ADDIS ABABA UNIVERSITY COLLEGE OF HEALTH SCIENCE

SURGERY DEPARTMENT, CARDIOTHORACIC UNIT

KNOWLEDGE OF CARDIOVASCULAR DISEASE RISK FACTORS AMONG PATIENTS ATTENDING CARDIAC FOLLOW UP CLINIC IN TIKUR ANBESA SPECIALIZED HOSPITAL

BY

AZEB TESFAYE MSC IN CARDIOVASCULAR PERFUSION FINAL YEAR STUDENT

A RESEARCH PAPER SUBMITTED TO THE PARTIAL FULFILLMENT OF MSC IN CARDIOVASCULAR PERFUSION ATTIKUR ANBESA SPECIALIZED HOSPITAL

FEBREURY, 2021

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ASSURANCE OF INVESTIGATOR

The undersigned agree to accept all responsibility for the scientific and ethical conduct of the research and the provision of required progress report and conduction of the research publication office in effect at the time grant is forwarded as the result of this application.

Name of investigator …….. Signature ……. ….. Date…….

Name of Advisor…….Signature……Date…….

Name of internal Examiner……Signature……Date……

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ACRONYMS/ABREVIATION

CVD =Cardiovascular Disease

CHD =Coronary Heart Disease

NCDs= Non communicable disease

SSA=Sub Saharan Africa

DALYs= Disability adjusted life years

LMIC=Low and Middle Income Countries

HDFQ=Heart disease fact questioner

WHO= World Health Organization

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Abstract

Introduction: as the largest single cause of death on the planet, cardiovascular disease (CVD) in all its forms is an important public health problem. CVD is not a single disease, but a cluster of diseases and injuries that affect the cardiovascular system. These are most commonly diseases of the heart and of the blood vessels of the heart and brain. In general they affect people in beginning and later life. The aim of this study is to asses Knowlegde of cardiovascular disease riskfactors among patients attending cardiac follow up clinic in Tikur Anbes Specialized Hospital.

Methods: A Cross sectional study Design was conducted in Tikur anbesa specialized Hospital. The sample size of this study is 305. The sampling method of this study is systematic random sampling. Epi-info was used for data entry and SPSS for analysis. Descriptive statistics is applied for analysis and Mean, standard deviation, tables and graphs used for data summary and presentation.

Result: Among of all the respondents, 163 (54.3%) had good knowledge while the rest 137 (45.7%) were found to be not knowledgeable. Two third of the respondents, 190 (63.3%), reported that Consumption of alcohol is not a risk factor for CVD while only the rest 110 (36.7%) reported alcohol is a risk factor for CVD. Considering Diabetes mellitus, 246 (82%) of them reported that having Diabetes mellitus is a risk factor for CVD.

Conclusion: The knowledge of CVD patients in the current study area was found to be low. The habit of physical exercise of the study subjects is found to be poor with most of them travelling using cars or buses. The proportion of study subjects with risk factors like overweight, cigarette smoking and Alcohol consumption was found to be high. Ethiopian Federal ministry of health should focus on awareness raising programs including broadcasting messages for the whole population. Physical activities should be promoted by acknowledging and scale up the monthly street sport festivity to weekly or bi-weekly.

CHAPTER ONE: INTRODUCTION

1.1. Background

Cardiovascular disease (CVD) remains a global major cause of death and represents a significant disease burden in populations around the world. The global burden of disease studies reported an estimated 422.7 million cases of CVD, causing 17.92 million deaths worldwide in 2015 (1).

Developing countries are facing a high burden of CVD whilst awareness of disease and associated risk factors is limited(2), (3)]. Those living in poverty and especially those in low income countries are significantly more impacted by CVD(4).

Moreover, findings show that the prevalence of CVD is increasing and posing a public health challenge in developing countries[(1), (5).

From an epidemiologic view on disease prevalence, Ethiopia is in epidemiologic transition from predominantly infectious diseases to chronic diseases. CVD is a major public health challenge in Ethiopia. The overall prevalence of hypertension among the Ethiopian population is 19.6%, and is higher among the urban population (23.7%) (6). In 2015, ischemic heart disease was the first leading causes of age standardised death rates and fourth leading causes of age standardized disability adjusted life years with rates of 141.9 and 2535.7 per 100,000 population respectively (7). Increasing prevalence of CVD in developing countries is related to unhealthy lifestyle behaviours. Except few region based studies, evidence on CV risk behaviours is scarce in Ethiopia. Findings from the Southern part of the country show that 10.8% of CV patients smoke cigarettes, 12.1% drink alcohol and 73.9% don't do any physical activity (8). A study performed in the capital of Ethiopia reported 68.6% of hypertensive patients don't exercise, 14.1% smoke cigarette, 25.2% drink alcohol and 30.9% don't adhere to healthy diet (9).

There is limited research regarding the knowledge of CVD risk factors in developing countries (3), (10)–(11). The majority of adults in Sub-Saharan Africa fail to name even one CVD risk factor, (12) and in Nigeria almost 50% have poor knowledge about CVD risk factors (3). In Cameroon, this knowledge level is also suboptimal, such that 36% of adults are unaware of CVD risk factors (10). Nevertheless, in South Africa, most adults are aware that cigarette smoking and excessive alcohol consumption are risk factors for CVD (13).

The level of education and place of residence have a significant influence on health literacy.

It has been reported that higher education levels correlate with a better knowledge of CVD, less number of risk factors and changes in health related behaviour , (12),(14).

Gaps in evidence on CVD and risk factors form a barrier to effective prevention of cardiovascular conditions. Thus, evidence on patients' knowledge of CVD risk factors is paramount in primary and secondary prevention of CVD (15). However, research to reduce the existing evidence gap and the increasing burden of CVD risk behaviours in developing countries is scarce.

Few studies conducted so far in Ethiopia focussed at describing the high burden of CVD, none of the studies explored CVD patients' knowledge of CVD risk factors. Evidence on patients' knowledge of CVD risk factors has vital importance for evidence based health policy and help to design customised interventions. Therefore, the purpose of this study was to assess knowledge of cardiovascular risk factors among patients with CVD.

1.2. Statement of the problem

Developing countries are facing a high burden of CVD whilst awareness of disease and associated risk factors is limited (2). Those living in poverty and especially those in low income countries are significantly more impacted by CVD. Moreover, findings show that the prevalence of CVD is increasing and posing a public health challenge in developing countries (5). High blood pressure is of major influence in the increasing CVD burden in these countries (5). For most patients with hypertension it is uncontrolled which causes further cardiovascular complications. Hypertension affects more than 1.3 billion people worldwide and one third of adults have the condition .The number of adults with hypertension in 2025 is predicted to increase by about 60%. Moreover, the total number of individuals with hypertension is increasing rapidly to epidemic levels with a projected 125.5 million individuals affected by 2025 in Sub-Saharan Africa(SSA)(16).

Non-communicable diseases (NCD) account for over 1.4 billion disability adjusted life years (DALYs), which is58.5% of the global health burden (10). Cardiovascular diseases (CVD) are a major contributor to this global NCD burden and the leading cause of deaths around the world. In 2012, the World Health Organization (WHO) estimated that over 17 million people died from CVDs, representing over at Two third of global mortality(2). The majority of these CVD deaths were due to ischemic heart disease (7.4 million) and stroke (6.7 million). Low and middle income countries (LMIC) are unduly hit by this CVD epidemic with three-quarters of these premature CVD deaths occurring there (17). According to estimates based on the largest African acute heart failure registry, almost 1 in 5 persons die from acute heart failure within 6 months of diagnosis. This CVD epidemic is largely driven by behavioural and environmental risk factors whose magnitude seems to rapidly increase in SSA owing to epidemiologic transition and population ageing. CVD events (mostly stroke and heart failure) are the main endpoint of most CVDs and feature among the five leading causes of DALYs from NCD. Awareness of chronic diseases including CVDs and their risk factors can be a precondition for success in prevention and control of these diseases. This knowledge will inform individuals on healthy attitudes to adopt and to be proactive in reducing their own lifetime risk by plummeting their exposure to modifiable risk factors for CVD (18). Studies have assessed the knowledge of adult populations regarding CVD , and even among school children , however studies from Africa are scant and concentrate on specific populations such as primary care physicians in western Cameroon (19), slum dwellers in Nairobi (16), and

university staff and students in Nigeria (3). Studies around CVD and its risk factors in sub-Saharan Africa have similarly shown some variation in the distribution/affection across genders (20). From an epidemiologic view on disease prevalence, Ethiopia is in epidemiologic transition from predominantly infectious diseases to chronic diseases. CVD is a major public health challenge in Ethiopia. The overall prevalence of hypertension among the Ethiopian population is 19.6%, and is higher among the urban population (23.7%) (6). In 2015, ischemic heart disease was the first leading causes of age standardised death rates and fourth leading causes of age standardized disability adjusted life years with rates of 141.9 and 2535.7 per 100,000 population respectively (7). The increasing prevalence of CVD in developing countries is related to unhealthy lifestyle behaviours. Except few region based studies, evidence on CV risk behaviours is scarce in Ethiopia. Findings from the Southern part of the country show that 10.8% of CV patients smoke cigarettes, 12.1% drink alcohol and 73.9% don't do any physical activity (8). A study performed in the capital of Ethiopia reported 68.6% of hypertensive patients don't exercise, 14.1% smoke cigarette, 25.2% drinks alcohol and 30.9% don't adhere to healthy diet (9).

