades of medical service delivery, became a Medi-To School of Medicine in 2011, and the Department of Dentistry is attached to Yekatit 12 Hospital by decision of the Addis Ababa city government on November 25, 2013.

Yekatit 12 Hospital is one of the hospitals under Addis Ababa City Administration Health Bureau that has been giving routine health services for Addis Ababa and other referral cases from different regional states of Ethiopia. Unlike other hospitals, there is no special day for hypertensive patients, who have daily follow-up with other chronic follow-up units. During the course of the study, the hospital saw almost 184 patients per month.

4.2. Study Design

Institutional based cross-sectional study was conducted at the selected Governmental teaching hospital in Addis Ababa Ethiopia.

4.3. Population

4.3.1. Source of population

All hypertensive patients under follow-up in Addis Ababa hospitals in Ethiopia.

4.3.2. Study population

All hypertensive patients who are recognized on follow-up at the purposively selected public teaching hospitals in Addis Ababa City, Ethiopia.

4.3.3. Study units

Randomly selected hypertensive patients who a were fulfill the inclusion criteria and available during the time of data collection.

4.4. ELIGIBILITY CRITERIA

4.4.1. Inclusion criteria

Adult hypertensive patients aged above 18 years and willing to participate in the study who were on follow-up for at least 6 months will be included.

4.4.2. Exclusion criteria

Patients with hearing difficulties, unwilling to participate in the study, or any other serious health conditions and mentally incompetent patients were excluded.

4.5. Sample Size Determination and Procedure

4.5.1. Sample Size Determination

The sample size was determined by using formula for estimating a single population proportion with 5% margin of error and 95% confidence interval (CI). A proportion of 51.5% good self-care practice and 43.6% good knowledge (52). Taking the highest 51.5% value of good selfcare practice from a recent study conducted in Addis Ababa, Ethiopia 2016.and adding 10% for nonresponse rate is considered to get the required sample size.

The actual sample size for the study was calculated by taking the largest number:51.5% value of good self-practice.

$$n = \frac{\left(Z\frac{\alpha}{2}\right)^2 (p)(1-p)}{d^2}$$

$$n = \frac{(1.96)^2(0.515)(0.485)}{0.05^2} = \frac{3.8416 \times 0.249775}{0.0025}$$

$n_0 = 384$

$n = n_o + 10\% \, n_o$

$$n = 384 + \frac{10}{100} \times 384$$

$n = \underline{422}$

The calculated sample size to be 384 by considering none response rate (10 %) final sample size was 422 adult HTN patients.

Where: n_0 = Sample size before considering non respondents

n= the desire sample size considering 10% nonrespondents

p=proportion of patient who had good self-care practice

q = proportion of patients who don't have good self-practice

sample size is calculated considering a p-value of 0.515 to get the largest sample size.

d= 5% is maximum margin of error the researcher is willing to tolerate` Z= 1.96 is standard normal deviation value corresponding to 95% CI

4.5.2. Sampling procedure and techniques

There are four public teaching hospitals that provide chronic hypertensive follow up services in Addis Ababa city. Out of these, all were selected. The study was conducted on governmental teaching hospitals having chronic follow up units which include: TikurAnbessa Specialized Hospital, St. Paul's Hospital Millennium Medical College, (SPHMMC) Menelik II referral Hospital and Yekatit 12 Hospital, Participants were proportionally allocated for each hospital based on case-flow and systematic sampling technique was used to select patient.

ni= (n ×Ni)/N

Where:

ni= Proportional sample allocation for each teaching hospital

n= number of patients holding capacity in each selected governmental teaching hospitals

Ni = final sample of the study.

N=total number of patients holding capacity in all the selected governmental teaching hospitals.

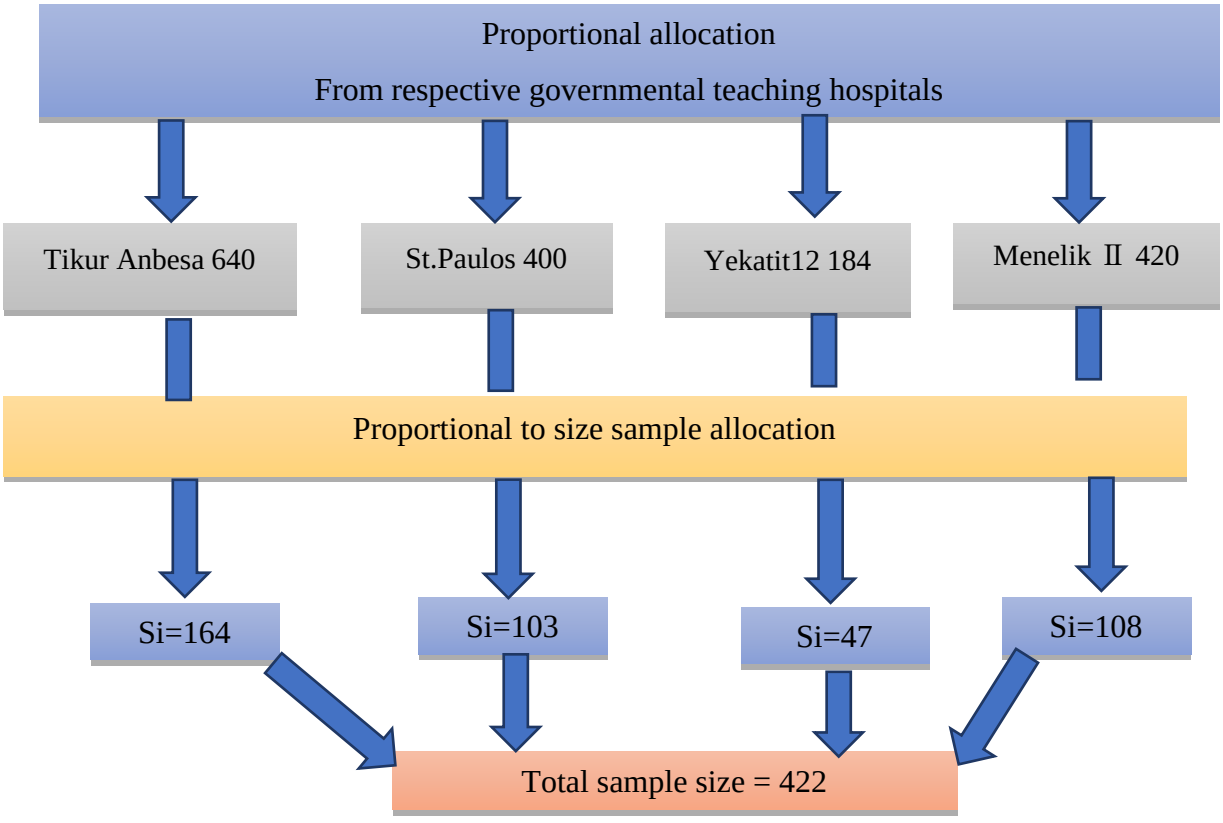

Figure 1: Schematic representation of the proportional allocation for assessment of knowledge and self-care practice among adult hypertension on Governmental teaching hospital in Addis Ababa, Ethiopia, 2022

4.6. Operational definitions

Knowledge refers to an idea or concept they had about the disease's definition, risk factors, effects, and consequences. It is measure ed in terms of knowledge scores. Knowledge scores below the mean and above or equal to the mean score were categorized as having "inadequate" and "adequate" knowledge, respectively (56).

