COLLEGE OF MEDICENE AND HEALTH SCIENCES

DEPARTMENT OF PUBLIC HEALTH

KNOWLEDGE, ATTITUDE AND PRACTICE OF HYPERTENSIVE PATIENTS ON LIFE STYLE MODIFICATION IN WOLKITE UNIVERSITY SPECIALIZED HOSPITAL, GURAGE ZONE, CENTERA ETHIIOPIA, 2025

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ACRONYMS AND ABBREVIATIONS

BP: Blood Pressure

CHD**:** Coronary Heart Disease

CHF: Congestive Heart Failure

CI: Confidence Interval

CSA: Central Statistical Agency

CVD: Cardiovascular Disease

DBP: Diastolic Blood pressure

DM: Diabetes Mellitus

E.C: Ethiopian Calendar

GP: General Physician

HC: Health Center

HBP: High Blood Pressure

HTN**:** Hypertension

KAP: Knowledge Attitude Practice

LSM: Life Style on Modification

MmHg: millimeter Mercury

NGO: Non-Governmental Organization

SBP: Systolic Blood Pressure

SD: Standard Deviation

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ABSTRACT

Background: Hypertension is an overwhelming global challenge. Appropriate lifestyle changes are the cornerstone for the prevention of hypertension. It is estimated that about one third of adults in most communities in the developed and developing world have hypertension. In Africa, 15% of the population has hypertension(1). Although there is shortage of extensive data, 6% of the Ethiopian population has been estimated to have HTN(2).

Objectives: To assess the Knowledge, Attitude and Practice of Hypertensive Patients on Life Style Modification in Wolkite University Specialized Hospital, Gurage Zone, Central Ethiopia 2024.,

Methods: Institutional based cross-sectional study was conducted at the chronic adult Out Patient in Wolkite University Specialized Hospital, Gurage Zone, Central Ethiopia from December 24- 2024 – January 6-2025. A total of 240 Hypertensive patients were consecutively included in the study. A structured interviewer-administered questionnaire used for data collection. Systematic random sampling technique was used to collect data and Questions are categorized to elicit participants' demographic characteristics, economic characteristics, knowledge, Attitude and the practice of various lifestyle-modification measures. The data was collected by EPI-INFO Version -7.2 Statistical software then entered to analyze SPSS version 25 and the result was presented by statement and table. The result will be disseminated to Wolkite University, Specialized Hospital, Public Health Department and other stakeholders.

Result: Information was collected from 240 Hypertension patients on life style modification. From a total of 240 patients 167(69.3%) have good knowledge but only 104(43.3%) were good practice. of the 240 respondents, 142(59.2%) and 98(40.8%) had positive and negative attitudes respectively.

Conclusion and Recommendation: This study assessed the knowledge, attitude, and practice of life style modification among hypertension patients. The findings revealed that while patient had good level of knowledge and a positive attitude towards adopting lifestyle changes, their actual practice of these modifications was poor. Regularly provide health education sessions focused on the importance of lifestyle modification especially on reduce salt intake and regular exercise

Keywords: Hypertensive, KAP, Life style Modification, Wolkite University Specialized Hospital.

1. INTRODUCTION

1.1. Background

Hypertension is a long-lasting medical condition in which a person's blood pressure is high. It is defined as a sustained elevated blood pressure of 140 mmHg or greater systole, and/or 90 mmHg or greater diastole(3). It is estimated that about one third of adults in most communities in the developed and developing world have hypertension. In Africa, 15% of the population has hypertension(1). Although there is shortage of extensive data, 6% of the Ethiopian population has been estimated to have HTN. Approximately 30% of adults in Addis Ababa have hypertension above 140/90 mmHg or reported use of anti-hypertensive medication(2). The major impact of hypertension can contribute to other health problems such as heart disease, stroke, and kidney problems, and so reduces quality of life(4, 5).Hypertensive patients was when compared to normal hypertensive develops twice as much as coronary heart disease, four times as much congestive heart failure and seven times as much stroke(3).

In a typical American (control) diet, reducing sodium intake from the higher to the intermediate level significantly reduced systolic BP by 2.1 mmHg; reducing sodium intake from the intermediate to the lower level further reduced systolic BP by 4.6 mmHg. In the DASH diet, corresponding changes in systolic BP were -1.3 and -1.7 mmHg, respectively. The effects of sodium reduction tended to be greater in blacks than whites. Compared with the control diet with higher sodium, the DASH diet with lower sodium reduced systolic BP by 7.1 mmHg in non-hypertensive persons, and 11.5 mmHg in hypertensive(5).

A consistent body of evidence from observational studies and clinical trials indicates that weight is positively associated with BP and hypertension. The importance of this relationship is reinforced by the high and increasing prevalence of overweight and obesity throughout the world. Virtually every clinical trial that has examined the influence of weight loss on BP has documented that weight reduction lowers BP(6). Interestingly, reductions in BP occur before (and without) attainment of desirable body weight. In one study that aggregated results across weight loss trials, average systolic and diastolic BP reductions were 1.6/1.1 mmHg per kilogram of weight loss. Lifestyle intervention trials have uniformly achieved short-term weight loss. In several instances, substantial weight loss has also been sustained over 3yr or more(6). A healthy lifestyle remains the cornerstone of the management of hypertension at all levels of the disease. A healthy lifestyle

decreases blood pressure, enhances antihypertensive drug efficacy and decreases total cardiovascular risk. The strategies for a healthy life style include and maintaining ideal weight with a body mass index (BMI) between 18.5 and 24.9 kg/m2; Limiting alcohol intake to two standard drinks per day for men and one standard drink per day for women and small men; controlling nutrition through use of low in total fat with high intake of fruit and vegetables, regular use of low fat dairy products, a high intake of fiber containing wholegrain foods, consumption of fish rather than red meat, avoidance of food high in unsaturated fat, salt and sugar, and avoidance of beverage with high caffeine; exercising regularly ; for at least 30 minutes on most or preferably all days of the week; stopping the use of all tobacco products, including snuff(4, 5).

It is possible to prevent the development of hypertension and to lower blood pressure levels by simply adopting a healthy lifestyle. For example studies have shown that salt restriction produce a 3 mmHg decrease in diastolic blood pressure to patients on diuretics and B-blockers; and an isolated chronic endurance exercise can approximately decrease 5-7mmHg in hypertensive patients(7). Even though, small reductions in BP, if applied to an entire population, could have an enormous beneficial effect on cardiovascular events. For instance, a 3-mmHg reduction in systolic BP should lead to an 8% reduction in stroke mortality and a 5% reduction in mortality from coronary heart disease(8). However, healthy life style modifications remain difficult to implement in spite of their obvious benefit to frustrating health care providers in advocating them(5).

The research paper includes introduction which is briefly described .Then statement of the problem and significance of the study described in different page respectively. The research then follows literature review, objectives and methods and materials .All of them are describe in this research paper. Lastly discussion and conclusion are described. The findings could be useful to the governmental and non-governmental organizations working in lifestyle modification programs to design interventions to improve the knowledge and practice of lifestyle modification in these hospitals and other similar circumstances. The findings could also be useful as contribution to the ongoing research efforts on lifestyle modification practice of hypertensive patients.

1.2. Statement of problem

Hypertension is a common and major global public health problem. Approximately 7.6 million deaths (13-15% of the total) and 92 million disability-adjusted life years ‘worldwide were attributable to high blood pressure in 2001. By 2025 the number of hypertensive people is expected to increase by 60% and reach 1.56 billion people(9). Hypertension doubles the risk of CVD, including coronary heart disease (CHD), congestive heart failure (CHF),ischemic and hemorrhagic stroke, renal failure, and peripheral arterial disease(9). Study done in south west Ethiopia showed that the prevalence of hypertension was 16.9%(8). Among the hypertensive only 44.8% were aware of their hypertension, and the overall control rate of hypertension was only 22.4 %. According to this study, knowledge, attitude and practice towards prevention of hypertension on life style modification is poor in the study participants(10).