1.3. Significance of the study

Cardiovascular diseases (CVDs) are the most common cause of non-communicable disease mortality in sub-Saharan African (SSA) countries. Gaps in knowledge of CVD conditions and their risk factors are important barriers in effective prevention and treatment. Yet, evidence on the awareness and knowledge level of CVD and associated risk factors among populations of Ethiopia is scarce. This review aimed to determine available evidence of the level of knowledge of CVDs risk factors among patients attending in Tikur anbesa specialized hospital.

The overarching purpose of this study is to assess knowledge of CVD risk factors among patients.

CHAPTER TWO: LITRATURE REVIEW

As the NCD epidemic continues to accelerate amidst the ongoing infectious diseases battle, health-care systems in SSA are increasingly regarding CVDs in particular and NCDs in general as a top public health priority (21).With about four-fifths of participants having an overall adequate knowledge regarding CVD risk factors, this present study demonstrated a modest level of health literacy in an urban setting of SSA. Our rates of CVD literacy echoes findings of previous studies from South Africa (22), Iran and Malaysia (23)which produced knowledge rates of 75.3, 78.7 and 81% respectively. Contrary to our findings, regional studies from Nigeria(44%) and Cameroon (10)(22) (47.5%) revealed considerably low rates of CVD literacy. This observed variability in literacy rates between cited studies could be explained by the education-level differences among study participants and diversity of tools used for knowledge assessment. With regards to knowledge of specific risk behaviours, over nine-tenth of participants in this study recognized excess body weight, physical inactivity, and excess alcohol intake as risks, while more than three quarters acknowledged smoking, unhealthy diet, hypertension and diabetes as attributable risks.

Knowledge of CV risk factors among CVD patients was unsatisfactory, and about half of the patients have suboptimal knowledge, which is in line with existing findings reported from India and United Arab Emirates (22). However, the mean CVD risk factors knowledge score in the current study (70.5%) is higher compared to finding from Nigeria (48.6%), and this could be due to difference in population characteristics (3). Consistent with the finding of this study, a systematic review showed low level knowledge and awareness of CVD and associated risk factors among populations in Sub-Saharan Africa (12). The possible reasons for the suboptimal knowledge may be attributed to a lower level of educational attainment of the patients, poor patient counselling during follow up care appointment and absence of intensive lifestyle counselling programs. Moreover, low health literacy may be due to lack of effective patient counselling methodologies that fits the cultural and sociodemographic context and poor health information seeking behaviour of patients. Implementation of innovative health education strategies may help to improve health literacy for CV patients and for the general population as well.

Residence, education level and marital status were associated with knowledge of cardiovascular risk factors, which mirrors that social, cultural and economic factors are major

determinants of awareness and health behaviour change .In line with the finding of the current study, numerous studies (24) have revealed higher education is associated with better health literacy. A review conducted in Sub-Saharan Africa reported that place of residence is an important determinant of knowledge of cardiovascular risk factors, i.e. urban residence is associated with improved knowledge of CV risk factors (12). In Ethiopia, rural residents attain lower educational level and have poor access to health information as compared to urban residents who relatively have better health literacy. Thus, low knowledge of CV risk factors in rural residents could be due to their lower education attainment. Moreover, the current study shows that those who were never married have lower levels of knowledge regarding CV risk factors compared to those who were married. being married is associated with, lower risk factors, better knowledge and better CVD health status(25).

Studies from Nigeria, Germany and Luxembourg reported that a higher level of education is associated with healthy lifestyle and appropriate self-care behaviours (26).In addition, evidence from a review revealed that a lower educational level is associated with lower knowledge of CV risk factors, and this also concurs with the finding of the current study (12). Findings from Pakistan also support those of this study where lack of formal education is associated with lower knowledge of cardiovascular disease risk factors. However, about one-third of the patients in the current study had no formal education, thus, improving literacy in developing countries is vital in tackling the emerging burden of chronic diseases, in particular, CVD and its associated lifestyle behaviours, as demonstrated previously (12).

The prevalence of alcohol drinking, inadequate fruit and vegetable consumption and physical inactivity in the current study is comparable to findings from Addis Ababa , Kenya and Nigeria (27). However, the rate of smoking in this study is lower compared to findings from Addis Ababa (9), Ghana , Kenya and Uganda , and this could be due to differences in sociocultural characteristics of participants.

According to the Health Belief Model, knowledge of health behaviour is an important determinant of adherence to healthy lifestyle behaviours. Though, knowledge alone is not sufficient, and patients' perceptions and attitudes of health behaviours are also important predictors of health lifestyle behaviours(12). The current study demonstrated that occurrence of actual cumulative risk behaviours is not associated with knowledge of CV risk factors(11). Thus, as patients' perceptions and attitudes of CV risk factors are important determinants of behaviour change, these needs to be explored in further research. a high level of knowledge of CVD risk factors is not sufficient to reduce cardiovascular risk, however, improving the perception of adults regarding CV risk factors plays an important role in reducing long term

cardiovascular risk (11).which states awareness of modifiable CV risk factors is positively associated with health behaviour for adult patients is inconsistent with the finding of the current study. A potential reason may be due to differences in education profile.

Even though the overall actual risk behaviour is not associated with occurrence of actual cumulative risk behaviour, the vast majority of patients had good knowledge and practice healthy behaviour regarding smoking. Available evidence reports that most adults are aware of the fact that cigarette smoking is a risk factor for Cardiovascular disease (12), (13). Inadequate consumption of fruit and vegetables was highly and equally (100%) prevalent among those who have good or fair or poor level knowledge of CVD risk factors. In addition, the majority of patients knew physical activity lowers the chance of developing heart disease, however, more than half of them failed to achieve this. This shows the existence of other factors that determine patients' health behaviours, including individual perceptions and beliefs regarding the disease and the risk factors. This issue needs to be explored more through further research.

Findings show intensive lifestyle counselling improves awareness and adherence to healthy lifestyle behaviours (14) . In the current study, about half of CVD patients who had received follow up care with a focus on the management of CVD risk factors had sub-optimal Knowledge of these and they were indulged in multiple unhealthy behaviours. This is consistent with findings from America which reported African Americans have cluster of CVD risk behaviours (28). In addition, about one fifth do not know high blood pressure is a risk factor for heart disease, and this indicates a need for implementing targeted education strategies.

CHAPTER THREE: OBJECTIVES

3.1. General Objective

- To asses Knowlegde of cardiovascular disease riskfactors among patients attending cardiac follow up clinic in Tikur Anbesa Specialized Hospital.

3.2. Specific Objectives

- To Identify the level of knowlege of cardiovascular disease risk factors among patients attending cardiac followup clinic in Tikur anbesa specialized hospital.
- To compare Knowledge of cardiovascular disease risk factors among patients attending cardiac followup clinic inTikur anbesa specialized hospital.
- To estimate the proportion of knowledgeable patients on cardiovascular disease risk factors among patients attending cardiac followup clinic in Tikur anbesa specialized hospital.
- To Describe cardiovascular disease risk factors among patients attending cardiac followup clinic in Tikur anbesa specialized hospital.