Self-care practice refers to a hypertensive patient's behaviors toward their illness, such as diet, exercise, medication adherence, and self-blood pressure measurement, and is measured in terms of self-care-practice scores. Scores below the mean and above or equal to the mean are categorized as having "inadequate" and "adequate" self-care practices, respectively (56).

Good knowledge: a knowledge score equal to or higher than the mean of Seventeen knowledge questions.

Poor knowledge: Knowledge score below the mean out of Seventeen knowledge questions

Good practice: Out of Thirteen practice questions, the practice scores equal to or higher than the mean.

Poor practice: The practice score is below the mean out of Thirteen practice questions.

4.7. Data collection procedure

A structured, interviewer-administered questionnaire was used to collect data on knowledge, self-care practice, and associated factors in the management of hypertension. The instrument was prepared in English and translated to the local language Amharic version by an expert in both languages, who then translated them back to English to check for its consistency. The instrument was pretested on 5% of the total samples in a health care institution (TASH) other than the study setting before the actual data collection period. Data collectors and supervisors were trained for one day prior to the actual data collection period.

4.8. Data Collection Tool

An interviewer-administered structured questionnaire was used; it contains three parts. Part I was used to collect socio-demographic data, Part II was used to collect knowledge about hypertension, and Part III is a self-care practice, which was used to measure areas or domains of hypertensive knowledge and self-care practices:

The respondents' responses to seventeen questions were used to measure their level of knowledge regarding hypertension. Each correct response received a score of [1], while each incorrect response received a score of [0]. The study participants were categorized as having good or poor knowledge of hypertension management using the mean value. Accordingly, the sum values less than the mean were categorized as poor knowledge, and the values greater than or equal to the mean were categorized as good knowledge. Thirteen questions were posed to the respondents in order to gauge their self-care habits in relation to hypertension. Each right answer received a score of [2], while each wrong answer received a score of [1]. The study respondents were categorized as having good or poor self-care habits for hypertension based on the mean value. Accordingly, a sum value less than the mean was categorized as poor self-care practice, and a value greater than or equal to the mean was categorized as good self-care practice.

4.9. Study variables

4.9.1 Dependent variable

- Knowledge on management of hypertension
- Self- care practices of the patients

4.9.2 Independent variables

- Socio demographic
- Behavioral factor
- Family history of hypertension
- Complication of hyperattention
- Source of information
- Duration of the disease
- Lifestyle

4.10. Data quality Assurance

The instrument were pretested on 5% of the total samples in a health care institution other than the study setting before the actual data collection period.

Internal consistency for each item was checked by Cronbach's alpha coefficient (0.7).

The contents of questionnaires were modified based on the results of the pilot survey, and suggestions from various individuals were included in the final questionnaire. Both the data

collectors and supervisors were trained for one day on the objective and methodology of the research and the data collection approach. The questionnaire was translated into Amharic and then back translated into English by another person to check for its consistency, and then approved by advisors to ensure its validity.

4.11. Data processing and analysis

The collected data was checked, and entered into Epi-data software, then exported to SPSS version 20.0 software for analysis. Incomplete and inconsistent data was excluded from the analysis. Descriptive statistics were used to describe participant characteristics. The descriptive statistics results were expressed as mean, standard deviations, percentages and frequencies. Bivariate logistic regression model was employed to examine associations between independent variables and dependent variables, and those variables with p-value < 0.25 were included into the multivariate regression models and variables that showed p-value < 0.05 on the multivariate regression analysis method was declared significant for associations. Finally, the result was summarized and presented in texts, figures and tables.

4.12. Ethical consideration

Ethical approval was obtained from the Institutional Review Board (IRB) of Addis Ababa University, the College of Health Science, and the Addis Ababa Health Bureau. An official letter was written to the selected governmental teaching hospitals. Permission was obtained from the respective hospitals, and verbal and written consent was obtained from participants. There were no potential hazards that could harm the respondents in any way.

Information obtained from the selected individual respondents was kept confidential.

4.13. Dissemination of results

The result will be submitted to Addis Ababa University's Health Sciences College and the department of nursing and midwifery. Also, the result will be submitted to the hospital's administrator. Further effort will be made to present it at workshops and conferences and to publish it in journals.

CHAPTER FIVE

5. Result

5.1. Socio-demographic characteristics of respondents

Out of the total of four hundred twenty-two (422) hypertensive patients sampled in public hospitals in Addis Ababa city administration, four hundred thirteen (413) of them were interviewed with response rate of 97%. The respondents' mean age was 57.22 ±13.38 years. The majority of respondents 200 (48.4%) were between the ages of 41 and 60. From a total of 413 respondents, the majority were female: 242 (58.6%) and married: 220 (53.3%). The result on educational status about half of the participants, 208 (50.4%), were academically at the secondary and higher education qualification level. Significant proportions 188 (45.5%) of the respondents' monthly incomes was above 1650 Birr. From the total number of participants, their117 (28.3%), were retired occupation. table 1

Table 1: Socio-demographic characteristics of respondents in selected governmental Hospitals of Addis Ababa, Ethiopia, 2022.

Variables	Frequency	Percent (%)
Gender		
Male	171	41.4
Female	242	58.6
Marital status		
Single	193	46.7
Married	220	53.3
Age		
<40	54	13.1
41-60	200	48.4
61-80	149	36.1
>80	10	2.4
Education status		
Illiterate	25	6.1
Primary	179	43.3
Secondary and higher education	208	50.4
Monthly income		
< - 600 Birr per month	146	35.4
Between 600 - 1650 Birr per month	79	19.1
> 1650 Birr per month	188	45.5
Occupation		
Civil Servant	70	16.9
Merchant	106	25.7

Pension	117	28.3
House wife	105	25.4
Farmer	15	3.6

5.2. Knowledge of the hypertensive patient about hypertension

The majority of respondents were aware that cigarettes and alcohol are harmful to HTN patients. Regarding the source participants 362 (87.7% received information on hypertension, with 353 (85.5%) receiving it from health professionals. 64.2% of respondents had been with HTN for more than five years. 274 (66.3%) of the 413 participants had a family history of hypertension. 277 (67.1%) of those polled did not believe that heredity is a risk factor for hypertension.

70% of respondents thought blood pressure above 140/90 was abnormal, while 74.8% thought blood pressure above 120/80 was normal. Of the 321 total respondents (77.7%) who measured their cholesterol level, the majority of those 142 (34.4%) checked their cholesterol level every three months. Respondents, 232 (56.2%), have not known that untreated cholesterol causes elevated blood pressure, and the majority of the respondents, 331 (80.1%), have known that untreated HTN is a cause of heart disease. 407 (98.5%) of the study participants believed that minimizing salt and spice was important for hypertensive patients. (Table 2).