Hypertension can be adequately managed through drug treatment as well as lifestyle changes. LSM, in addition to lowering BP, can also reduce other cardiovascular risk factors. Furthermore, the involved cost is minimal and there are hardly any risks. Hypertensive patients irrespective of their disease stage are encouraged to adopt these measures. Unawareness of LSM and failure to apply it was one of the identified patient-related barriers to BP control. In hypertensive individuals, LSM can be recommended as an initial treatment before starting drug therapy or as an adjuvant. LSM has proven role in hypertension management. For example, according to Whelton et al., LSM can decrease systolic blood pressure (SBP) approximately by 11mmHg. Moreover, LSM may enable drug step-down and drug withdrawal ultimately when the control is deemed adequate, particularly in patients who are highly committed to maintain lifestyle changes.

Different types of LSMs are indicated for hypertension management, including weight loss for obese patients, sodium reduction not exceeding 1.5 g daily, alcohol intake reduction, smoking cessation, avoidance of excessive caffeine, diet modification such as low intake of saturated and total fat and increase in fruits and vegetables intake.

Despite its proven effect, the implementation of LSM is often the overlooked part of hypertension management. One problem for lack of LSM among hypertensive patient is lack of awareness and poor practice(11).

It is possible to prevent the development of hypertension and to lower blood pressure levels by simply adopting a healthy lifestyle. The recommended lifestyle measures that have been shown to be capable of reducing blood pressure include: (i) salt restriction, (ii) moderation of alcohol consumption, (iii) high consumption of vegetables and fruits and low-fat and other types of diet, (iv) weight reduction and maintenance and (v) regular physical exercise. In addition, insistence on cessation of smoking should be part of any comprehensive lifestyle modification plan to reduce the risk of high blood pressure and Cardiovascular disease. Hypertensive patients irrespective of their stage or grade should be motivated to adopt these measures. Motivating patients to implement lifestyle changes is probably one of the most difficult aspects of managing hypertension(12).

Despite the fact that Hypertension is one of the leading causes of disability and death in both developed and developing countries that need urgent strategies to implement interventions that control it. This study aims to assessing the current status of the Knowledge, Attitude and Practice of Hypertensive Patients on Life Style Modification in Wolkite University Specialized Hospital 2024.

1.3. Significance of the Study

Hypertension is one of the leading causes of disability and death in both developed and developing countries that need urgent strategies to implement interventions that control it. Hypertension already affects one billion people worldwide, leading to heart attacks and strokes. Researchers have estimated that raised blood pressure currently kills nine million people every year. Elevated blood pressure is the most potent modifiable risk factor for cardiovascular disease worldwide .Unawareness of lifestyle modifications, and failure to apply these were one of the identified patient-related barriers to blood pressure control. Appropriate lifestyle changes may safely and effectively delay or prevent Hypertension in non-hypertensive subjects.

Despite the fact that Hypertension is one of the leading causes of disability and death in both developed and developing countries that need urgent strategies to implement interventions that control it. In addition, the number of studies to assess the Knowledge, Attitude and Practice of Hypertensive Patients on Life Style Modification in the study area is limited. It is hoped that the results of the study will provide valuable information for the design of possible programs and interventions that Health system will be used to improve life style of HTN Patients. The policy maker, managers, concerned NGO, any stakeholders that can be benefited from this study result. Furthermore, it may also help as source for further study in the same area of inquiry. The findings could also be useful as a contribution to the ongoing research efforts on lifestyle modification practice of hypertensive patients.

2. LITRATURE REVIEW

2.1. Magnitude of Hypertensive

Studies done in different countries showed that the level of knowledge about hypertension in their population is low. A study done in Mongolia by Demaio et al . Showed that more than 80% understand what hypertension is, 97% did not know if they had high blood pressure, 92% did not notice whether their relatives had hypertension, and 95% thought they were not at risk of hypertension .Forty percent of overweight individuals did not know that being overweight is the negative effects for hypertension. More than 40% did not know that alcohol is the negative effects for hypertension(13).

A study done in Mongolia by Demaio et al showed that two-fifths 40% of participants rated their knowledge as high and felt they were 'very familiar' with the concept of blood pressure. On awareness regarding the risk posed to specific body organs from high blood pressure, 775 (4.2%) are aware of the risks of blood pressure to the heart, kidneys and brain(13).According to study done in India by Mahajan et al, out of 340 hypertensive patients, 287 (84.41%), 235 (69.1%) and 249 (73.23%) had poor score of knowledge, attitudes and practices of Hypertension respectively. The low score of knowledge, attitude and practice is mainly associated with illiteracy, low socioeconomic class of the patients. Also, he found that the knowledge, attitude and practice score was less in females when compared to males(14).

Some of hypertensive patients believe that life style modification is not serious and considerable, and hypertension is only prevented and treated by drugs so that all efforts are made to improve KAP of hypertensive patients on life style modifications. According to a review of literature in South Africa there appear to be no studies that have comprehensively assessed patient hypertension knowledge, attitudes and perceptions on the importance of life style modification in controlled hypertension(15).

Epidemiologic, clinical and experimental studies suggest that ingestion of a diet habitually high in salt plays a role in the etiology and pathogenesis of hypertension. Sodium chloride is the most abundant salt occurring naturally in food. However, the largest quantities of salt now consumed originate from industrially processed food(16).

Salt reduction has been suggested as a possible adjunct to pharmacologic treatment to enhance blood pressure control. Several studies have investigated this issue and found that, for hypertensive patients who are receiving antihypertensive medication; salt restriction provides additional benefits in terms of blood pressure control(17). It is thus important that in hypertensive patients, counseling and assistance in embarking on a low salt diet should be an integral part of the overall therapeutic regimen. An increased prevalence of hypertension in groups with high alcohol consumption has been recognized for a number of years. In South Africa good lifestyle changes are further complicated by varying socio-economic conditions, education levels and poor health care delivery. This study will inform health care workers on possible education and lifestyle modification emphasis for these patients. This could augment already existing methods of treatment in the management of hypertension(15).

Studies related to the knowledge of hypertensive patients on life style modification.

A studies done in a North Carolina by Vera et al. showed that 29% of respondents older than 65 years had lower hypertension knowledge compared with 18% of those ages 45 to 65 and 22% of those younger than 45 years old. More than 29% of African-Americans had lower hypertension knowledge, compared with 19% of whites. One third of respondents with less than a high school education had lower hypertension knowledge, compared with 24% of high school graduates and 14.6% of those with some college(18).The study conducted on the Knowledge, attitude and practice about hypertension among adult people of selected areas of Bangladesh showed that 56.36% of the respondents had proper knowledge on hypertension. On an average 85.68% had positive attitude toward hypertension(19).

Study done in Nigeria by Busariet an l showed that (47.1%) had good knowledge of hypertension. Knowledge of hypertension was better in women than in men (59.3% vs. 40.7%)(17).A studies done in a North Carolina by Vera et al. showed that 29% of respondents older than 65 years had lower hypertension knowledge compared with 18% of those ages 45 to 65 and 22% of those younger than 45 years old. More than 29% of African-Americans had lower hypertension knowledge, compared with 19% of whites. One third of respondents with less than

a high school education had lower hypertension knowledge, compared with 24% of high school graduates and 14.6% of those with some college(18).

Study done in Nigeria by Marfa et al. showed that (60%), 62 and 59 % of respondents were aware of lifestyle modification adjunct to the management of hypertension such as regular exercise; reduce salt intake and eating a diet high in fruits, vegetables and low in fat. Respectively In addition 38% were aware of avoidance of cigarette smoking and 46% were aware of reduction in alcohol intake(20).

Another study done in Nigeria showed 69.4% believed hypertension could be cured once and for all, but 31% did not believe so. While 46% knew treatment is lifelong(17).