CHAPTER FOUR: METHODOLOGY

4.1. Study Area

Tikur Anbesa Specialized hospital is located in Addis Ababa, the capital city of Ethiopia. The hospital is one of the biggest teaching hospitals in Ethiopia. It serves about 5,000,000 people; a majority of them are usually referred from neighbouring primary and secondary hospitals, health centers and private health facilities. The hospital is being used as a teaching hospital for undergraduate and postgraduate medical and health science students under Addis Ababa University. Cardiac follow up clinic which is found in this hospital works Four days a week and they see an average of one hundred and twenty patients a day besides this Echocardiography,Electrocardiography,Phlebotomy procedures are the main duty in this clinic .There are twenty one total staff members including Cardiology fellow , Nurses and supportive staff.

4.2. Study Design and Period

Hospital based cross-sectional study was conducted from November to December 2020.

4.3. Source/Target population

The source population was all patients age greater than 18 yrs who was attended with the diagnosis of CVD at cardiac follow up clinic in Tikur Anbesa Specialized Hospital.

4.4. Study population

The study population was all patients age greater than 18 yrs who was attended with the diagnosis of CVD at cardiac follow up clinic in Tikur Anbesa Specialized Hospital during the study period.

4.5.Sample size determination

- The sample size was determined by using single population proportion formula $n=\frac{(Z\alpha/2)^2 p(1-p)}{d^2}$

with the following assumptions: 95% confidence level, 1.96 (Zα/2), 50% proportion, 5% degree of precision (d),10 % and N (1000)total CVD patients attending cardiac follow up clinic in Black lion hospital.

$n=\frac{(1.96)^2 0.5(1-0.5)}{0.05^2}=384$

But the total population is less than10,000 which is 1000 correction formula was used.

NF $n=n_0/1+n_{0/N}$

Where

NF

=384/1+384/1000

=277

10%non-response rate 28 and final sample size was 305

4.6.Sampling technique

Systematic random sampling technique was used to select the sample in the study population. Average monthly CVD patients who came for follow up at Tikur anbesa specialized hospital were estimated to be 1000. Then "K" was calculated by dividing the average monthly CVD patients, 1000, by the sample size. "K" was found to be "3". Finally, study units were selected in every three patient at patient waiting room.

4.7. Inclusive criteria and exclusive criteria

4.7.1.Inclusive criteria

All patients from age greater than 18 yrs who attended cardiac follow-up clinic in Tikur Anbesa Specialized Hospital.

4.7. 2.Exclusive criteria

Cardiovascular disease patient with disability (those unable to hear and speak).

4.8. Variables of the study

4.8.1. Dependent variables

- Hypertension
- Dyslipidemia
- Diabetes
- Knowledge of CVD patients

4.8.2. Independent variables

- Age
- Sex
- Education
- Life style
- Weight of patient
- Blood pressure
- Place of residency
- Marital status
- smoking
- lack of physical activity
- unhealthy dietary practices

4.9. Operational definitions

Good knowledge: Those who score mean value and above to answer the question.

Poor knowledge: Those who score below the mean as to answer the question.

4.10. Data collection tools, study materials and procedures

The data collection was carried out using specifically designed Questioner. Data was collected using three validated tools, the World Health Organisation (WHO) STEPs instrument, International physical activity questionnaire and the Heart Disease Fact Questionnaire.

The WHO STEPs instrument follows a stepwise approach to chronic disease risk factor Surveillance. The international physical activity questionnaire used to assess physical activity.

The primary outcome of the study was knowledge of cardiovascular risk factors among patients with cardiovascular disease. The 'Heart Disease Fact Questionnaire' (HDFQ) was used to assess the patient's knowledge of CVD risk factors. The English version of both the international physical activity questionnaire and the HDFQ were translated into local languages and were back translated in to English by language experts to check reliability of the translations. Four nurses who have bachelor of Degree qualifications was conducted for data collection through face to face interviews.

4.11. Data quality assurance

To ensure the quality of data, data collectors was trained for 3 days and pre-test of questioner was tested on 5% samples to assess for clarity, length and completeness. Then after, some possible adjustment/correction was made. The data entry was done weekly.

4.12. Data analysis

Data entry has done using Epi-info software and then exported to SPSS Version 23 for analysis. Data cleansing performed using sorting in the SPSS software. Descriptive statistics including mean, SD and frequency is done. Data summary was performed by using tables, graph and pie chart.

4.13. Data dissemination

The finding of the study submitted to Addis Ababa University, college of medicine, surgery department cardiothoracic unit. Furthermore effort made to present the finding of the study in different professional meetings/conference and the manuscript will be sent for peer reviewed journals for possible publication.

4.14. Ethical considerations

Ethical approval obtained from Surgery Department University of Addis Abeba and from outpatient department of Tikur anbesa specialized hospital. Before commencing the study Informed and verbal consent was obtained from each participant prior to participation in the study.

CHAPTER FIVE: RESULT

A total of 300 cardio vascular patients were participated for the study, making a response rate of 98%.

5.1. Socio-demographic characteristics of the respondents

The mean age of respondents was 66 (±14) yrs. One hundred sixty four (54.7%) of the patients were male while the rest 136 (45.3%) were female. Around 109 (36.3%) were completed primary education while only 27 (9%) graduated from universities. Around 162 (54%) of the patients were found to be married while the rest 83 (27.7%), 55 (18.3%) were widowed and divorced respectively. Most of the ethnicities were Amhara and Oromo with a frequency of 110 (36.7%) and 109 (36.3%) respectively.

Table 1Socio-demographic characteristics of the CVD patients at Tikur Anbesa Specialized Hospital, AA, Ethiopia, 2020

Variables	Frequency	Percent
Sex		
Male	164	54.7
Female	136	45.3
Religion		36.3
Orthodox	109	27.3
Muslim	82	18
Protestant	54	18.3
Catholic	55	
Ethnicity		
Amhara	109	36.3
Oromo	110	36.7
Tigrie	27	9
Others	54	18
Educational status		
No formal education	55	18.3
Primary	109	36.3
Secondary	109	36.3
College/University	27	9.0

Marital status		
Married	162	54.0
Divorced	55	18.3
Widowed	83	27.7

5.2. Knowledge of patients and risk factors of Cardio vascular disease

Among of all the respondents, 163 (54.3%) had good knowledge while the rest 137 (45.7%) were found to be not knowledgeable. Two third of the respondents, 190 (63.3%), reported that Consumption of alcohol is not a risk factor for CVD while only the rest 110 (36.7%) reported alcohol is a risk factor for CVD. Considering Diabetes mellitus, 246 (82%) of them reported that having DM is a risk factor for CVD. Regarding overweight status of the patients, 192 (64%) of them reported that being overweight is one of the major risk factor for CVD while the rest 108 (36%) reported that being overweight is not a risk factor. For the case of salt consumption, 244 (81.3%) of them reported that taking too much salt is a risk factor for CVD. Most of the participants, 273 (91%) reported that taking fruit is preventive from CVD.

Most of the respondents, 246 (82%), reported that taking much salt has health problem while the rest 54 (18%) said that it has not any health problem.