Table 2: knowledge of hypertensive patients about hypertension in governmental hospitals of Addis Ababa, Ethiopia, 2022.

Variable	Response	Frequency	Percent (%)
Duration with HTN	6 month – 1 year	65	15.7
	1-5 years	83	20.1
	>5 years	265	64.2
Family history	Yes	274	66.3
	No	139	33.7
can be inherited	Yes	136	32.9
	No	277	67.1
information about hypertension	Yes	362	87.7
	No	51	12.3
Source of information	Media	60	14.5
	Health professional	353	85.5
BP above 140/90 as normal	Yes	122	29.5
	No	291	70.5
less than 120/80 is to be high	Yes	104	25.2
	No	309	74.8
Cigarettes has a negative effect	Yes	244	59.1
	No	169	40.9
Alcohol has a negative effect	Yes	332	80.4
	No	81	19.6
Ever measured cholesterol	Yes	321	77.7
	No	92	22.3
If yes, how often	Once or twice in my lifetime	52	12.6
	Every month	127	30.8
	Every three months	142	34.4
Untreated cholesterol elevates BP	Yes	181	43.8
	No	232	56.2
Untreated HTN affects the heart	Yes	331	80.1
	No	82	19.9
When to take pressure medicine	When you feel anxious	7	1.7
	Always for lifetime	405	98.1
if you feel worse, do you stop taking the medicine	Yes	51	12.3
	No	362	87.7
Ever stop taking medicine if you're feeling better	Yes	30	7.3
	No	383	92.7
Hypertensive should not be fed	Vegetables and legumes	6	1.5
	High in salt and spice	407	98.5

5.3. Self-care practices of hypertensive patients about hypertension

The majority of 353 (85.5%) of the total study participants cheeked their blood pressure for personal reasons; of those who cheeked their blood pressure, 208 (50.4%) did so. At the time of the interview, it had been less than a week since checking, and of the 159 patients (38.5%) cheeked in the nearest health care facility, 149 (36.1%) have their own sphygmomanometer. In their follow-up, the majority of respondents 262, (63.4%) had been in health institutions for three to six months. From the total participants, 134 (32.4%) were followed up for a heart exam for more than 12 months; more than half of respondents (257, or 62.2%) were checked for an ECG for less than six months; and 74 (17.9%) were never checked. 220 (53.3%) of the 413 respondents exercise physically, with the majority (179, 43.3%) walking for 15 to 30 minutes. The majority of study participants (171, or 41.4%) never considered food portions for HTN (DASH). (Table 3)

Table 3: Self-care practice among adult hypertensive patients on hypertension management in selected governmental hospitals, Addis Ababa, Ethiopia, 2022.

Variable	Response	Frequency	Percent (%)
have a sphygmomanometer	Yes	149	36.1
	No	264	63.9
regularly checkup BP	Yes	353	85.5
	No	59	14.3
how often check your BP?	< a week	208	50.4
	monthly	66	16.0
	More than 3 months	81	19.6
where do you get BP checked	At tertiary hospital	19	4.6
	At home	119	28.8
	Pharmacy	59	14.3
	Nearest health care facility	159	38.5
Barriers towards self-testing for BP	Lack of awareness	66	16.0
	It's far away	277	67.1
	Expensive	70	16.9
Time to consult doctor for HTN	> 6 months	21	5.1
	Between 3-6 months	262	63.4
	< 3 months	130	31.5
Time to consult cardiologist	Never	84	20.3
	More than 12 months	134	32.4
	Every 6-12 months	68	16.5
	Within 3-6 month	127	30.8
Time to ECG checkup	Never	74	17.9
	> than 6 months	257	62.2

	Every 6 months	51	12.3
	Every 3 months	26	6.3
	Monthly	5	1.2
consider food portions for HTN	Never	171	41.4
	Sometimes	140	33.9
	Always	102	24.7
Habit on physical exercise	NO	193	46.7
	Yes	220	53.3
Frequency of exercise	<3 per week	41	9.9
	3 per week	78	18.9
	>3 per week	101	24.5
If yes, what type of exercise do you perform	Walking	179	43.3
	Squat	5	1.2
	Cycling	2	0.5
	Jogging	34	8.2

5.4. Overall knowledge and self-care practices of respondents

The overall knowledge of the respondent is described by using the mean score for study participants' knowledge on the management of hypertension.

A total of 13 questions were asked to assess the overall knowledge of the study subjects. Study participants scored above 9.06, with a minimum of 4 and a maximum of 12, with a standard deviation of 2.1.

Study participants who scored less than the mean value were regarded as having poor knowledge, whereas participants who scored equal to or more than the mean value were regarded as having good knowledge. Therefore, among all participants, two hundred twenty-six (54.7%) respondents have inadequate knowledge on the management of hypertension, and the rest one hundred eighty-seven (45.3%) have adequate knowledge or knowledge above the mean regarding the management of hypertension.

The overall self-care practice is described using the mean score for study participants toward self-care practice in the management of hypertension. Study participants who scored less than the mean value were regarded as having poor practice, whereas participants who scored more than the mean value were regarded as having good practice. Therefore, of all the participants, two hundred twenty-one (52.5%) had good self-care practices, and one hundred ninety-two (47.5%) had poor self-care practices.

Figure 3: Knowledge and selfcare practice study participants to wards management of hypertension

5.5. Factors associated with patients' knowledge toward management of hypertension

Age, gender, marital status, education, level of income, occupation, family history of HTN, and nearly all knowledge-related questions on hypertension were all significant in bivariate logistic regression at p- value < 0.2, and entered into the final multivariate regression model. From a socio-demographic standpoint, there is a statistically significant relationship between knowledge and age, income level, occupation, and those knowledge-related quotations: family history, inherited, information about HTN, cholesterol checkup, the borderline of hypertension, and the impact of smoking and alcohol on patients' attitudes toward knowledge's management of hypertension. Participants between the ages of 41 and 60 were 10.47 times more likely to be knowledgeable about hypertension management than those between the ages less than 40. (p = 0.008, AOR = 10.47, 95% CI: 1.830-59.902). Participants on pension (retired) were 9.6 times more likely than civil servants to be knowledgeable about hypertension management. Participants with no family history of hypertension were 0.11 times less likely to be knowledgeable about hypertension management than those with a

family history of hypertension (AOR = 0.11, 95% CI: 0.026-0.463, p=0.003).Participants who did not believe hypertension could be inherited were 0.002 times less likely to be knowledgeable about hypertension management than those who did (AOR = 0.002, 95% CI: 0.0.001-0.021, p = 0.000).The respondents who get information about hypertension from the media were 89% less likely to have knowledge on hypertension management as compared to those who get information from health professionals (AOR = 0.11, 95% CI: 0.014–0.788, p = 0.028). Respondents who believed that untreated cholesterol raises blood pressure were more likely to be knowledgeable about hypertension management than those who did not believe (AOR = 0.03; 95% CI: 0.008-0.130; p = 0.000). The respondents who didn't consider the negative impact of smoking on hypertension were 97% (1-0.03) less likely to have knowledge on the management of hypertension as compared to those who believed in the negative impact (AOR = 0.03; 95% CI: 0.006-0.105; p = 0.000). Furthermore, participants with untreated high blood pressure who did not consider negative effects on the cardio-vascular system were less likely to have knowledge on the management of hypertension as compared to those who considered negative effects (AOR = 0.03; 95% CI: 0.0.003-0.279; p = 0.002).