According to a systematic review done by Kayima et al. in Africa, the lowest levels of awareness of hypertension were found in rural communities in Nigeria (8%), Uganda (10%) and Gabon (9%). The lowest prevalence of awareness in urban areas was 12.3% among slum dwellers in Nairobi. The highest awareness rates were found in the studies that considered elderly subjects reaching 81% in urban elderly populations of Tunisia. Generally, studies from North African countries showed the highest levels of awareness 71% among hypertensive patients. West and central Africa seemed to have the lowest levels of awareness of hypertension status(21).

The study conducted on the assessment of Knowledge, Self-care Practice, and Associated Factors Among Hypertensive Patients in the Public Hospital of Addis Ababa Ethiopia showed that (43.6%) of the study participants had good knowledge about hypertensive self-care. A strong association was observed between knowledge about hypertension and educational status, family history of hypertension, place of residence; and occupational status of the study participants(22).

The study conducted on the Knowledge, Attitude and Self-Care Practice towards Control of Hypertension among Hypertensive Patients on Follow-up at St. Paul's Hospital, Addis Ababa showed that 48.6% of hypertensive patients participated in this study have good basic knowledge of hypertension, 47.8% of them have good attitude and only 39.5% of the study participants have good practice towards control of hypertension(23). The study conducted on the Knowledge, attitude and practices of lifestyle modification and associated factors among hypertensive patients on-treatment follow up at Yekatit 12 General Hospital in the largest city of East Africa:

A prospective cross-sectional study revealed that 67.7% [95% CI (65.32%, 70.08%)] were knowledgeable towards lifestyle modification(24).

The study conducted on the Knowledge, attitude and practice of lifestyle modification recommended for hypertension management and the associated factors among adult hypertensive patients in Harar, Eastern Ethiopia showed that 200 (73.0%) of participants had good knowledge on lifestyle modification recommended for hypertension management(11).

The study conducted on the Assessment of Knowledge and Practice of Life Style Modification among Hypertensive Patients at Nekemte Specialized Hospital, Western Oromia, Ethiopia: A Cross-sectional Study Design showed that the respondents' knowledge of lifestyle modifications was 79.28%, but only 68.92% of them have a good practice.(25)

Studies related to the attitude of hypertensive patients on life style modification.

A studies done in a North Carolina by Vera et al. showed that 29% of respondents older than 65 years had lower hypertension knowledge compared with 18% of those ages 45 to 65 and 22% of those younger than 45 years old. More than 29% of African-Americans had lower hypertension knowledge, compared with 19% of whites. One third of respondents with less than a high school education had lower hypertension knowledge, compared with 24% of high school graduates and 14.6% of those with some college(18). The study conducted on the Knowledge, attitude and practice about hypertension among adult people of selected areas of Bangladesh showed 85.68% had positive attitude toward hypertension(19).

A study done in done in Addis Ababa by Tadesse Guda Two hundred eighteen (51.9%) of respondents strongly agreed to the statement " high blood pressure is preventable", one hundred thirty eight (32.9%) agreed to the statement "stopping smoking and alcohol helps to prevent hypertension", 169(40%) agreed to the statement "avoiding salt in their food is good" while 169(40.2%) disagreed to the statement "it is good to use extra added cooking oil". Mean of attitude score was 65.1% (±16 SD) with minimum 40% and maximum 97% cumulative percent attitude score. Two hundred nine (49.8%) of the respondents has neutral attitude towards preventive measures of hypertension based on blooms cut of point(26).

The study conducted on the Knowledge, Attitude and Self-Care Practice towards Control of Hypertension among Hypertensive Patients on Follow-up at St. Paul's Hospital, Addis Ababa showed that 47.8% of them have good attitude towards control of hypertension(23). The study conducted on the Knowledge, attitude and practices of lifestyle modification and associated factors among hypertensive patients on-treatment follow up at Yekatit 12 General Hospital in the largest city of East Africa: A prospective cross-sectional study revealed that 54.0% [95% CI (51.34%, 56.6%)] were reported to have favorable attitude towards lifestyle modification(24).

The study conducted on the Knowledge, attitude and practice of lifestyle modification recommended for hypertension management and the associated factors among adult hypertensive patients in Harar, Eastern Ethiopia showed that 182(66.4%) had favorable attitude on lifestyle modification recommended for hypertension management(11).

Study related to the practice of hypertensive patients on life style modification.

People with hypertension can prevent the squeals of the disease and prevent the possible Complications caused by raise in blood pressure by taking care of themselves. Self-care refers to learned, conscious, and purposeful practices, which people do for themselves, their children and their families to stay healthy and maintain their proper health, both mentally and physically, meet their social and psychological needs, and prevent illness or accident. Self-care is not a substitute but a supplement that determine how to apply professional and organizational care. The self-care practice for prevention of complications of hypertension includes not taking salty foods. No smoking, abstained from drinking any alcohol, and being adherent to ant hypertension medication. Self-care practices introduced in healthy behaviour are vital in both the prevention, and 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, drug side effects and complexity of the regimen.(22)

A study done in Mongolia by Demaio et al showed that only 20% of participants had had their blood pressure checked in the previous year, 67.79% of participants were current smokers, and 23.18% were nonsmokers. Among the current smokers, 38.12% did not know that smoking was a risk factor for hypertension(13).

A study done in Iran by Sabouhi et al on patients came to health care centers showed that practice score of HTN was high (very good/score >75%) in 49/2% patients with mean of 73.7% (SD = 11.27). About fifty percent (44.9%) reported that sometimes they had regular exercise while 31.6% rarely had regular exercise. Thirty six percent (36.8%) had always used law salt diet (15.4% have often adhered it). Thirty six (36.3%) have tried to decrease their stress according to doctor or health care provider's recommendation. And 70.9% report that that they have rarely quit medications base on family or friend's recommendation(27). A study done in Nigeria showed that, 81.5% took much table salt, but 18.5% did not. While 63% used a lot of condiments in cooking, 37% did not, 21% regularly took plenty of vegetables but 79% did not, whereas 22% took plenty of fruits, 78% did not. Although 13% adhered to dietary advice to lose weight 87% did not(26).

The study conducted on the Knowledge, Attitude and Self-Care Practice towards Control of Hypertension among Hypertensive Patients on Follow-up at St. Paul’s Hospital, Addis Ababa showed that 39.5% of the study participants have good practice towards control of hypertension(23). A study done in Addis Ababa by Tadesse Guda eighty four (20%) of the respondents were current smokers, of which 38(45.2%) smoked about 6-10 years, and forty seven (55.9%) smokes 6-10 cigarette per day. Two hundred sixty six (63.3%) of respondents drink alcohol, where 140(52.6%) of them drinks less than one glass of alcohol /week Mean percent of practice score was 60.5% (±16.9 SD). One hundred eighty five (44%) had fair practice towards preventive measures of hypertension(26). The study conducted on the Knowledge, attitude and practices of lifestyle modification and associated factors among hypertensive patients on-treatment follow up at Yekatit 12 General Hospital in the largest city of East Africa: A prospective cross-sectional study revealed that practices were 38% [95% CI(19.91%, 57.49%] of the respondents had good practices(24).

A study done in North Gondar (Ethiopia) by Awoke at el. showed that 32 participants (4.7%) declared that they were smoking cigarettes previously. Nineteen (2.8%) of participants were current smokers of whom 7 (36.8%) were smoking at least half a pack (10 or more cigarettes) every day. Concerning their alcohol use, 251(37.0%) were current users. One from every seven participants (16.9%) was involved in vigorous activities such as carrying or lifting heavy loads, and construction works(28).The study conducted on the assessment of Knowledge, Self-care Practice, and Associated Factors among Hypertensive Patients in the Public Hospital of Addis Ababa Ethiopia showed that 51.5% of the study participants had good self-care practices towards hypertension(22).

The study conducted on the Knowledge, attitude and practice of lifestyle modification recommended for hypertension management and the associated factors among adult hypertensive patients in Harar, Eastern Ethiopia showed that 136 (49.6%) had good practice on lifestyle modification recommended for hypertension management(11).The study conducted on the Assessment of Knowledge and Practice of Life Style Modification among Hypertensive Patients at Nekemte Specialized Hospital, Western Oromia, Ethiopia: A Cross-sectional Study Design showed that the respondents' knowledge of lifestyle modifications was 79.28%, but only 68.92% of them have a good practice(25).