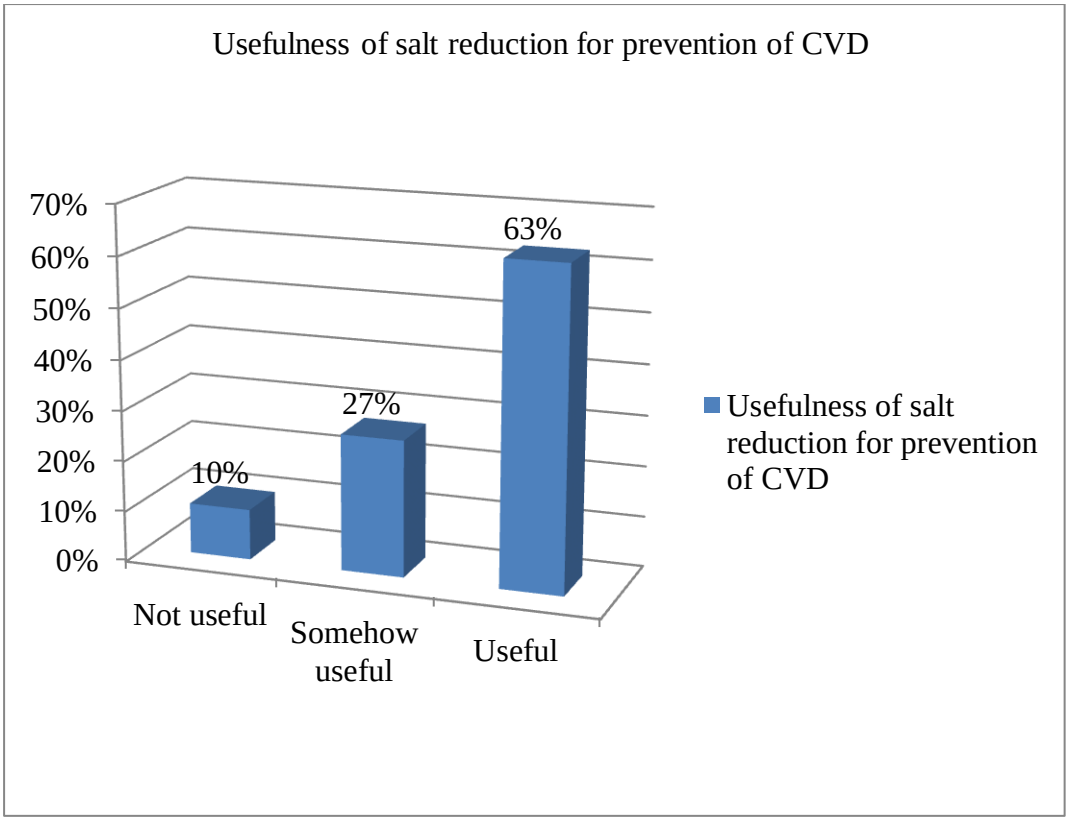

Figure 1 Usefulness of salt reduction for the prevention of CVD among patients at Tikur Anbesa hospital, AA, Ethiopia, 2020.

Regarding on their experience of active physical activity to their work places, 216 (72%) of them reported that they do not have the habit of going work place either walking or using a bicycle. Only 84 (28%) of them has the habit of walking or using bicycle to go to work place. For the case of running or football habit of the respondents, most of them, 219 (73%) reported that they do not have the habit of that, only the rest 81 (27%) has that practice. Of hypertensive case that also had CVD, around 163 (84%) took hypertension medication correctly.

Table 2 Number of times physical exercise undergone per a week at Tikur Anbesa specialized hospital, AA, Ethiopia, 2020

Number of times physical exercise undergone per week	Frequency	Percent
Not done	56	18.7
One time	82	27.3
Two times	135	45.0
Three or more times	27	9.0

One hundred ninety two (64%) of the participants counseled for salt reduction while 246 (82%) and 218 (72.7%) reported that they were counseled for weight reduction and stopping cigarette smoking respectively. Around 273 (91%) of the respondents reported that they were counseled for the importance of physical activity for the reduction of CVD. Around 273 (91%) didn't take traditional medicines for hypertension. One hundred sixty five (55%) of them measured their BP on regular basis while 168 (56%) took their medication correctly. One hundred sixty two (54%) of them reported that they did not measured their blood glucose level ever while the rest 138 (46%) measured their blood glucose level. Of those who measured their blood glucose level, 83 (60%) were told to have increase blood glucose level. One hundred sixty four (54.7%) of the respondents has increased bad cholesterol level.

From all the participants 164 (54.7%) had a history of cigarette smoking at list one in their life time. Similarly, 273 (91%) of the respondents has at least once alcohol consumption practice.

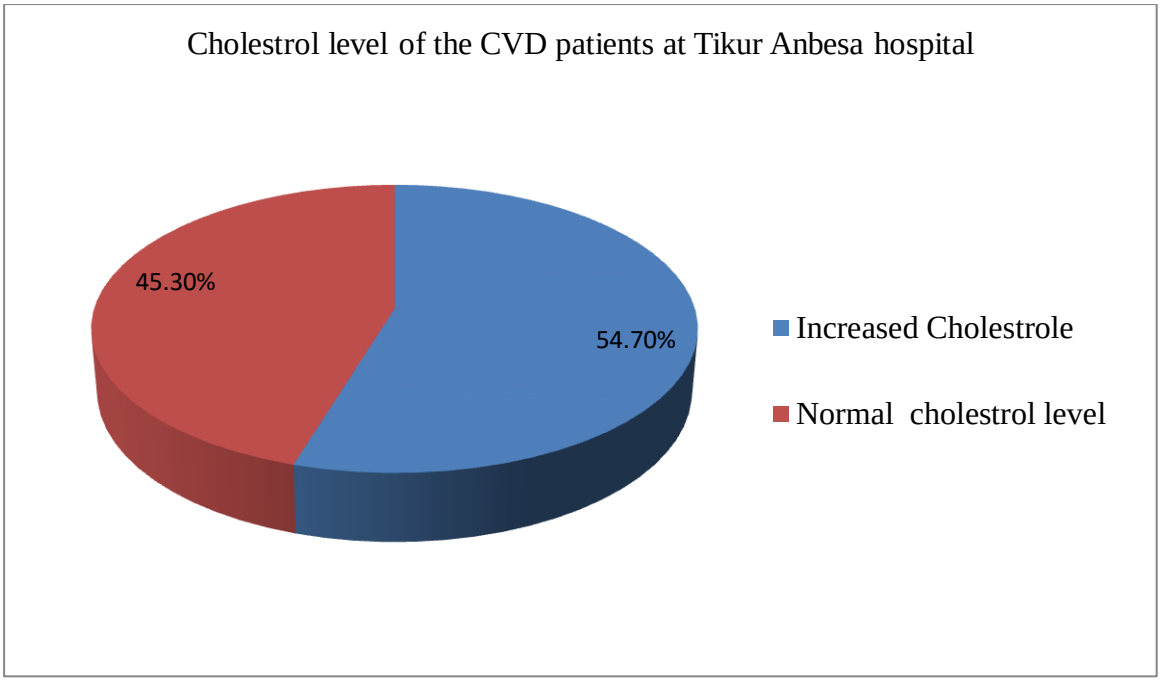

Figure 2 Cholesterol of the CVD patients at Tikur Anbesa specialized hospital, AA, Ethiopia, 2020

From all the participants 164 (54.7%) had a history of cigarette smoking at list one in their life time. Similarly, 273 (91%) of the respondents has at least once alcohol consumption practice.

CHAPTER SIX: DISCUSSION

In the current study Only 54.3% of the respondents had good knowledge. This is in line with a study conducted in hawassa, Jima and Nekemtte (29-31). In contrary, it is much lower compared to a study conducted in Kenya Mombasa and Tanzania (32, 33). The possible justification for this could be the difference in the demography of the patients between these three different areas. Unlike that of Mombasa and Tanzania, the availability of qualified hospitals for the treatment of Cardio vascular disease across the country is very rare. Because of this reason patients from remote areas of the country are usually treated in few hospitals like that of Tikur Anbessa specialized hospital. The other possible justification could be the education status of the patients in Tikur Anbessa specialized hospital and in our country at large. Many reports from the united nation organizations revealed that the educational status of Kenyans is much higher compared to Ethiopians. This might put its own share for the reduced percentage of knowledgeable CVD patients in the current study area.

The habit of physical exercise for three or more times a week is only 9% in the current study. This is in line with a study conducted in Mekelle (34). However, it is much lower compared to a study conducted in Ghana and Senegal. This could be justified with use of transportation while going to work to a much higher level. In addition to this having a very narrow living compound could contribute a lot as peoples might not do physical exercise if they don't have enough space. Lack of spare space in each villages in the capital city for the purpose of physical activity is one of the major challenge in order not to make physical exercise a habit.

Around half of the respondents were found to be cigarette smokers. This is much higher compared to a study result revealed from Bahirdar (35). However it is much lower compared a study result revealed from Ghana.

CHAPTER SEVEN: CONCLUSION

The knowledge of CVD patients in the current study area was found to be low. The habit of physical exercise of the study subjects was found to be poor with most of them travelling using cars or buses. The proportion of study subjects with risk factors like overweight, cigarette smoking and Alcohol consumption was found to be high.