Table 4: Factors affecting knowledge about hypertension among hypertensive patients in public hospitals of Addis. Ababa, Ethiopia, 2022

Variables	Response	Knowledge		COR (95%CI)	AOR (95%CI)	P=<0.05
		Good	Poor			
Age Category	< 40	17	37	1	1	
	41-60	118	82	3.13(1.652,5.938)	**10.47(1.830,59.902****	0.008
	61-80	48	100	1.04(0.535,2.041)	0.86(0.118,6.311)	0.884
	>81	4	6	1.45(0.362,5.822)	5.39(0.171,170.088)	0.339
Gender	Male	92	79	1	1	
	Female	95	147	0.55(0.373,0.825)	0.30(0.067,1.338)	0.114
Marital status	Single	77	116	1	1	
	married	110	110	1.51(1.019,2.227)	1.88(0.632,5.571)	0.257
Education	Illiterate	4	19	1	1	
	primary	57	124	2.18(0.710,6.711)	0.17(0.008,3.680)	0.257
	Secondary and Higher education	125	83	7.15(2.350,21.780	0.38(0.020,7.249)	0.520
Income	< 500	44	102	1	1	
	501 - 1000	24	55	1.01(558,1.835)	**0.02(0.002,0.149) *****	0.000
	> 1000	119	69	4.00(2.520,6.342)	0.39(0.075,2.001)	0.257
Occupation	Civil servant	42	28	1	1	
	Merchant	51	55	0.62(0.335,1.139)	**4.44(0.775,25.471) ***	0.094
	Pension (retired)	54	63	0.57(0.313,1.042)	**9.60(1.061,86.747) ***	0.044
	Farmer	6	9	0.44(0.142,1.387)	15.02(0.399,565.223)	0.143
	House wife	34	71	0.32(0.170,0.599)	4.47(0.549,36.433)	0.162
How long did you stay with HTN	6 months - 1 year	28	37	1		
	1 - 5 year	38	45	1.12(0.580, 2.146)		
	Above 5 years	121	144	1.11(0.642, 0.919)		
HTN in Family	Yes	104	170	1	1	
	No	83	56	2.42(1.596,3.679)	**0.11(0.026,0.463) ****	0.003
Blood pressure can be inherited	No	72	205	0.06(0.037,0.110)	**0.002(0.001,0.021) *****	0.000
	Yes	115	21	1	1	
where do you get information	Mass media	32	28	1.46(0.843,2.528)	**0.11(0.014,0.788) ***	0.028
	Health professional	155	198	1	1	
BP above 140/90 is considered as normal	Yes	8	114	0.04(0.021,0.093)	**0.001(0.000,0.009) *****	0.000
	No	179	112	1	1	
Smoking negative effect on HTN	No	13	156	0.03(0.018,0.063)	**0.03(0.006,0.105) *****	0.000
	Yes	174	70	1	1	
Alcohol negative effect on HTN	No	9	72	0.11(0.052,0.223)	**0.08(0.009,0.696) ***	0.022
	Yes	178	154	1	1	
Measured cholesterol	No	17	75	0.20(0.114,0.356)	0.48(0.106,2.207)	0.348
	Yes	170	151	1	1	
Untreated cholesterol increases BP	No	47	185	0.07(0.046,0.119)	**0.03(0.008,0.130) *****	0.000
	Yes	140	41	1	1	
Untreated BP affects the heart	No	5	77	0.05(0.021,0.135)	**0.03(0.003,0.279) ****	0.002
	Yes	182	149	1	1	
HTN shouldn't be feed	Vegetables and legume	2	4	1		
	High in salt and spicy	185	222	1.67(0.302,9.202)		

Note: ***=p<0.001, **=P<0.01, *=P<0.05 COR Crude odd ratio. AOR Adjusted odd ratio.

Statistically significant values p<0.05 or p<0.25 in the bivariate model were included in the multivariate model.

5.6. Factors associated with patients' self-care practice toward management of hypertension

Bivariate analysis of sociodemographic and related factors revealed significant associations between self-care practice and age, gender, monthly income, occupation, educational status, regular BP checks, heart exams, and diet practices to prevent hypertension. Finally, multivariate analysis was used, which reveals statistical associations between self-care practice and age, gender, and educational level. Occupation, consider HTN (DASH) food portions, the time of a heart exam, and check blood pressure regularly. Female participants were 83% less likely than male participants to practice self-care (AOR = 0.17, 95% CI: 0.80-0.382, p = 0.000). Participants in the 61-80 age group were 81% less likely to practice self-care than participants in the less than forty age group (AOR = 0.19, 95% CI: 0.072-0.516, p = 0.001), and respondents in the 81-85 age group were 92% less likely to practice self-care than participants in the less than forty age group (AOR = 0.08, 95% CI: 0.011-0.588, p = 0.013). Participants with secondary and higher education levels were 5.32 times more likely than illiterates to practice self-care (AOR = 5.32, 95% CI: 1.079-26225, p = 0.040). Housewives were 3.17 times more likely to practice self-care than civil servants (AOR = 3.17, 95% CI: 1.073%–9.3213%, p = 0.036). Respondents who did not have their blood pressure regularly cheek-checked were 97% less likely to practice self-care than those who did (AOR = 0.03; 95% CI: 0.011-0.104; p = 0.000). Those participants who never consider food portions for HTN were 75% less likely to practice self-care as compared to those who always consider a selected food portion for HTN (AOR = 0.25, 95% CI: 0.123–0.526, p = 0.000). Participants who checked their cardiovascular health for more than 12 months were 83% less likely to practice self-care than those who checked in the previous 3-6 months (AOR = 0.17, 95% CI: 0.080-0.345, p = 0.000), while those who never checked were 85% less likely to practice self-care than those who checked in the previous 3-6 months (AOR = 0.15, 95% CI: 0.063-0.337).

Table 5: Factors affecting self-care practice about hypertension among hypertensive patients in public hospitals of Addis Ababa, Ethiopia, 2022.