Study conducted on the Lifestyle modification practice and associated factors among diagnosed hypertensive patients in selected Hospitals in West Arsi Zone, Oromia Regional State, Ethiopia showed that 25.2% (95% CI: 18.8-32.9) of the patients were practiced recommended lifestyle modifications(29).

2.2 Conceptual Framework

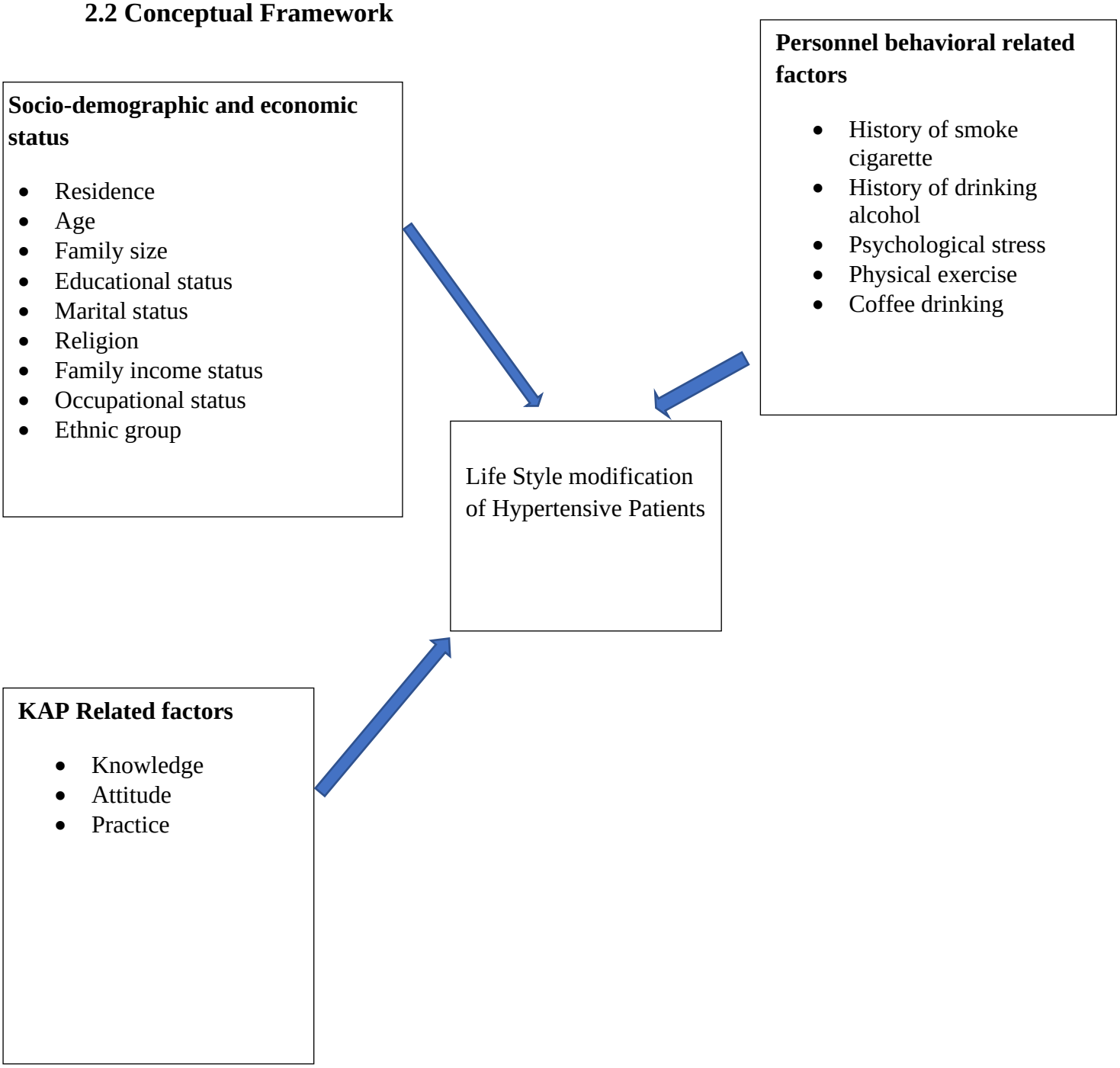

Figure-1: Conceptual Framework of the Assessment of Knowledge, Attitude and Practice of Hypertensive Patients on Life Style Modification in Wolkite University Specialized Hospital, Central Ethiopia 2024(9, 11, 12, 16, 18, 19, 23, 24)

3. OBJECTIVES

3.1. General Objective

To assess the Knowledge, Attitude and Practice of Hypertensive Patients on Life Style Modification in Wolkite University Specialized Hospital, 2024

3.2. Specific Objectives.

- To assess knowledge of hypertensive patients on life style modification in Wolkite University Specialized Hospital, 2024.
- To determine attitude of hypertensive patients to ward life style modification in Wolkite University Specialized Hospital, 2024.
- To determine practice of hypertensive patients to ward life style modification in Wolkite University Specialized Hospital, 2024.

4. METHODS

4.1. Study area

This study was conducted at in Wolkite University Specialized Hospital, 2024 from December 2024 - January 2025 GC. Wolkite University Specialized Hospital found at Central part of Ethiopia, Gurage Zone, in Wolkite town at a distance of 153 km from the capital city of Ethiopia Addis Ababa. Those hospital was established in 2011 E.C .The Hospital has more than 672 staffs of which 23 GP,110 nurses, 25 laboratories, 30 pharmacists, 59 resident, 11 public health, 30 midwifery,9 anesthesia, 6 psychiatric,4 radiology, Internal medicine, surgery, obstetrics and gynecology, emergency and pediatrics are the major departments in Wolkite University Specialized Hospital.

Wolkite town is the currently the capital city of Gurage Zone .Its altitude ranges from 1910m above sea. The total surface area of the town is 889.4 Hectare .The climatic condition of the town is “semi desert” with annual environmental T° which ranges from 20-25°C.

4.2. Study design and Period

Our study was institutional based cross-sectional study conducted from December 24- 2024– January 6-2025 GC.

4.3. Source and Study Population

4.3.1 Source population

All hypertensive patients who are on chronic follow up at in Wolkite University Specialized Hospital will be considered as source population**.**

4.3.2. Study Participation/Population

Selected all HTN patients who are on chronic follow up those visiting hospital at the time of data collection those fulfill their criteria.

4.4. Inclusion and Exclusion Criteria

4.4.1. Inclusion criteria

The study was included all patients on chronic hypertension follow up was included in the study.

4.4.2. Exclusion criteria

Patients with psychiatric problem having chronic hypertension and unable to communicate during the study period, critically ill and cannot respond to the question, pregnancy induced hypertension patient, hypertensive urgency or emergency will be exclude.

4.5. Sample Size and Sampling Technique

4.5.1. Sample Size Determination

The Sample size was calculated by using a single population proportion determination formula. The proportion that obtained from the result of Assessment of Knowledge and Practice of Life Style Modification among Hypertensive Patients at Nekemte Specialized Hospital, Western Oromia, Ethiopia; A Cross-sectional Study Design showed that the respondents' knowledge of lifestyle modifications was 79.28%, but only 68.92% of them have a good practice. The study conducted on the Knowledge, attitude and practices of lifestyle modification and associated factors among hypertensive patients on-treatment follow up at Yekatit 12 General Hospital in the largest city of East Africa: A prospective cross-sectional study revealed that 54.0% were reported to have favorable attitude towards lifestyle modification.

n = initial sample size, Level of confidence 95%, which gives the percentile of the normal distribution, $Z\alpha/2 = 1.96$, d = Margin of error assumed to be 5%, Estimated non-response rate = 10%

Table 1: Sample size calculation assessment of knowledge, attitude and practice of hypertensive patients on life style modification in Wolkite University Specialized Hospital, Central Ethiopia from DEC 2024-JAN 2025.