CHAPTER EIGHT: RECOMMENDATION

Ethiopian Federal ministry of health should focus on awareness raising programs including broadcasting messages for the whole population and targeted educational strategy. Physical activities should be promoted by acknowledging and scale up the monthly street sport festivity to weekly or bi-weekly. Tax systems should further strengthen regarding cigarette and Alcohol consumption so as to reduce the frequency of consumption as it becomes more costly. Addis Ababa health bureau should design awareness raising sessions for the population in order to reduce risk factors of CVD.

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10. Annex

10.1. INFORMATION SHEET

Hello Dear My name is …… I am working data collector of the study conducted for Miss Azeb Tesfaye she is studying Master of Degree of cardiovascular perfusion at Addisabeba university college of health science department of surgery. Participants and you will be kindly requested to answer in this study questionnaire.

Study title: Knowledge of cardiovascular disease risk factors among patients attending cardiac followup clinic in Tikuranbesa specialized hospital.

Duration: The query lasts 30-40 minutes.

Risks: There is no risks of participating in this study.

Benefits: At this moment you may not get any direct benefits of being involved in this study but the information you provide is very important to solve the problem on luckof knowledge of cardiovascular disease risk factors.

Confidentiality: The information that you provide us will be confidential. The questioner will be coded to exclude showing your name on the questioner and consent form.

Rights: In this study participation is voluntary. You have the right to participate in this study and you have the right to withdraw from participating at any time.

Contact address: If you have questions or unclear ideas at any time about the study contact for principal investigator by this phone No +251966250429 or Email address azebte01@gmail.com.

10.2. CONSENT FORM

I understood the information sheet concerning this study and have understood verbal explanation and what will be required of me and any time I may withdraw from this study without giving a reason and without being affected for my refusal. I understand all condition stated.

Are you willing to participate in this study?

1. Agree
2. Disagree

Interviewer Signature certifying that the informed consent will be given verbally,

Interviewer Name…….

Interviewer Signature……..

Date…….

10.3. Questionnaire

ANNEX RESEARCH QUESTIONER ENGLISH VERSION		
PART 1. SOCIO DEMOGRAPHIC CHARACTERSTICS		
1.	Age	
2.	Sex	Male……..Female…..
3.	Ethnicity	A. Amhara B. Tigray C. SNNPR D. Oromo E. Others(Specify)……..
4.	Religion	A. Orthodox B. Protestant C. Catholic D. Muslim E. Others (Specify)……
3.	Educational Status	A. No formal education B. Primary C. Secondary D. College/University E. Post graduate
4.	Place of Residency	A. Urban B. Rural

5.	Marital Status	A. Married B. Un married C.Others(Specify)

PART 2. GENERAL KNOWLEDGE QUESTION ABOUT CVD

1.	Cardiovascular diseases (CVD) are diseases of rich people	1. Yes 2. No
2.	Smoking does not increase a risk of CVD	1. Yes 2. No
3.	Consuming a lot of vegetables and fruits increases the risk of CVD	1. Yes2. No
4.	Consumption of too much salt is a risk to CVD	1. Yes 2. No
5.	Having excess body weight increases ones risk of CVD	1.Yes 2.No
6.	A family history of CVD increases ones risk of acquiring CVD	1.Yes 2.No
7.	Generally, regular consumption of red meat is healthier than white meat	1.Yes 2.No
8.	Cardiovascular diseases are curable upon Completion of described dose.	1. Yes 2. No
9.	Diabetes increases ones risk of CVD	1. Yes 2. No
10.	Men are at higher risk of CVDs compared to women	1. Yes 2. No
11.	Excessive alcohol drinking is dangerous to cardiovascular health	1. Yes 2. No
12.	CVDs are the leading cause of deaths globally	1. Yes2. No
13.	A person may know that he/she has CVD based on signs and symptoms alone	1.Yes 2.No
14.	A person with CVD may infect a close person	1. Yes 2.No
15.	High blood pressure is a risk factor of CVD	1.Yes 2.No
16.	Animal fat is healthier than plant oil	1.Yes 2.No
17.	Old age is a risk factor for CVD	1.Yes 2.No
18.	Stress increases ones risk of acquiring CVD	1.Yes 2.No

19.	Exercising regularly is harmful to cardiovascular health	1.Yes 2.No
20.	High cholesterol in blood prevents one from CVD	1. Yes 2. No
21.	CVD are not preventable	1.Yes 2.No
22.	Doing health check-ups frequently is harmful	1. Yes 2. No
PART 3		
TOBACCO USE		
1.	Do you currently smoke any tobacco products, Such as cigarettes, cigars or pipes?	1. Yes 2. No
2.	Do you currently smoke tobacco products daily?	1. Yes 2. No
ALCOHOL CONSUMPTION		
1.	Have you ever consumed any alcohol such as beer, Wine, spirits or [add other local examples]?	1. Yes 2. No
2.	Have you consumed any alcohol within the past 12 months?	1. Yes 2. No
3.	Have you stopped drinking due to health reasons, such as a negative impact on your health or On the advice of your doctor or other health worker?	1. Yes 2. No
DIET		
1.	In a typical week, on how many days do you eat fruit?	Number of days ……..
2.	How often is salt, salty seasoning or a salty sauce added in cooking or Preparing foods in your household?	1. Always 2.often 3.sometimes 4.rarely 5. Never
DIETARY SALT		

1.	How much salt or salty sauce Do you think you consume?	1.Far too much 2.Too much 3.Just the right amount 4.Too little 5. Far too little
2.	How important to you is Lowering the salt in your diet?	1.Very important 2.Somewhat important 3.Not at all important
3.	Do you think that too much salt or Salty sauce in your diet could cause a health problem?	1.Yes 2.No
PHYSICAL ACTIVITY		
4.	Does your work involve vigorous-intensity activity that causes large increases in breathing or heart rate like [carrying or lifting heavy loads, digging or construction work] For at least 10 minutes continuously?	1.Yes 2.No
5.	Do you walk or use a bicycle (pedal cycle) for at least 10 minutes continuously to get to and from places?	1.Yes 2.No
6.	Do you do any vigorous-intensity sports, fitness or recreational (leisure) activities that cause large increases in breathing or heart rate like [running or football] For at least 10 minutes continuously?	1. Yes 2. No
7.	In a typical week, on how many days do you do vigorous intensity sports, Fitness or recreational (leisure) activities?	Number of days……
8.	How much time do you usually	Hrs…….Minute……

	Spend sitting or reclining on atypical day?	
HISTORY OF RAISED BLOOD PRESSURE		
1.	Are you currently receiving any of the following treatments/advice for high blood pressure prescribed by a doctor or other health worker?	1. Yes 2.No
2.	Drugs (medication) that you have taken in the past two weeks	1.Yes 2.No
3.	Advice to reduce salt intake	1.Yes 2.No
4.	Advice or treatment to lose weight	1.Yes 2. No
5.	Advice or treatment to stop smoking	1. Yes 2.No
6.	Advice to start or do more exercise	1.Yes 2. No
7.	Have you ever seen a traditional Healer for raised blood pressure or hypertension?	1.Yes 2.No
8.	Are you currently taking any herbal Or traditional remedy for your raised blood pressure?	1.Yes 2.No
9.	Have you ever had your blood pressure Measured by a doctor or other health worker?	1.Yes 2. No
10.	Have you ever been told by a doctor or other health worker that You have raised blood pressure or hypertension?	1.Yes 2.No
11.	In the past two weeks, have you taken any drugs (medication) for raised blood pressure prescribed By a doctor or other health worker?	1. Yes 2. No
12.	Have you ever seen a traditional Healer for raised blood pressure or hypertension?	1. Yes 2. No
13.	Are you currently taking any herbal Or traditional remedy for your raised blood pressure?	1.Yes 2.No

HISTORY OF DIABETES		
1.	Have you ever had your blood sugar Measured by a doctor or other health worker?	1. Yes 2. No
2.	Have you ever been told by a doctor or other health worker that You have raised blood sugar or diabetes?	1.Yes 2.No
3.	Were you first told in the past 12 months?	1.Yes 2.No
4.	In the past two weeks, have you taken any drugs (medication) for diabetes prescribed By a doctor or other health worker?	1.Yes 2.No
5.	Are you currently taking insulin For diabetes prescribed by a doctor or other health worker?	1. Yes 2. No
6.	Have you ever seen a traditional healer For diabetes or raised blood sugar?	1. Yes 2. No
7.	Are you currently taking any herbal or Traditional remedy for your diabetes?	1. Yes 2. No
8.	Have you ever had your cholesterol (fat levels in your blood) measured By a doctor or other health worker?	1. Yes 2. No
9.	Have you ever been told by a doctor Or other health worker that you have raised cholesterol?	1.Yes 2.No
10.	Were you first told in the past 12 months?	1.Yes 2.No
11.	In the past two weeks, have you taken any oral treatment (medication) for raised total cholesterol prescribed By a doctor or other health worker?	1.Yes 2.No
12.	Have you ever seen a traditional Healer for raised cholesterol?	1.Yes 2.No