Variables	Response	Practice		COR (95%CI)	AOR (95%CI)	p-<0.05
		Good	Poor			
Age	< 40	25	29	1	1	
	41 – 60	112	88	1.48(0.808,2.699)	0.57(0.241, 1.336)	0.195
	61 – 80	75	73	1.19(0.638,2.225)	**0.19(0.072, 0.516) ****	0.001
	> 81	4	6	0.77(0.196,3.054)	**0.08(0.011, 0.588) ***	0.013
Gender	Male	117	54	1	1	
	Female	100	142	0.32(0.215,0.491)	**0.17(0.080,0.382) *****	0.000
Marital status	Single	96	97	1		
	Married	121	99	1.23(0.838,1.819)		
Education	Illiterate	4	19	1	1	
	primary	71	110	3.07(1.002,9.385)	2.95(0.641, 13.616)	0.165
	secondary and higher education	142	66	10.22(3.344,31.230)	**5.32(1.079, 26.225) ***	0.040
monthly income	< 500	57	89	1	1	
	501 – 1000	37	42	1.38(0.791,2.391)	1.24(0.515, 2.973)	0.634
	> 1000	123	65	2.95(1.887,4.626)	2.29(0.985, 5.348)	0.054
occupation	Civil Servant	46	24	1	1	
	Merchant	47	59	0.42(0.223,0.779)	0.62(0.235, 1.649)	0.341
	Pension	63	54	0.61(0.330,1.124)	0.87(0.325, 2.338)	0.785
	Farmer	6	9	0.35(0.111,1.093)	5.07(0.809, 31.810)	0.083
	House wife	55	50	0.57(0.307,1.072)	**3.17(1.073, 9.321) ***	0.036
have a home sphygmomanometer	No	128	136	0.63(0.422,0.953)	1.05(0.572, 1.943)	0.866
	Yes	89	60	1	1	
regularly BP checkup	No	7	52	0.09(0.041,0.210)	**0.03(0.011,0.104) *****	0.000
	Yes	209	144	1	1	
Barrier to checkup	Lack of awareness	28	38	0.49(0.248, 0.973)	**0.34(0.123,0.944) ***	0.038
	It's far away	147	130	0.75(0.442, 1.285)	**0.35(0.163,0.769) ****	0.009
	Expensive	42	28	1	1	
How often do you consult your doctor for HTN?	> 6 months	11	10	0.83(0.330, 2.097)	0.65(0.180,2.350)	0.511
	Every 3-6 months	132	130	0.77(0.503, 1.173)	0.92(0.494, 1.697)	0.780
	< 3 months	74	56	1	1	
Time to cardio vascular exam	Never	30	54	0.29(0.165, 0.524)	**0.15(0.063,0.337) *****	0.000
	More than 12 months	54	80	0.36(0.216, 0.592)	**0.17(0.080,0.345) *****	0.000
	Every 6-12 months	50	18	1.47(0.768, 2.824)	1.46(0.585, 3.640)	0.418
	Within 3-6 months	83	44	1	1	
consider food portions for HTN	Never	57	114	0.17(0.099, 0.296)	**0.25(0.123,0.526) *****	0.000
	Sometimes	84	56	0.51(0.293, 0.898)	1.05(0.498, 2.216)	0.896
	Always	76	26	1	1	

Note: ***=p<0.001, **=P<0.01, *=P<0.05 COR Crude odd ratio. AOR Adjusted odd ratio.

Statistically significant values p<0.05 or p<0.25 in the bivariate model were included in the multivariate model.

CHAPTER SIX

6. Discussion

The study was intended to determine knowledge of hypertension and its self-care practices among adult hypertensive patients at four governmental teaching hospitals in Addis Ababa. Accordingly, 45.3% demonstrated good knowledge and 52.5% good self-care practice, respectively.

This finding was almost similar to reports from earlier studies in Addis Ababa (51.5%) and Gondar (56%), and study in Asia demonstrates that 70% hypertensive patients in the sampled population having awareness about their disease (26). Another survey conducted in Nepal reveals that 80% of study subjects had the habit of doing self-care related to their own disease (34) however, it was lower than that of a study conducted in Asia and Nepal. This is due to a combination of factors, including low health literacy, limited public health initiatives, poverty and limited access to regular medical care. patients' self-care practice for hypertension management is low, particularly among farmers, merchants, primary care providers, and Illiterate. Also, some studies suggest that many factors may contribute to poor levels of self-care practice among hypertensive patients, including but not limited to the perceived benefit of exercise, level of education, access to recreational facilities, and neighborhood environment. (48). This study found that males had better knowledge than females about hypertension management, similar to a study in Cape Coast that found females had lower knowledge than males (32).

The mean age was 57.22 ±13.38 years implying that hypertension affects the elderly in this study setup. This is consistent with a study conducted in Gondar, Ethiopia, and Nepal. (30, 73) Participants in the study who were 41-46 years old were 10.47 times more likely to be knowledgeable about hypertension management than those who were 17-40 years old. ($p = 0.008$, AOR = 10.47, 95% CI: 1.830-59.902). In contrast, participants over the age of 60 practiced 81% less self-care than those between the ages of 17 and 40 (AOR = 0.19, 95% CI: 0.072-0.516, $p = 0.001$).

Participants who did not believe hypertension could be inherited were 0.002 times less likely to be knowledgeable about hypertension management than those who did (AOR = 0.002, 95% CI: 0.0.001-0.021, $p = 0.000$). similar study in India (30).

Participants who participated in physical activity and the type of physical activity, findings of this study high participants who were 179 (43.3%) habits of walking on a frequency of more than three per week, Participants, nearly half (47%), did not engage in any physical activity, implying that they were unaware that, a lack of physical activity could increase one's risk of developing hypertension. The finding is similar, with a study in the metropolis of Ghana (32).

Most (98%) of the patients in this study reported taking antihypertensive medication regularly as prescribed. (50.4%) checked their blood pressure mostly once a week in a nearby location and went to the hospital for a follow-up as recommended by their doctor about every 3-6 months (63%).

Self-care practice on HTN was significantly associated with age, gender, level of education, and occupation. Similarly, to a study conducted in India, female participants were 83% less likely than male participants to practice self-care (AOR = 0.17, 95% CI: 0.080–0.382). (35). One possible explanation is that females are more burdened with housekeeping tasks than males.

The current study revealed that 47.5% the study participants with poor self-care practices were almost identical to those in Addis Ababa (48.5%) and Dessie (49%), but higher than those in Nepal (20%) and Pakistan (38.1%). (30).

In contrast to studies conducted in China and the United States of America, patients with low knowledge scores were found to have poor blood pressure control and poor regular checkups for related diseases. The low score of knowledge and self-care practice was primarily due to the patients' low socioeconomic status, a lack of different sources of information, a lack of awareness on lifestyle change, and not following a dietary approach to stop hypertension.

Our study identified that age, monthly income, sources of information, occupation, and family history of HTN have strong associations with knowledge on the management of hypertension. The results were similar to the study conducted in rural China (32).

Similarly, 33.9% of participants in this study were aware that the Dietary Approaches to Stop Hypertension (DASH) trial demonstrated that a diet rich in fruits, vegetables, and low-fat dairy products (39).

A study conducted in Nepal, similar to ours, found that the vast majority of respondents were aware that salt consumption is one of the major risk factors for high blood pressure (34).

In terms of information source, the majority reported that 353 (85.5%) received knowledge from their health professionals. A study done in Botswana found that "Zenga knowledge through health education and health promotion" (47).