Variable	**Proportion(p)**	**Calculated sample size**	**Decision**
Knowledge	Good knowledge	252	Rejected
Attitude	Positive attitude	381.7	Accepted
Practice	Good practice	329.3	Rejected

The sample size (n) will be computed as:-p=54.0%

However, since our source population is 510, the final sample size was determined by using formula

nf=n/1+n/N 'for N less than 10,000.

Where, n=our initial sample size

nf=our final sample size

N=our source population all hypertension patients who are on chronic follow up

nf=381.7/1+381/510

nf =218

Finally, after 10% non-response rate was considered the sample size for the study was 239.8 ~240

4.5.2. Sampling technique

systematic random sampling technique was employed using select the study participant from Wolkite University Specialized Hospital.The total sample size was consecutive from hypertensive patients those follow antihypertensive drug in Chronic OPD at in Wolkite University Specialized Hospital. Sampling interval (K) was determined by divide the total number of all hypertension patients who are on chronic follow up to the sample size**.**

K=N/n, where N is all hypertension patients who are on chronic follow up (510) and n is sample size (240)

K=510/240=2.1~2. The fist participant was select by using lottery method .in this study, the first was 2(2, 4, 6, 8……240). Selected participant was interview according to the K interval until the sample size (240) is met.

4.6. Variable

4.6.1. Dependent Variable

Life Style modification

4.6.2. Independent Variables

Socio-demographic factors: Residence, age, family size, educational status, marital status, religion, average family income, occupational status, ethnic group.

KAP Related factors

Knowledge

Attitude

Practice

Personnel behavioral related factors:

History of smoke cigarette

History of drinking alcohol

Psychological stress

Physical exercise

4.7. Operational definition

Good knowledge -- Respondents with response above 50% of the knowledge questions were considered as having good knowledge(30, 31)

Poor knowledge -- Those who answered below 50% of the knowledge questions were considered as having poor knowledge(30, 31)

Good Practice -- Those who correctly answered above 50% practice questions were considered as having good practice. (32)

Poor Practice -- Those who answered below 50% of the practice questions were considered as having poor practice.(32)

Adherence to lifestyle modifications -- Respondents who adhere to diet, exercise, smoking, and alcohol consumption-related recommendations.(33)

Exercise- related adherence-- Respondents who reported to have exercised for 30 min per day, at least three times per week.(33)

Life style modification:-Refers to the change in living pattern to reduce HTN(15).

Smoking-related adherence -- Respondents who reported to have never smoked or stopped smoking(34).

Alcohol consumption-related adherence -- Respondents who reported to have never consumed alcohol(34)

4.8. Data collection tools and procedures

4.8.1. Data collection tools

The data was collected using pre-tested structured questionnaire. The questionnaire was prepared by group members and first adapted was prepared in English version and we translated into Amharic and re-translated back to English to see its consistency. The questions and statements was grouped and arranged according to the particular objectives that they are aimed to address the objectives.

4.8.2. Data Collection Procedure

Data was collected using a combination of well structured questionnaire. Data was collected by group of member and supervised by two advisors. Training was given to data collectors and supervisors on the objectives of the study for one day.

4.9. Quality Assurance

The quality of the data was assured by using pretested questionnaire. Prior to the actual data collection, pre-test was done on 5% of the total study subjects at Wolkite Health Center which was not be included in the actual study, and based on the findings necessary amendments was made. The objective of the study, confidentiality of the information, informed consent and interview technique. The data collector was closely supervised by supervisors to ensure adherence to data collection procedures. The supervisor was checking the completeness of questionnaire.

4.10. Data Processing and analysis

Data was checked for its completeness and consistency. The data was collected by EPI-INFO Version -7.2 Statistical software then analyze by using SPSS version 25. After organizing and analyzing the data, frequencies, mean, Standard deviation and percentages was calculated to all variables that are related to the objectives of the study. Finally, the result was presented by statement and tables.

4.11. Ethical consideration

Ethical clearance was obtained from the ethical review board of Wolkite University College of Medicine and Health Science department of public health the formal letter of cooperation was written to in Wolkite University Specialized Hospital. Verbal consent was obtained from each study subjects after explaining the purpose of study. A participant was having the right to continue or withdraw from the study at any point if they are not comfortable with the study. Name of the respondent was not being included in the questionnaire and information of individual respondent was not being shared to ensure the confidentiality. All the responses of the participants and the results obtained from each client was be kept anonymous and confidential by using a coding system whereby system no one was have access except the students done this research. The study has no any risk on the study subject and interview will be conducted in a private area. The hypertensive patient was given awareness about HTN and their result was not being shared to ensure confidentiality.

4.12. Data dissemination

The final report was presented as partial fulfillment of the degree of undergraduate Public Health department to Wolkite University College of Medicine and Health Science. The result will also be disseminated to government offices, Wolkite University Specialized Hospital, Gurage Zonal Health Department and Central Ethiopia Health Bureau and Federal Ministry of Health. Finally, it will be published in one of scientific journals to reach wide range of scientific community**.**

5. Result

5.1 Socio demographic characteristics

There were 240 hypertensive patients interviewed in this study. The number of males 123(51.2%) was greater than the number of females 117(48.8%). Most of them were age between 45-64. In this study most participants were married which is 189(78.8%). Among the respondents about 155(64.6%) were from rural, and 85(35.4%) were from urban. The most dominant ethnicity and religion were Gurage and Orthodox which account 183(76.3%) and 108(45%) respectively. The educational status showed that participants were illiterates 95(39.6%).The occupational status of participant showed 71(29.6%) were Merchant. Concerning income, most of the participant monthly income was >5000 which account 105(43.8%).

Table 2: Socio demographic characteristics in Wolkite University Specialized Hospital Central Ethiopia 2025

Variables	Category	Frequency	Percent
Residence	Rural	155	64.6%
	Urban	85	35.4%
Sex	Male	123	51.2%
	Female	117	48.8%
Age	18-30	8	3.3%
	31-44	65	27.1%
	45-64	107	44.6%
	>65	60	25%
Family size	<5	91	37.9%
	>5	149	62.1%

Marital Status	Single	38	15.8%
	Married	189	78.8%
	Widowed	9	3.8%
	Divorced	4	1.7%
Religion	Muslim	92	38.3%
	Orthodox	108	45%
	Protestant	30	12.5%
	Catholic	10	4.2%
Ethnicity	Gurage	183	76.3%
	Oromo	29	12.1%
	Amhara	24	10%
	Others	4	1.7%
Educational status	No formal education	95	39.6%
	Primary education	38	15.8%
	Secondary education	25	10.4%
	Certificate	7	2.9%
	Diploma	18	7.5%
	Degree and above	57	23.8%
Occupational Status	House wife	62	25.8%
	Government employer	45	18.8%

	Farmer	47	19.65
	Merchant	71	29.6%
	Daily labor	3	1.3%
	Unoccupied	7	2.9%
	Other	5	2.1%
Distance from home to health facility	<30min	180	75%
	>30min	45	18.8%
	>1hr	15	6.3%
Average monthly income	<500	7	2.9%
	500-999	59	24.6%
	1000-5000	69	28.7%
	>5000	105	43.8%
	>5	109	45.4%

5.2 Life style modification related knowledge of hypertensive patients

The overall study of knowledge showed that 167(69.6%) [95% CI (63.78%, 75.42%)] of the respondent have good knowledge and 73(30.4) poor knowledge. From 240 respondents 147(61.3%) didn't know their recent BP measurement, 179(74.6%) of the respondent were know the role of regular exercise in HTN; 224(93.3%) were know about the dietary modification of HTN and most of them have knowledge about decrease salt intake which account 110(45.8%); 172(71.7%) knew the effect of alcohol in HTN and 131(54.6%) knew the effects of smoking.