13.	Are you currently taking any herbal or Traditional remedy for your raised cholesterol?	1. Yes 2. No
HISTORY OF CARDIOVASCULAR DISEASES		
1.	Have you ever had a heart attack or chest pain from heart disease (angina) Or a stroke (cerebrovascular accident or incident)?	1.Yes 2.No
2.	Are you currently taking aspirin regularly To prevent or treat heart disease?	1.Yes 2.No
3.	Are you currently taking statins (Lovastatin/Simvastatin/Atorvastatin or any other statin) Regularly to prevent or treat heart disease?	1.Yes 2.No
LIFESTYLE ADVICE		
1.	During the past 12 months, Have you visited a doctor or other health worker?	1.Yes 2.No
2.	During any of your visits to a doctor or other health worker in the past 12 months, Were you advised to do any of the following?	
3.	Quit using tobacco or don't start	1.Yes 2.No
4.	Reduce salt in your diet	1.Yes 2.No
5.	Eat at least five servings of fruit and/or vegetables each day	1.Yes 2.No
6.	Reduce fat in your diet	1.Yes 2.No
7.	Start or do more physical activity	1.Yes 2.No
8.	Maintain a healthy body weight or lose weight	1.Yes 2.No
9.	Reduce sugary beverages in your diet	1.Yes 2.No

የመረጃ ቅጽ

ሄሎ ውድ ስሜ _____ ነው በአዲስ አበባ ዩኒቨርስቲ የጤና ሳይንስ ኮሌጅ የቀዶ ጥገና የትምህርት ክፍል በልብ እና የደም ስር ስርአት ፐርፊውዥን (ስርጭት) ላይ 2ኛ ዲግሪዋን በማጠናት ላይ ለምትገኘው ለወ/ሪት አዜብ ተስፋዬ ጥናት ክንውን በዳታ ሰብሳቢነት በመስራት ላይ እገኛለሁ፡፡ ተሳታፊዎቹ እና እርስዎ የዚህን ጥናት መጠይቅ እንዲመልሱ በትህትና ይጠየቃሉ፡

የጥናቱ መጠሪያ፡ በጥቁር አንበሳ እስፔሻላይዝድ ሆስፒታል የልብ ሕክምና ክሊኒክ ውስጥ በመታከም ላይ ከሚገኙ ታካሚዎች መካከል የልብ እና የደም ስር በሽታ አደጋ ምክንያቶችን ማወቅ፡

ጥያቄ፡- ጥያቄው ከ30 እስከ 40 ደቂቃ ይቆያል፡፡

አደጋ፡- በጥናቱ በመሳተፍዎ ምንም አይነት የሚደርስብዎ አደጋ የለም

ጥቅማ ጥቅም፡ በዚህ ጊዜ ላይ በጥናቱ በመሳተፍዎ የሚያገኙት ምንም አይነት ቀጥተኛ ጥቅማ ጥቅሞች የሉም ግን የሚያቀርቡት መረጃ በልብ የደም ስር ስርአት በሽታ አደጋ ምክንያቶች ላይ ያለውን የእውቀት ችግር ለማሰወገድ በጣም አስፈላጊ ነው፡፡

ሚስጥራዊነት፡ የሚሰጡን መረጃ በፍጹም ሚስጥራዊነት የሚጠበቅ ይሆናል፡፡

ጥያቄው፡ በመጠይቁ እና በስምምነት ቅጹ ላይ ስምዎን ላለማሳየት በሚስጥር ቃል ይያዛል፡፡

መብት፡- በዚህ ጥናት ውስጥ ያልዎት ተሳትፎ በበጎ ፍቃኝነት ላይ የተመረኮዘ ነው፡፡ በዚህ ጥናት ውስጥ የመሳተፍ መብት ያልዎት ሲሆን ከጥናቱ ውስጥ ካሎት ተሳትፎ በማንኛውም ጊዜ የመውጣት መብት አልዎት፡፡

የመገኛ አድራሻ፡ ስለ ጥናቱ በማናቸውም ጊዜ ጥያቄዎች ወይም ግልጽ ያልሆኑ ሀሳቦች ካልዎት ዋናውን ተመራማሪ በስልክ ቁጥር +251 966250429 ወይም በኢሜይል አድራሻ azebte01@gmail.com ለማግኘት ይችላሉ

የስምምነትቅጽ

ይህንንጥናትአስመልክቶየመረጃቅጹንአንብቤእናበቃልየቀረበልኝንማብራሪያየተረዳሁስሆንከእኔም ንእንደሚጠበቅብኝተረድቻለሁ፡፡ምንምአይነትምክንያትመስጠትሳያስፈልገኝእናበመቃወሜምንም አይነትተጽኖሳይደርስብኝከዚህጥናትበማንኛውምጊዜልወጣእንደምችልእረዳለሁ፡፡

ከዚህበላይየተገለጹትንሁሉንምሁኔታዎችተገንዝቤያለሁ፡፡

በዚህጥናትለመሳተፍፍቃደኛነዎትን?

ሀ) ተስማምቻለው

ለ አልተስማማውም

ግልጽ ስምምነት በቃል እንደሚሰጥ ያረጋገጠው ቃለ መጠይቅ አድራጊው ፊርማ

የቃለ መጠይቅ አድራጊ ስም፡ _____

የቃለ መጠይቅ አድራጊ ፊርማ፡ _____

ቀን፡ _____

አባሪ፡ **የምርምር ጥያቄዎች የአማርኛ ክፍል**		
ክፍል 1፡ የማህበራዊ ስነ ህዝብ መገለጫ ጸባያት		
1.	እድሜ	
2.	ጾታ	ወንድ ……. ሴት ……..
3.	ብሔር	ሀ/ አማራ ለ/ ትግሬ ሐ/ ደቡብ መ/ ኦሮሞ ሠ/ ሌላ (ይጥቀሱ)……
4.	ሀይማኖት	ሀ/ ኦርቶዶክስ ለ/ ጴንጤ ሐ/ ካቶሊክ መ/ የእስልምና ተከታይ ሠ/ ሌላ (ይጥቀሱ) _____
5.	የትምህርት ደረጃ	ሀ/ መደበኛ ትምህርት አልተማሩም ለ/ 1ኛ ደረጃ

		ሐ/ 2ኛ ደረጃ መ/ ኮሌጅ/ዩኒቨርስቲ ሠ/ ድህረ - ምረቃ
6.	የመኖሪያ ቦታ	ሀ/ ከተማ ለ/ ገጠር
7.	የጋብቻ ሁኔታ	ሀ/ ያገባ ለ/ ያላገባ ሐ/ ሌላ (ይጥቀሱ).....
ክፍል 2፡ ስለ ልብ እና የደም ቧንቧ በሽታአንዳንድ የጠቅላላ እውቀት ጥያቄዎች		
1.	ልብ እና የደም ቧንቧ በሽታ የሀብታም ሰዎች በሽታ ነውን	1 አዎ 2 አይደለም
2. 2	ሲጋራ ማጨስ ለልብ እና የደም ቧንቧ በሽታ እየጨመረ የሚመጣ አደጋ ይዳርጋልን	1 አዎ 2 አይደለም
3.	በጣም ብዙ አትክልቶች እና ፍራፍሬዎችን መብላት ለልብ እና የደም ቧንቧ በሽታ አደጋ መጨመር ይዳርጋልን	1 አዎ 2 አይደለም
4.	በጣም ብዙ ጨው አብዝቶ መመገብ ለልብ እና የደም ቧንቧ በሽታ አደጋ ይዳርጋልን	1 አዎ 2 አይደለም
5.	የአንድ ሰው የሰውነት ክብደት ከመጠን በላይ መጨመር ለልብ እና የደም ቧንቧ በሽታ አደጋ ይዳርጋልን	1 አዎ 2 አይደለም
6.	በቤተሰብ ውስጥ የልብ እና የደም ቧንቧ በሽታ ህመም ታሪክ መኖር በልብ እና የደም ቧንቧ በሽታ የመያዝ አደጋን ይጨምረዋልን	1 አዎ 2 አይደለም
7.	በአጠቃላይ ቀይ ስጋን በመደበኛነት መመገብ ነጭን ስጋ	1 አዎ 2 አይደለም