Our study shows that sixteen percent of the respondents check their blood pressure monthly. 38.5% of patients get their blood pressure checked at the nearest health care facility, and 177 (42.9%) had no reason for not checking. 63.9% do not have a sphygmomanometer at home. Most of the patients, 262 (63.4%), consulted their doctor about hypertension every 3–6 months, and 134 (32.4%) consulted their cardiologist in more than 12 months. The majority of the participants—257 (62.2%) get their electrocardiogram (ECG) examined more than six months after it is obtained, and 66 (16%) get their cholesterol checked every six months. Almost went to Pakistan to study (37).

Hypertension is defined by 291 (70.5%) of the study participants as high blood pressure. Pressure greater than or equal to 140/90 mm was thought of as abnormal, 77 (18.6%) had no idea, and 45 (10.9%) considered it normal.

The most important practice followed by the majority of hypertensive patients in our city is that 98% of respondents take their medication on a regular basis as prescribed by their doctor. where 0.5% took their medication when feeling anxious. This is This is better when compared to studies conducted in New York and Pakistan (34, 37, 47).

Strengths and limitations of the study

The strength of Assessing the knowledge and self-care practices of hypertensive patients can help identify gaps in knowledge, improve self-care practices, enhance patient outcomes, and inform healthcare policy.

Limitations:

- Social desirability bias due to sensitive and personal questions related to knowledge and self-care practice, especially about financial issues, to which some patients were not willing to respond openly.
- This study was done at a governmental teaching hospital only.
- The finding does not reflect the condition of lower-level healthcare facilities

CHAPTER SEVEN

7. Conclusion and recommendation

7.1. Conclusion

This study revealed that the overall knowledge and self-care practices of hypertensive patients were very low. Self-care practice for hypertension management is low in patients, particularly females, those over the age of 40, those retired, and those with low educational status. As hypertension is an important risk factor for cardiovascular disorders including stroke, heart failure, and ischemia,

Even though controlling blood pressure and diet management practices are said to be the cornerstone of self-care practices and hypertension control, this study finding is an important indicator to give due attention to designing awareness creation packages on hypertension.

7.2. Recommendation

For health care provider

- Health professionals who are actively involved in the management of hypertensive patients need to understand the overall poor knowledge of hypertension among hypertensive patients and make regular follow-ups on the consequences of hypertension.
- Activities to raise awareness and control hypertension should be promoted throughout the country.
- Patient health education programs and interventions on high cholesterol and cardiovascular risk associated with uncontrolled hypertension should be prioritized.
- All nurses working on hypertension follow-up should give consistent and strict advice on the importance of self-care practices for hypertensive patients.
- They should develop and schedule educational programs to educate patients on the prevention and treatment of hypertension.

Policymakers

- The policymaker places emphasis on, develops programs to raise awareness of, and self-care techniques for managing hypertension, and directs nursing interventions intended to address this problem.
- Scholars and professionals in hypertension should propose programs that increase knowledge and self-care practice in order to improve hypertension health.

To researcher

- It is recommended to carry out large-scale studies in population-based multicenter settings in order to address the problem. Also, develop programs that play a key role in controlling cardiovascular and other complications that are due to hypertension.

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ANNEXES

ANNEX I. INFORMATION SHEET AND CONSENT FORM

Information Sheet

My name is _____. I am working as a data collector in the research conducted by Freweini Gebremeskel who is conducting this research for the partial fulfillment of her Master Degree in Cardio Vascular nursing specialty in Addis Ababa University. We are trying to assess Knowledge and self-care practice among adult hypertension patients in governmental teaching hospitals under follow up. We would like your honest opinion concerning the questions.

Title: Assessment of knowledge and self-care practice among adult hypertensive patient on management of hyperattention in governmental teaching hospitals, Addis Ababa Ethiopia 2022.

Purpose: The aim of the study is to assess level of Knowledge, and self-care practice among adult hypertensive patient on governmental hospitals in Addis Ababa, Ethiopia.

Duration: The question that is going to be asked will take about 20 minutes.

Benefit of the study: There is no direct benefit to you now. However, the result of the study will be helpful for all population in the future by assessing patients Knowledge, and self-care practice towards hypertension

Risk of the study: Participating in this study will not have any risk or harm associated with data collection.

Rights of the participant: participating and not participating is the full right and participants can stop from participation in the study at any time. Participants can ask any questions which is not clear for better understanding.

Confidentiality: Any information forwarded will be kept private and the name of the participant will not be specified.

Address of the principal investigator:

Name: Freweini Gebremeskel (BSc)

Tel: +251-911707934

E-mail: freweinigebremeskel08@gmail.com

Consent form

By reading the above information, I consent voluntarily to participate.

If you are willing to participate in this study, proceed to the questionnaires on the next Page. Signature---------- date----------

Thank You for your willingness to participate!!

ANNEX II. QUESTIONERS

ENGLISH VERSION QUESTIONER ADDIS ABABA UNIVERSITY COLLEGE OF HEALTH SCIENCES SCHOOL OF NURSING AND MIDWIFERY

This is a questionnaire designed to assess knowledge and self-care practice among adult hypertensive patients on management of hyperattention under follow up in governmental teaching hospitals in Addis Ababa Ethiopia. This study is conducted for the partial fulfillment of Master Degree in Cardio Vascular nursing specialty in Addis Ababa University. Any personal data and information delivered by you will be kept confidential and used only for the aforementioned purpose. Please read carefully and provide your response to each item. Thank you for your cooperation!!

Investigator name_____

Date__/___/___

Patient code_____

Part I: Personal Information

1. Age _____
2. Sex
   A) Male B) Female
3. Marital status
   A) Single
   B) Married
4. Education status
   A) Illiterate
   B) primary
   C) secondary and higher education
5. What is your monthly income?
   1. < 600 Birr per month
   2. 601 - 1650 Birr per month

3. > 1650 Birr per month

6. What is your occupation? _____

Questions related to Knowledge

1. How long do you stay with high blood pressure?
   - Six months to one year
   - One to five years
   - Above Five years
2. Is there anyone with high blood pressure in your family?
   - Yes
   - No
3. Do you believe blood pressure can be inherited?
   - Yes
   - No
4. Do you get information about hypertension?
   - Yes
   - No
5. If your answer to question number 4 is yes, where do you get it from?
   - Media
   - Health professional
6. A blood pressure level of above 140/90 is considered normal
   - Yes
   - No
7. A blood pressure level of less than 120/80 is considered to be high
   - Yes
   - No
8. Smoking cigarettes has a negative effect on persons with hypertension
   - Yes
   - No
9. Drinking alcohol has a negative effect on persons with hypertension
   - Yes
   - No
10. Have you ever measured your cholesterol in your blood?
    - Yes
    - No
11. If your answer to question 10 is yes, how often
    - Once or twice in my lifetime
    - Every month
    - Every three months
    - Every six months
    - Beyond that
12. Un treated cholesterol increase blood pressure.
    - Yes
    - No
13. Untreated high blood pressure affects the heart

- Yes
- No

14. When to take pressure medicine
    - when you aren't feeling good
    - Always for lifetime
15. Sometimes if you feel worse when you take the medicine, do you stop taking it?
    - Yes
    - No
16. Do you ever stop taking your medicine if you're feeling better?
    - Yes
    - No
17. A hypertensive patient should not be fed
    - Vegetables and legumes
    - High in salt and Spicy