Table 3: life style modification related knowledge in HTN patients, at Wolkite University Specialized Hospital Central Ethiopia 2025

Knowledge	**Responses**	**Frequency**	**Percent**
Recent BP measurement	Yes	93	38.85
	No	147	61.3%
Your current BP reading	120-140/80-90	49	20.4%
	141- 180/91120	44	18.3%
About Life style modification of hypertension	Yes	219	91.3%
	No	21	8.8%
Physical exercise plays a positive role in management of HTN	Yes	179	74.6%
	No	61	25.4%
Smoking cessation play a positive role in management of HTN	Yes	131	54.6%
	No	109	45.5%
	No	68	28.3%
Dietary modification of HTN	Yes	224	93.3%

	No	16	6.7%
Type Dietary modification	Decrease coffee intake	104	43.3%
	Decrease salt intake	110	45.8%
	Decrease eat fatty meal	10	4.2%

5.3 Attitude toward Life style modification of hypertension

From 240 respondents142 (59.2%) [95% CI (52.98%, 65.42%)] have favorable attitude and 98(40.8%) have poor attitude. Among the respondent of 80(33.3%) have strongly agreed, 108(45.0%) agreed, 51(21.3%) neutral and 1(4%) were disagreed, for nutritional therapy had a positive role in HTN.58 (24.2%) strongly agreed, 78(32.5%) agreed, 86(35.8%) neutral and 18(7.5%) had disagreed for reduction of alcohol intake had positive role. In this study 54(22.5%) strongly agreed, 73(30.4%) agreed, 109(45.4%) neutral and 4(4.17%) disagreed for cessation of cigarette smoking play a positive role .Among attitudes of physical exercise 72(30.0%) were strongly agreed, 90(37.5%), 43(17.9%) neutral and 35(14.6%) were disagreed for positive role of HTN management.

Table 4: Attitude towards life style modification of hypertension at Wolkite University Specialized Hospital Central Ethiopia 2025.

S.N	Attitude	Strongly agree	Agree	Neutral	Disagree	Strongly Disagree
		Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)
1	Nutritional therapy plays a positive role in management of HTN	80(33.3%)	108(45%)	51(21.3%)	1(4%)	0(0%)
2	Modified life style is helping manage your condition	72(30%)	85(35.4%)	78(32.5%)	5(2.1%)	0(0%)
3	Reduce of alcohol intake plays a positive role in treatment of HTN	58(24.2%)	78(32.5%)	86(35.8%)	18(7.5%)	0(0%)
4	Cigarette smoking cessation plays a positive role in treatment of HTN	54(22.5%)	73(30.4%)	109(45.5)	4(1.7%)	0(0%)
5	Physical exercises play a positive role in treatment of HTN	72(30%)	90(37.5%)	43(17.9%)	35(14.6%)	0(0%)

5.4: Life style modification of hypertensive patients

From 240 respondent 104(43.3%) [95% CI (37.03%, 49.57%)] have good practice and 136(56.7%) have poor practice 84(35.0%) performed physical exercise. among these performed exercise 75(31.3%) worked out <30 minutes, 9(3.8%) worked between 30 and 60 minutes. 109(45.4%) never add sugar to their food and drink, 58(24.2%) always add salt. almost 100% did not smoke and 207(86.3%) did not drink alcohols.

Table 5:- life style modification of HTN patients at Wolkite University Specialized Hospital Central Ethiopia 2025.

Practice	**Responses**	**Frequency**	**%**
Effort to control weight	Yes	94	39%
	No	146	60.8%
Types of effort	Physical Exercise	22	9.2%
	Dietary Modification	72	30%
Perform any type of exercises	Yes	84	35%
	No	156	65%
Types of exercises you perform	Walking	38	15.8%
	.Jumping	0	0%
	Running	46	19.2
Time spent in exercise	<30min	75	31.3%
	30min-1hr	9	3.8%

Add sugar to your food/drink	Never	109	45.4%
	Rarely	66	27.5%
	Occasionally	32	13.3%
	Very often	27	11.3%
	Always	6	2.5%
Add Salt to your food/drink	Never	56	23.3%
	Rarely	40	16.7%
	Occasionally	42	17.5%
	Very often	44	18.3%
	Always	58	24.2%
Currently consume alcoholic drinks	Yes	33	13.8%
	No	207	84.3%
Consume alcoholic drinks a certain number of times per week	<3	31	12.9%
	4-5	2	8%
Drink a certain number of bottles of alcohol per day	1-2	33	13.8%
Currently smoke cigarettes	Yes	0	0%
	No	240	100%

6. Discussions

Hypertension is one of the most important public health challenges in which patients' outcomes are disability and death if it is not effectively prevented and controlled. Non pharmacological management requires great attention in addition to pharmacological treatment to control hypertension and its complications. A life style modification is a suitable primary therapy for patients with mild hypertension and is a suitable adjunct to pharmacologic therapy.(27)

In this study the respondent knowledge score was 167 (69.6%) have good knowledge, This finding was lower than the study conduct in Harar, Eastern Ethiopia(73.0%), Nekemte Specialized Hospital(79.28%)(11, 25). The possible reason for this discrepancy may be due to most of our respondent were illiterate and from rural area.

The current study found that around one hundred seventy nine (74.6%) had knowledge of physical exercise. This result was higher than the study done in Nigeria (60%)(20).the discrepancy may be due to study area and study period difference.

In our study 110(45.8) had knowledge of reduce salt intake. This finding was lower than the study done in Nigeria (62%)(20).the possible reason for this discrepancy may be due to low level of awareness related to risk of hypertension complication.

Regarding of knowledge about reduce alcohol intake and avoidance of cigarette smoking, the current study revealed around 172(71.7%) and 131(54.6%) respectively respondent knew. This result higher than to the study done in Nigeria (46%) and (38%) respectively(20).the discrepancy may be due to study period and study area.

This study cumulative mean percent of attitude towards life style modification score 142(59.2%) were favorable attitude .This finding was lower than to the study done in Harar, Eastern Ethiopia,(66.4%)(11).The possible explanation for discrepancy between the results may occur may be due to socio-cultural variation.

In our study Seventy eight (32.5%) and 73(30%) agree to reduce alcohol intake and cessation of smoking is a positive role for management of HTN respectively. This finding was comparable with study report done in Addis Ababa by Tadesse Guda (32.9%) agreed to the statement ‘‘stopping smoking and alcohol helps to prevent hypertension’’(26). This similarity may be due to personal behavior.

In this study cumulative mean percent of practice score 104 (43.3%) was good practice to manage HTN. This finding was lower than study done at Nekemte Specialized Hospital (68.92%)(25), Harar, Eastern Ethiopia (49.6%)(11), Public Hospital of Addis Ababa Ethiopia (51.5%)(22)This discrepancy may be due to attitude that varies between different communities and culture.

The study revel almost 100% of the respondent didn’t smoke cigarette. This finding was similar to study in North Gondar (2.8%) were smoker(28). This similarity may be due to knowledge about the adverse effect of smoking.

The current study found that around thirty three (13.8%) of the respondent drink alcohol. This finding was lower than to the study done in Addis Ababa by Tadesse Guda (63.3%)(26). This discrepancy may be due to knowledge about the adverse effect of alcohol.

In this study one hundred eighty four (76.6%) of the respondent add salt for their food and drink. This finding was higher than to the study done in Iran by Sabouhi (52.2%)(27) This discrepancy may be due to socio-cultural variation.

In our study 84(35%) of the respondent perform physical exercise .This finding was lower than to the study done in Iran by Sabouhi (76.5%)(27). The possible explanations for this discrepancy may be due to a patient personal behavior and culture.

7. Strength and Limitation of the study

7.1 Strength

Since there were no similar studies conducted in this area, this study can offer ideas and information for further studies.

7.2 Limitation

The study was conduct in a single institution, which limits the generalization of the findings to other health care settings or populations. The sample may not be representative of all hypertension patients, as the institutions patient population could differ in terms of demographic or health behaviors.