	ከመመገብ የበለጠ የበለጠ ጤናማነት ነው	
8.	የልብ እና የደም ቧንቧ በሽታ የታዘዘልዎትን መድሃኒት በማጠናቀቅ ሊድን የሚችል ነው	1 አዎ 2 አይደለም
9.	የስኳር በሽታ በልብ እና የደም ቧንቧ በሽታ የመያዝ አደጋን ይጨምረዋል	1 አዎ 2 አይደለም
10.	ወንዶች ከሴቶች ጋር ሲነጻጸር ከፍተኛ የልብ እና የደም ቧንቧ በሽታ ተጋላጭነት አደጋ አላቸውን	1 አዎ 2 አይደለም
11.	አልኮልን አብዝቶ መውሰድ ለልብ እና የደም ቧንቧ በሽታ አደገኛ ነው	1 አዎ 2 አይደለም
12.	ልብ እና የደም ቧንቧ በሽታ በአለም አቀፍ ደረጃ ዋነኛው የሞት መንስኤ ነው	1 አዎ 2 አይደለም
13.	አንድ ሰው በምልክቶቹ እና በባህሪያቶቹ ላይ ተመስርቶ ብቻ ልብ እና የደም ቧንቧ በሽታ እንዳለበት ሊያውቅ ይችላል	1 አዎ 2 አይደለም
14.	ልብ እና የደም ቧንቧ በሽታ ያለበት ሰው በአቅራቢያ የሚገኝ ግለሰብን ሊበክል ይችላል	1 አዎ 2 አይደለም
15.	ከፍተኛ የደም ግፊት የልብ እና የደም ቧንቧ በሽታ አምጪ ምክንያት ሊሆን ይችላል	1 አዎ 2 አይደለም
16.	ከእንስሶች የሚገኝ ቅባት ከተክሎች ከሚገኝ ቅባት የበለጠ ጤናማ ነው	1 አዎ 2 አይደለም
17.	የእርጅና እድሜ በልብ እና የደም ቧንቧ በሽታ አደገኛ ምክንያት ነው	1 አዎ 2 አይደለም
18.	ጭንቀት በልብ እና የደም ቧንቧ በሽታ የመያዝ እድሉን ይጨምረዋል	1 አዎ 2 አይደለም
19.	በመደበኛነት የአካል እንቅስቃሴ ማድረግ ለልብ እና የደም	1 አዎ 2 አይደለም

	ቧንቧ ጤና አደገኛ ነው	
20.	በደም ውስጥ ያለ ከፍተኛ የስብ ክምችት አንድ ሰው በልብ እና የደም ቧንቧ በሽታ እንዳይያዝ ይከላከላል	1 አዎ 2 አይደለም
21.	የልብ እና የደም ቧንቧ በሽታ ሊከላከሉት የሚችሉት በሽታ አይደለም	1 አዎ 2 አይደለም
22.	በመደበኛነት የጤና ክትትል ማድረግ ጎጂ ነው	1 አዎ 2 አይደለም
ክፍል 3 **የትምባሆ አጠቃቀም**		
1.	በአሁኑ ጊዜ ማናቸውንም የትምባሆ ውጤቶች እንደ ሲጋራ፣ ሲጋርስ ወይም ፒፓዎች ያሉትን ይጠቀማሉን?	1 አዎ 2 አይደለም
2.	በአሁኑ ጊዜ የትምባሆ ምርቶችን በየቀኑ ይጠቀማሉን	1 አዎ 2 አይደለም
የአልኮል ፍጆታ		
1.	ማናቸውንም አልኮሎችን እንደ ቢራ መጠጦች ወይም (ሌሎች የአካባቢያዊ ምሳሌዎችን ይጨምሩ) ይወስዳሉ?	1 አዎ 2 አይደለም
2.	ባለፉት 12 ወራት ውስጥ ማንኛውንም አልኮል ወስደው ያውቃሉን	1 አዎ 2 አይደለም
3.	በጤና ምክንያቶች እንደ በጤናዎ ላይ እንደደረሰ አሉታዊ ተጽኖ ወይም በዶክተሮች ወይም በሌሎች ጤና ሰራተኛ ምክር መጠጥ መጠጣት አቁመው ያውቃሉን?	1 አዎ 2 አይደለም

አመጋገብ		
1.	በአንድ አይነተኛ ሳምንት ውስጥ ለምን ያህል ጊዜያት ፍራፍሬ ይመገባሉን	የቀናት ብዛት …….
2.	በቤተሰብዎ ውስጥ ምግብ በሚያበስሉበት ወይም በሚያዘጋጁበት ጊዜ ለምን ያህለ ጊዜ ጨው፣ ጨዋማ ማጣፈጫ ወይም ጨዋማ ስጎ ይጠቀማሉን?	1 በጣም ብዙ ብዙ 2 በጣም ብዙ 3 ትክክለኛውን መጠን ብቻ 4 በጣም ጥቂት 5 በጣም በጣም ጥቂት
በምግብ ውስጥ የሚጨመር ጨው		
1.	በምግብዎ ውስጥ ምን ያህል ጨው ወይም በጨው የተዘጋጀ ስጎ እመገባለሁ ብለው ያስባሉን	1. እጅግ በጣም ብዙ 2. በጣም ብዙ 3 ትክክለኛውን መጠን ብቻ 4 በጣም ጥቂት 5 በጣም በጣም ጥቂት
1	በመግብዎ ውስጥ ጨውን መቀነስ ምን ያህል ጠቃሚ ነው	1. በጣም አስፈላጊ 2. በተወሰነ ደረጃ አስፈላጊ 3. ከእነ ጭራሹ አስፈላጊ አይደለም
2	በምግብዎ ውስጥ በጣም ብዙ ጨው ወይም ጨዋማ ስጎ የጤና ችግር ሊዳርግ እንደሚችል ያስባሉን	1 አዎ 2 አይደለም

የአካላዊ እንቅስቃሴ		
3	ጠንካራ ክብደት ያለው እንቅስቃሴን የሚያካትት ስራ በአተነፋፈስ ወይም በልብ ምት ፍጥነትዎ ውስጥ ትላልቅ አደጋዎችን (ከባባድ ጭነቶችን መጫን ወይም ማንሳት መቆፈር ወይም የግንባታ ስራ) ቢያንስ ለ10 ደቂቃዎች በቀጠይነት መስራት ሊዳርግ ይችላልን?	1 አዎ 2 አይደለም
4	ወደ ስራ ቦታዎ ለመሄድ እና ከስራ ቦታዎ ለመመለስ የእግር ጉዞ ወይም ብስክሌት ማሽከርከር (ባለ ፔዳል ብስክሌት) ቢያንስ ለ10 ደቂቃ በቀጣይነት ይጠቀማሉን?	1 አዎ 2 አይደለም
5	ማናቸውንም ከባባድ ጥንካሬ ያላቸውን ስፖርቶች፣ የአካል ብቃት ወይም መዝናኛ (የትርፍ ጊዜ) ተግባራትን በአተነፋፈስ ወይም በልብ ምት ላይ ከፍተኛ ጭማሪ ሊዳርግ የሚችሉ እንደ "እሩጫ ወይም እግር ኳስ" ቢያንስ ለ10 ደቂቃ በቀጣይነት ይሰራሉን፡፡	1 አዎ 2 አይደለም
6	በአንድ አይነተኛ ሳምንት ውስጥ በጣም ጠንካራ የሆኑ ስፖርቶችን፣ የአካል ብቃቶችን ወይም የመዝናኛ/የእረፍት ጊዜ ተግባራትን ለምን ያህል ጊዜ ይሰራሉን?	የቀናት ብዛት .....
7	በአንድ አይነተኛ ቀን ውስጥ በመቀመጥ ወይም በመጋደም በተለምዶ ምን ያህል ጊዜዎን ያጠፋሉን ?	
የጨመረ የደም ግፊት ታሪክ		
1.	ዶክተርዎ ወይም ሌላ የጤና ሰራተኛ ላዘዘልዎት ከፍተኛ የደም ግፊት ማናቸውንም የሚከተሉት	1 አዎ 2 አይደለም