Questions related to Self-care practices

1. Do you have a home sphygmomanometer?
    - Yes
    - No
2. Do you regularly check your BP?
    - Yes
    - No
3. If yes, how often do you check your BP?
    - < 1 Week
    - Monthly
    - > 3 months
4. If your response is yes for question number 2, where do you get your BP checked?
    - At tertiary hospital
    - At home
    - Pharmacy
    - Nearest health care facility
5. What are the barriers towards self-testing for BP?
    - Lack of awareness
    - It’s far away
    - Expensive
6. How often do you consult your doctor for HTN?
    - > 6 months
    - Every 3-6 months
    - < 3 months
7. How often do you consult your cardiologist for heart exam?
    - Never
    - More than 12 months

- Every 6-12 months
- Every 3-6 months
- Less than 3 months

8. How often do you get your ECG examined?
   - Never
   - More than that
   - Every 6 months
   - Every 3 months
   - Monthly

9.Do you consider about food portions and choices whenever you have to eat food.
   - Never
   - Sometimes
   - Often
   - Always

10.Do you perform physical exercise at all?
   - Yes
   - No

11.How often do you exercise?
   - < Three times per week
   - Three times per week
   - > Three times per week

12.What type of exercise do you perform?
   - Walking
   - Jogging
   - Cycling
   - Others…

13.For how long do you exercise per session?
   - <15 min
   - 15-30min
   - > 30 min

Thank you

አባሪ 1. የመረጃ ሉህ እና የፍቃድ ቅፅ

የመረጃ ወረቀት

ስሜ ነው _____. በአዲስ አበባ ዩኒቨርሲቲ በካርዲዮ ቫስኩላር ነርሲንግ ስፔሻሊቲ የማስተርስ ዲግሪዋን በከፊል ለማሟላት በምታደርገው በፍሬወይኒ ገብረመስቀል በምታደረገው ጥናት መረጃ ሰብሳቢ ሆኜ እየሰራሁ ነው። የመንግስት ማስተማሪያ ሆስፒታሎች ውስጥ በአዋቂዎች የደም ግፊት ታማሚዎች መካከል ያለውን እውቀት እና እራስን አጠባበቅ ለመገምገም እየሞከርን ነው። ለጥያቄዎቹ ትክክለኛ አስተያየትዎን እንፈልጋለን። ርዕስ፡ የአዋቂ የደም ግፊት ታማሚ በመንግስት ማስተማሪያ ሆስፒታሎች የእውቀት እና ራስን አጠባበቅ ልምምድ አዲስ አበባ ኢትዮጵያ 2022። ዓላማው፡ የጥናቱ ዓላማ በአዲስ አበባ፣ ኢትዮጵያ ውስጥ በሚገኙ የመንግሥት ማስተማሪያ ሆስፒታሎች ውስጥ በአዋቂ የደም ግፊት ታማሚ መካከል ያለውን የዕውቀት ደረጃ እና ራስን የመንከባከብ ተግባር ለመገምገም ነው። የሚፈጀው ጊዜ፡ የሚጠየቀው ጥያቄ 20 ደቂቃ ያህል ይወስዳል። የጥናቱ ጥቅም፡ አሁን ምንም አይነት ቀጥተኛ ጥቅም የለም። ነገር ግን የጥናቱ ውጤት ታማሚዎችን በመገምገም ወደፊት ለሁሉም ህዝብ ጠቃሚ ይሆናል እውቀት ይነሮዋል የጥናቱ ስጋት፡ በዚህ ጥናት ውስጥ መሳተፍ ከመረጃ አሰባሰብ ጋር የተያያዘ ምንም አይነት አደጋ ወይም ጉዳት አይኖረውም። የተሣታፊ መብቶች፡ መሳተፍ እና አለመሳተፍ ሙሉ መብት አለው እና ተሳታፊዎች በማንኛውም ጊዜ በጥናቱ ከመሳተፍ ማቆም ይችላሉ። ተሳታፊዎቹ ለተሻለ ግንዛቤ ግልጽ ያልሆኑትን ማንኛውንም ጥያቄዎች መጠየቅ ይችላሉ። ምስጢራዊነት፡- ማንኛውም የተላለፈ መረጃ በሚስጥር ይጠበቃል እና የተሳታፊው ስም አይገለጽም። የዋናው አጥኒ አድራሻ፡- ስም፡ ፍሬወይኒ ገብረመስቀል (BSc) ስልክ፡ +251-911707934

ኢመይል፡ freweinigebremeskel08@gmail.com

የፍቃድ ቅፅ ከላይ ያለውን መረጃ በማንበብ በጥናቱ ለመሳተፍ በፈቃደኝነት

ተስማምቻለሁ

በዚህ ጥናት ለመሳተፍ ፍቃደኛ ከሆሁ በሚቀጥለው ገጽ ወደሚገኙት መጠይቆች ይቀጥሉ።

ፊርማ _____ ቀን _____

ለመሳተፍ ፈቃደኛ ስለሆኑ እናመሰግናለን!!

አዲስ አበባ ዩኒቨርሲቲ
የጤና ሳይንስ ኮሌጅ
የነርሲንግ እና ሚድዋይፍ ትምህርት ቤት የነርሲንግ
ትምህርት ክፍል

ይህ በአዲስ አበባ ኢትዮጵያ በሚገኙ የመንግስት ማስተማሪያ ሆስፒታሎች ውስጥ ክትትል በሚደረግባቸው የአዋቂዎች የደም ግፊት ታማሚዎች እውቀትና ራስን አጠባበቅ ለመገምገም የተዘጋጀ መጠይቅ ነው። ይህ ጥናት በአዲስ አበባ ዩኒቨርሲቲ በካርዲዮ ቫስኩላር ነርሲንግ ስፔሻሊቲ የማስተርስ ዲግሪ የማስመረቂያ የጥናት ፅሁፍ ለመስራት የተዘጋጀ ነው። በእርስዎ የተሰጡ ማናቸውም የግል መረጃዎች እና ማስረጃዎች በሚስጥር ይያዛሉ እና ለተጠቀሰው ዓላማ ብቻ ጥቅም ላይ ይውላሉ። እባክዎን በጥንቃቄ ያንብቡ እና ለእያንዳንዱ ጥያቄ የእርስዎን ምላሽ ይስጡ። ለትብብርዎ እናመሰግናለን!!