8. Conclusions and Recommendation

This study assessed the knowledge, attitude, and practice of life style modification among hypertension patients. The findings revealed that while patient had good level of knowledge and a positive attitude towards adopting lifestyle changes, their actual practice of these modifications was poor like high salt intake and lack of physical exercise.

Based on the results of the study, the following recommendations are suggested, regularly provide health education sessions focused on the importance of lifestyle modification especially on reduce salt intake and regular exercise. Expand awareness campaigns to address knowledge and practice gap among rural and illiterate population. Train healthcare workers to counsel patient effectively on lifestyle modification during routine check-up.

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10. ANNEX

Annex 1: English Version information sheet and consent form

Hello. My name is _____and I am here on behalf of Group 1, a Undergraduate Public Health students from Wolkite University College of Health Sciences, department of Public Health. We are conducting a study on Assessment of Knowledge, Attitude and Practice of Hypertensive Patients on Life Style Modification in Wolkite University Specialized Hospital, Gurage Zone, Central Ethiopia 2024.The result of this study will be used by the hospitals to base their rational decision to develop appropriate strategies to combat this problem. The research is intended to benefit the community including the people that will be participating in this research and will introduce no risk to the participant. The questionnaire requires maximum of 25 minutes to complete. Your participation is entirely voluntarily, and you can quit from the study any time you want. You will have no penalty if you fail to show desire to participate. I, however, do hope that you will participate in the study since the data that will come from you will be important for us. Your name and other personal identity will not be used, and hence the information we will collect from you will completely be kept confidential and will not be disclosed to any third person other than the people participating in this study. For any question you want to ask us, you can use the contact address here under.

May I now begin the interviewing?

If yes, continue interviewing

If no, thank and stop interviewing

Name of the interviewer_____sign_____date_____

Address of the principal Investigator

Group 1: Wolkite University Students

Tel: _____

E-mail: _____@gmail.com

Annex 2: English version of Questionnaire

Part I. Socio Demographic Characteristics

Q. No	Questions	Responses
101	Residence	1. Rural 2. Urban
102	Ageof respondent?	1.<18 2.18-30 3.31-44 4.45-64 5.>65
103	How many family members?	1.<5 2. ≥5
104	Marital status	1. Single 2. Married 3. Widowed 4. Divorced
105	What is the religion you followed?	1. Muslim 2. Protestant 3. Orthodox 4. catholic 5. Others (specify)___
106	What is your Ethnic group?	1. Gurage 2. Amhara 3. Oromo 4. Other

107	What is your educational status?	1. No formal education 2. Primary education(grades1-8) 3. Secondary education(grades 9-12) 4. Certificate 5. Diploma 6. Degree and above
108	What is your Occupation?	1. Housewife 2. Government employer 3. Student 4. Farmer 5. Merchant 6. Daily labor 7. Unemployed 8. Other specify ----------
109	Distance from home to health facility _____min/hrs	1.<30 min 2.>30 min 3.1hr
110	Average family monthly income	1.<500 2.500-999 3.1000-5000 4.>5000
111	Duration on antihypertensive medication (year)	1.⩽5 2.>5

Part II: Questions related to Knowledge characteristics of the respondents on lifestyle Modification

201	Do you Knows recent BP measurement	1.Yes 2.No
202	If yes how much is your current BP reading?	1. <120/80 2. 121- 140/81-90 3. 141- 180/91-120 4.>181/121
203	Do you know about Life style modification of hypertension?	1. Yes 2. No
If No, Q203 skip Q204-207		
204	Do you know the physical exercise plays a positive role in management of HTN?	1.Yes 2.No
205	Do you know smoking cessation play a positive role in management of HTN?	1.Yes 2.No
206	Do you know decrease alcohol intake play a positive role in management of HTN?	1.Yes 2.No
207	Do you know the Dietary modification of HTN?	1. Yes 2. No
208	If yes, what type Dietary modification of do you know?	1. Decrease coffee intake 2. Decrease salt intake 3. Decrease calorie reach food 4. Decrease eat fatty meal 5. Other specify
209	Status of knowledge of respondent	1. Good Knowledge 2. Poor Knowledge

Part III: Questions related to attitude perception

301	Do you think nutritional therapy plays a positive role in management of HTN?	1. Strongly agree 2. Agree 3. Neutral 4. Disagree 5. Strongly disagree
302	Do you think or feel that your modified life style is helping manage your condition?	1. Strongly agree 2. Agree 3. Neutral 4. Disagree 5. Strongly disagree
303	Do you think reduce of alcohol intake plays a positive role in treatment of HTN?	1. Strongly agree 2. Agree 3. Neutral 4. Disagree 5. Strongly disagree
304	Do you think cigarette smoking cessation plays a positive role in treatment of HTN?	1. Strongly agree 2. Agree 3. Neutral 4. Disagree 5. Strongly disagree
305	Do you think physical exercises play a positive role in treatment of HTN?	1. Strongly agree 2. Agree 3. Neutral 4. Disagree 5. Strongly disagree
306	Status of Attitude	1. Good attitude 2. Poor Attitude

Part IV: Questions related to assess the practice of the respondents

Q. No	Questions	Responses
401	Are you making any effort to controlling your weight?	1. Yes 2. No
402	If yes, what type of effort do you make?	1.Physical Exercise 2.Dietary Modification 3.Others_____
403	Do you perform any exercises?	1.Yes 2. No
404	If yes, what type of exercises do you do?	1.Walking 2. Jumping 3. Running 4. Others_____
405	If yes, how much time do you spend exercising?	1. <30min 2. 30-1hrs 3. >1hr
407	How often do you add Salt to your food/drink each day?	1. Never 2. Rarely 3. Occasionally 4. Very often 5. Always
408	Do you currently consume alcoholic drinks?	1.Yes 2.No
409	If yes ,how many time per week	1.<3 2.4-5 3. >5
410	How many bottles of the alcohol do you take per day?	1. 1 -2Bottle 2. 3- 5bottle 3. >5 bottle

411	Do you currently smoke cigarettes?	1. Yes 2. No
412	On average, how many cigarette sticks do you smoke each day?	1. One stick 2. Two stick 3. >Three stick
413	Status of Practice	1. Good Practice 2. Poor Practice

Declarations of Investigator

We, the undersigned, declare that, this proposal is our original work, and the actual work (its report) has never been presented in this university or college, and that all resources and materials used herein have been duly acknowledged.

Declared by

Name sign Date

_____ _____ _____

Declaration of Advisors

We, the undersigned Advisors, approved that this proposal is an original work of the above students in partial fulfillment of the requirement for undergraduate Public Health Students to our best of knowledge.

Primary Advisor

Name Sign Date

_____ _____ _____

Secondary Advisor

Name Sign Date

_____ _____ _____

የአማርኛቃለመጠይቅ

ሠላም፤ስሜ _____
እባላለሁ፣ከወልቂጤዩኒቨርሲቲጤናሳይንስኮሌጅ፣የህብረተሰብጤናክፍልቅደምምረቃየህብረተሰብጤናተማ
ሪነኝ።በወልቂጤዩኒቨርሲቲስፔሻላይዝድሆስፒታልየደምግፊትህሙማንንየህይወትዘይቤማሻሻያዕውቀት፣አ
መለካከትእናተግባርግምገማላይጥናትእያደረግንነው።ጥናቱበዚህጥናትውስጥየሚሳተፉሰዎችንጨምሮህ
ብረተሰቡንተጠቃሚለማድረግየታሰበሲሆንለተሳታፊውምንምአይነትስጋትየማይፈጥርነው።መጠይቁለማ
ጠናቀቅቢበዛ 25 ደቂቃዎችንይፈልጋል።የእርስዎተሳትፎሙሉበሙሉበፈቃደኝነትነው,
እናምካልተመቾትበፈለጉበትጊዜማቆምይችላሉ።ከእርስዎየሚመጣውመረጃለእኛጠቃሚስለሚሆንበጥናቱ
ላይእንደሚሳተፉተስፋአደርጋለሁ።ስምእናሌላየግልማንነትጥቅምላይአይውልምስለዚህከእርስዎየምንሰበስ
በውመረጃሙሉበሙሉሚስጥራዊይሆናልእናምበዚህጥናትውስጥከተሳተፉትሰዎችበስተቀርለሌላሶስተኛሰ
ውአይገለጽም.
ሊጠይቁንየሚፈልጉትንማንኛውምጥያቄ፣በዚህስርየሚገኘውንአድራሻመጠቀምትችላላችሁ።ፈቃደኛኖት

አሁንቃለመጠይቁንልጀምር?

አዎከሆነ፣ቃለመጠይቁንይቀጥሉ

አይደለምከሆነማመስገንእናቃለመጠይቁንማቆም

የቃለመጠይቁጠያቂውስም _____ፊርማ _____ቀን_____

የጠያቂውአድራሻ

ስልክ፡ _____

ኢሜል፡_____@gmail.com

ቁጥር	ክፍልአንድ :- ማህበራዊ፣ነባራዊእናኢኮኖሚያዊሁኔታዎች	ምላሽ
101	መኖሪያ	1. ገጠር 2. ከተማ
102	እድሜ	1. <18 2. 18–30 3. 31–44 4. 45–64 5. >65
103	የቤተሰብአባላትብዛት	1. <5 2. >5
104	የጋብቻሁኔታ	1. ያላገባ 2. ያገባ 3. የተፋታ 4. በሞትየተለየ
105	ሃይማኖት	ሙስሊም 2. ኦርቶዶክስ 3. ፕሮቲስታንት 4. ካቶሊክ 5. ሌላከሆነይጥቀሱ
106	ብሔር	ጉራጌ 2. ኦሮሞ 3. አማራ 4. ሌላከሆነይጥቀሱ--------
107	የትምህርትደረጃ	ማንበብናመጻፍየማይችል 2. አንደኛደረጃ 3. ጐለተኛደረጃ 4. ዲግሪእናከዛበላይ

108	የስራሁኔታ	1. የቤትእመቤት 2. የመንግስትሰራተኛ 3. ተማሪ 4. ገበሬ 5. ነጋዴ 6. የቀንሰራተኛ 7. ስራየሌለው 8. ሌላከሆነይጥቀሱ
109	ከቤትእስከጤናተቋም-------በደቂቃ/ሰአት	1.<30 ደቂቃ 2.30 ደቂቃ 3.>1 ሰአት
110	አማካይየቤተሰብወርሀዊገቢ	1. <500 2. 500-999 3. 1000-5000 4. >5000
111	የደምግፊትመድሃኒትለምንያህልአመትተጠቅመዋል	1. <5 2. >5

ቁጥር	ክፍልሁለት:- ምላሽሰጪዎችበአኗኗርዘይቤላይያላቸውእውቀት	ምላሽ
201	የቅርብጊዜየደምግፊትልኬትዎንያውቃሉ?	ነ. አዎ 2. አይ
202	ለ 202 መልሶአዎከሆነየአሁኑየደምግፊትንባብዎምንያህልነው?	1. <120/80 2. 121- 140/81-90 3.141-180/91-120 4.>181/121

203	ስለደምግፊትየአኗኗርዘይቤማሻሻያያውቃሉ?	1. አዎ 2. አይ
204	ለ 203 መልሶአዎከሆነስለደምግፊትታካሚዎችምንዓይነትየህይወትዘይቤማሻሻያእንደሚያስፈልግያውቃሉ?	1. ክብደትመቀነስ (መደበኛየአካልብቃትእንቅስቃሴ) 2. ማጨስማቆም 3. የአልኮልመጠጥማቆም 4. የአመጋገብለውጥ 5. ሌላከሆነይጠቀሱ___
205	ስለደምግፊትየአመጋገብዘይቤያውቃሉ?	1. አዎ 2. አይ
206	ለ 205 መልሶአዎከሆነምንዓይነትየአመጋገብዘይቤያውቃሉ?	1. የቡናመጠንመቀነስ 2. የጨውመጠንመቀነስ 3. በካሎሪየበለፀገምግብመጠንመቀነስ 4. ቅባታማምግብንመቀነስ 5. 5. ሌላከሆነይጠቀሱ_____
207	የምላሽሰጪየእውቀትሁኔታ	1. ጥሩ 2. ደካማ
ቁጥር	**ክፍልሶስት:- ከአመለካከትግንዛቤጋርየተያያዙጥያቄዎች**	**ምላሽ**
301	የአመጋገብስርአትየደምግፊትንበመቆጣጠርአወንታዊሚናይጫወታልብለውያስባሉ?	1. በጣምእስማማለሁ 2. እስማማለሁ 3. ገለልተኛ 4. አልስማማም 5. በጣምአልስማማም
302	የተሻሻለውየአኗኗርዘይቤሁኔታለመቆጣጠርእየረዳነውብለውያ	1. በጣምእስማማለሁ 2. እስማማለሁ

	ስባሉወይምይሰማዎታል	3. ገለልተኛ 4. አልስማማም 5. በጣምአልስማማም
303	የአልኮልመጠንመቀነስበደምግፊትህክምናአዎንታዊሚናይጫወታልብለውያስባሉ?	1. በጣምእስማማለሁ 2. እስማማለሁ 3. ገለልተኛ 4. አልስማማም 5. በጣምአልስማማም
304	ሲጋራማጨስማቆምበደምግፊትህክምናላይአዎንታዊሚናይጫወታልብለውያስባሉ?	1. በጣምእስማማለሁ 2. እስማማለሁ 3. ገለልተኛ 4. አልስማማም 5. በጣምአልስማማም
305	የአካልብቃትእንቅስቃሴበደምግፊትህክምናላይአዎንታዊሚናይጫወታልብለውያስባሉ?	1. በጣምእስማማለሁ 2. እስማማለሁ 3. ገለልተኛ 4. አልስማማም 5. በጣምአልስማማም
306	የአመለካከትሁኔታ ነ. ጥሩአመለካከት 2. ደካማአመለካከት	ነ. ጥሩ 2. ደካማ
ቁጥር	**ክፍልአራት:- የተግባርሁኔታየተመለከቱጥያቄዎች**	**ምላሽ**
401	ክብደትዎንለመቆጣጠርሚረዳውንጥረትእያደረጉነው?	ነ. አዎ 2. አይ
402	ለ 401 መልሶአዎከሆነምንአይነትጥረትያደርጋሉ?	ነ.የአካልብቃትእንቅስቃሴ 2.የአመጋገብማስተካከያ 3.ሌሎች___
403	የአካልብቃትእንቅስቃሴያደርጋሉ?	ነ. አዎ 2. አይ
404	ለ 403 መልሶአዎከሆነምንአይነትእንቅስቃሴያደርጋሉ	ነ. መራመድ 2.መዝለል

		3. መሮጥ 4. ሌሎች_____
405	በአካልብቃትእንቅስቃሴምንያህልጊዜያጠፋሉ?	1. <30ደቂቃ 2. 30-1 ሰአት 3. > 1 ሰዓት
406	በምግብዎ/በመጠጥዎላይስኪርይጠቀማሉ?	1. በጭራሽ 2. አልፎአልፎ 3.ብዙጊዜ 4. ሁልጊዜ
407	በምግብዎ/በመጠጥዎላይጨውይጠቀማሉ?	1. በጭራሽ 2. አልፎአልፎ 3.ብዙጊዜ 4. ሁልጊዜ
408	የአልኮልመጠጦችንይጠቀማሉ?	1. አዎ 2. አይ
409	ለ 408 መልሶአዎከሆነ፣በሳምንትስንትቀንይጠጣሉ	1. <3 2. 4-5 3. >5
410	በቀንስንትጠርሙስየአልኮልመጠጥይጠጣሉ?	1. 1 -2 ጠርሙስ 2. 3-5 ጠርሙስ 3. > 5 ጠርሙስ
411	ሲጋራያጨሳሉ	1. አዎ 2. አይ
412	የተግባርሁኔታ	1.ጥሩ 2. ደካማ