የመርማሪው ስም_____

ቀን__/_____/_____ የታካሚ ኮድ

_____ ክፍል አንድ፡ የግል መረጃ

1. ዕድሜ _____
2. ፆታ
    1. ወንድ 2. ሴት
3. የጋብቻ ሁኔታ
    1. ያላገባ
    2. ያገባ
4. የትምህርት ሁኔታ
    1. መሃይም
    2. የመጀመሪያ ደረጃ
    3. ሁለተኛ ደረጃ እና ከፍተኛ ትምህርት
5. ወርሃዊ ገቢህ ስንት ነው?
    1. < 600 ብር
    2. በወር ከ601 - 1650 ብር መካከል
    3. በወር ከ1650 ብር በላይ
6. ሥራህ/ሥራሽ ምንድን ነው? _____

ደም ግፊት ላይ ያላቸው ዕውቀት የተመለከቱ ጥያቄዎች

1. ከደም ግፊት ጋር ለምን ያህል ጊዜ ቆዩ?
    - ከስድስት ወር እስከ አንድ አመት
    - ከአንድ እስከ አምስት አመት
    - ከአምስት ዓመት በላይ
2. በቤተሰብ ውስጥ ከፍተኛ የደም ግፊት ያለው ሰው አለ?
    - አዎ
    - አይደለም
3. የደም ግፊት በዘር ሊተላለፍ ይችላል ብለው ያምናሉ?
    - አዎ
    - አይ
4. ስለ የደም ግፊት መረጃ ያገኛሉ?
    - አዎ
    - አይ
5. ለጥያቄ ቁጥር 4 መልስዎ አዎ ከሆነ ከየት አገኙት?
    - ሚዲያ
    - የጤና ባለሙያ
6. የደም ግፊት መጠን ከ140/90 በላይ ከሆነ ኖርማል ይባላል፡፡
    - አዎ
    - አይደለም
7. የደም ግፊት መጠን ከ120/80 በታች ከሆነ ከፍተኛ ይባላል፡፡
    - አዎ
    - አይደለም
8. ሲጋራ ማጨስ ለደም ግፊት ታማሚ አሉታዊ ተፅዕኖ ያሳድራል፡፡
    - አዎ
    - አይደለም
9. የአልኮል መጠጥ መጠጣት ለደም ግፊት ታማሚ አሉታዊ ተፅዕኖ ያሳድራል፡፡
    - አዎ
    - አይደለም
10. በደምዎ ውስጥ ያለውን የኮሎስትሮል መጠን ተለክተው ያውቃሉ?
    - አዎ
    - አይደለም
11. ለጥያቄ ቁጥር 10 መልስዎ አዎ ከሆነ በስንት ጊዜ
    - በሂወት ዘመኔ አንድ ጊዜ ወይም ሁለት ጊዜ
    - በየወሩ
    - በየሦስት ወር
    - በየስድስት ወር
    - ከዚያበላይ
12. ያልታከመ ኮሌስትሮል የደም ግፊትን ያስከትላል?
    - አዎ
    - አይደለም

13. ያልታከመ የደም ግፊት የልብ ህመምን ያስከትላል።
    - አዎ
    - አይደለም
14. የግፊት መድሃኒት መቼነው የሚወሰደው
    - ጥሩ ስሜት በማይሰማዎት ጊዜ
    - ዘወትር ለእድሜልክ
15. አንዳንድ ጊዜ መድሃኒቱን ሲወስዱ የከፋ ስሜት ከተሰማዎት, መውሰድ ያቆማሉ?
    - አይ
    - አይ
16. ጥሩ ስሜት ሲሰማዎት አንዳንድ ጊዜ መድሃኒትዎን መውሰድ ያቆማሉ?
    - አዎ
    - አይ
17. የደም ግፊት ህመምተኛ መመገብ የለሌበት
    - አትክልቶች እና ጥራጥሬዎች
    - ከፍተኛ ጨው እና ቅመም

እራስን የመንከባከብ ልምድ

1. እቤት ውስጥ የግፊት መለኪያ መሣሪያ አለህ/ሽ?
    - አዎ
    - አይደለም
2. የደም ግፊትህ በየጊዜው ትለካለህ/ትለኪያለሽ?
    - አዎ
    - አይደለም
3. ተራ ቁጥር 2 ላይ መልስዎ አዎ ከሆነ በየስንት ቀኑ ይልካሉ?
    - < 1 ሳምንት
    - በየወሩ
    - > 3 ወራት
4. ለተራ ቁጥር 2 ጥያቄ መልስዎ አዎ ከሆነ የት ነው የሚለኩት?
    - በሆስፒታል
    - በቤት
    - ፋርማሲ
    - በአቅራቢያው ያለ የጤና እንክብካቤ ተቋም
5. ግፊትዎን ለመለካት የሚከብድም ነገር ምንድን ነው?
    - የግንዛቤ እጥረት
    - በቅርብ ስለማላገኝ
    - ውድ መሆኑ
6. የደም ግፊት ሃኪምዎን በየስንት ጊዜ ያማክሩታል?
    - > 6 ወራት
    - በየ 3-6 ወሩ

- <3 ወራት

7. የልብ ሃኪምዎን ለልብ ምርመራ በየስንት ጊዜ ያማክራሉ?
    - ከ 3 ወር በታች
    - ከ 3-6 ወር ውስጥ
    - ከ 6-12 ወር ውስጥ
    - ከአንድ ዓመት በላይ
    - አማክሬ አላቅም
8. የECG ምርመራ በየስንት ጊዜ ያደርጋሉ?
    - ወርሃዊ
    - በየሶስት ወሩ
    - በየስድስት ወሩ
    - ከዛም በላይ ቆይቼ
    - ምንም አላደርግም
9. ምግብ በሚመገቡበት ጊዜ ለጤናዎ ተስማሚ የምግብ ክፍሎች እና ምርጫዎች ያስባሉ?
    - በጭራሽ
    - አንዳንድ ጊዜ
    - ብዙ ጊዜ
    - ሁልጊዜ
10. አካላዊ እንቅስቃሴ ያደርጋሉ?
    - አዎ
    - አይ
11. ምን ያህል ጊዜ የአካል ብቃት እንቅስቃሴ ያደርጋሉ?
    - በሳምንት ከሦስት ጊዜ ያነሰ
    - በሳምንት ሦስት ጊዜ
    - በሳምንት ከሦስት ጊዜ የበለጠ
12. ምን አይነት የአካል ብቃት እንቅስቃሴ ያደርጋሉ?
    - መራመድ
    - መሮጥ
    - ብስክሌት መንዳት
    - ሌሎች…
13. በአንድ ከፍለ ጊዜ ለምን ያህል ጊዜ እንቅስቃሴ ያደርጋሉ?
    - <15 ደቂቃ
    - 15-30 ደቂቃ
    - > 30 ደቂቃ

እናመሰግናለን

APPROVAL SHEET

ADDS ABABA UNIVERSITY

COLLEGE HEALTH SCIENCE SCHOOL OF ALLIED SCIENCES
DEPARTMENT OF NURSING AND MIDWIFERY

1. the undersigned MSc student, declare that I have submitted my original work on a title of Assessment of knowledge and self-care practice among adult hypertensive patient on hypertension management in selected governmental teaching hospitals for the examination.

Submitted by:

Freweini Gebremeskel (BSc)

Signature _____ Date _____

This thesis work has been submitted for examination with my approval as an advisor.

Approved by:

2.Yohannes Ayalew (RN, Ph. D fellow, Assistant professor)

Signature _____ Date _____

3.Ketema Bizuwork (BSc, MSc, Lecturer)

Signature _____ Date _____