	ህክምናዎች/ምክር በመቀበል ላይ ነዎትን?	
2.	ባለፉት 2 ሳምንታት ሲወስዷቸው የቆዩ መድሃኒቶች	1 አዎ 2 አይደለም
3.	የጨው መጠንን ቀንሰው እንዲወስዱ ተምክረዋልን	1 አዎ 2 አይደለም
4.	ክብደት እንዲቀንሱ ተመክረዋልን	1 አዎ 2 አይደለም
5.	ሲጋራ ማጨስ እንዲያቆሙ ተመክረዋል ወይም ታክመዋልን	1 አዎ 2 አይደለም
6.	የበለጠ የአካል እንቅስቃሴ እንዲጀምሩ ወይም እንዲያደርጉ ተመክረዋልን	1 አዎ 2 አይደለም
7. አ	እየጨመረ ለመጣ የደም ግፊት ወይም የደም ብዛት ባህላዊ ሐኪም አይተው ያውቃሉን	1 አዎ 2 አይደለም
8.	እየጨመረ ለመጣው የደም ግፊትዎ ማንኛውንም የእጽዋት ወይም ባህላዊ መፍትሄ በመውሰድ ላይ ነዎትን	1 አዎ 2 አይደለም
9.	በዶክተር ወይም በሌላ የጤና ሰራተኛ የደም ግፊትዎ እንዲለካ አድርገው ያውቃሉን	1 አዎ 2 አይደለም
10.	እጨመረ የመጣው የደም ግፊት ወይም የደም ብዛት እንዳለብዎት በዶ.ር ወይም በሌላ የጤና ሰራተኛ ተነግሮታልን	1 አዎ 2 አይደለም
11.	ባለፉት 2 ሳምንታት ውስጥ እየጨመረ ለመጣው የደም ግፊትዎ በዶ/ር ወይም በማንኛውም የጤና ሰራተኛ የታዘዙ ማናቸውም መድሃኒት ሲወስዱ ቆይተዋልን	1 አዎ 2 አይደለም
12.	እጨመረ ለመጣው የደም ግፊት ወይም የደም ብዛት በባህላዊ ሐኪም ታይተው ያውቃሉን	1 አዎ 2 አይደለም

13.	እጨመረ ለመጣው በዶክተር ወይም በሌላ የጤና ሰራተኛ የደም ግፊትዎ እንዲለካ አድርገው ያውቃሉን	1 አዎ 2 አይደለም
	የስኳር ህመም ታሪክ	
1.	በዶ/ርዎ ወይም በሌላ የጤና ሰራተኛ በደምዎ ውስጥ ያለው ስኳር ተለክቶ ያውቃልን	1 አዎ 2 አይደለም
2.	በዶ/ርዎ ወይም በሌላ የጤና ሰራተኛ የደም ውስጥ ስኳርዎ እንደጨመረ ወይም የስኳር ህመምተኛ እንደሆኑ ተነግሮት ያውቃሉን ?	1 አዎ 2 አይደለም
3.	ባለፉት 12 ወራት ለመጀመሪያ ጊዜ የተነገርዎት መቼ ነበር	1 አዎ 2 አይደለም
4.	ባለፉት 2 ሳምንታት በዶክተርዎ ወይም በሌላ ጤና ሰራተኛ የታዘዙ ማናቸውንም የስኳር ህመም መድሃኒቶችን ወስደዋልን	1 አዎ 2 አይደለም
5.	በዶ/ርዎ ወይም በሌላ የጤና ሰራተኛ የታዘዘ የስኳር ህመም መድሃኒት በአሁኑ ጊዜ ኢንሱሊን በመውሰድ ላይ ነዎትን	1 አዎ 2 አይደለም
6.	ለስኳር ህመምዎ ወይም እየጨረመ ለመጣው የደም ውስጥ ስኳርዎ ባህላዊ ሀኪምን አይተው ያውቃሉን	1 አዎ 2 አይደለም
7.	ለስኳር ህመምዎ ማንኛውም የእጽዋት ወይም ባህላዊ መፍትሄ በአሁኑ ጊዜ በመውሰድ ላይ ይገኛሉን	1 አዎ 2 አይደለም
8.	በዶ/ርዎ ወይም በሌላ የጤና ሰራተኛ የተለካ የስብ መጠን (የደም ውስጥ የስብ ደረጃ) አልዎትን	1 አዎ 2 አይደለም

9.	እጨመረ የመጣ የደም ውስጥ ስብ መጠን እንዳልዎት በዶ/ርዎ ወይም በሌላ የጤና ሰራተኛ ተነግሮት ያውቃልን	1 አዎ 2 አይደለም
10.	ባለፉት 12 ወራት በመጀመሪያ የተነግሮት መቼ ነበር	1 አዎ 2 አይደለም
11.	ባለፉት 2 ሳምንታት በዶ/ርዎ ወይም በሌላ የጤና ሰራተኛ የታዘዘ እጨመረ ለመጣ የደም ውስጥ ስብ ማንኛውንም በአፍ የሚወሰድ መድሃኒት/ህክምና ይወስዳሉን	1 አዎ 2 አይደለም
12.	እየጨመረ ለመጣው የደም ውስጥ ስብ መጠን የባህላዊ ሀኪም ታይተው ያውቃሉን	1 አዎ 2 አይደለም
13.	እየጨመረ ለመጣው የደም ውስጥ ስብ መጠን ማንኛውም የእጽዋት ወይም የባህላዊ መፍትሄ በአሁኑ ጊዜ በመውሰድ ላይ ይገኛሉን	1 አዎ 2 አይደለም
የልብ እና የደም ቧንቧ በሽታ ታሪክ		
1.	ድንገተኛ የልብ ጥቃት ወይም ከልብ በሽታ የሚመጣ የደረት ህመም ወይም ከስትሮክ (የአራስ ደም ቧንቧ አደጋ ወይም ክስተት) የተነሳ የሚመጣ ገጥሞታልን ?	1 አዎ 2 አይደለም
2.	የለብ በሽታ ለመከላከል ወይም ለማከም በአሁኑ ጊዜ የአስፕሪን መድሃኒትን በመደበኛነት እየወሰዱ ነውን	1 አዎ 2 አይደለም
3.	በአሁኑ ጊዜ የደም ውስጥ ስብ መቆጣጠሪያ መድሃኒት (ሎቫስታቲን/ሲማቫስታቲን/አትሮቫስታቲን ወይም ማናቸውም ሌሎች ስታቲኖች) የልብ በሽታን በመደበኛነት ለመከላከል ወይም ለማከም በመውሰድ ላይ ይገኛሉን	1 አዎ 2 አይደለም
የአኗኗር ዘይቤ ምክር		
1.	ባለፉት 12 ወራት ጊዜ ውስጥ ዶ/ርዎን ወይም ሌላ ጤና ሰራተኛ አይተው ያውቃሉን	1 አዎ 2 አይደለም
2.	ባለፉት 12 ወራት ዶ/ርዎን ወይም ሌላ ጤና ሰራተኛ በማናቸውም ጊዜያት ሲጎበኙ ከሚከተሉት ማናቸውንም	1 አዎ 2 አይደለም

	ተመክረዋልን?	
3.	ትንባሆ ማጨስ እንዲያቆሙ ወይም የማያጨሱ ከሆነ ፈጽመው እንዳይጀምሩ	1 አዎ 2 አይደለም
4.	በምግብዎ ውስጥ ጨው እንዲቀንሱ	1 አዎ 2 አይደለም
5.	በየቀኑ ቢያንስ 5 ጊዜ ፍራፍሬ እና ወይም አትክልቶችን መመገብ	1 አዎ 2 አይደለም
6.	በምግብዎ ውስጥ ስብን መቀነስ	1 አዎ 2 አይደለም
7.	የአካላዊ እንቅስቃሴ መጀመር ወይም የበለጠ መስራት	1 አዎ 2 አይደለም
8.	ጤናማ የሰውነት ክብደት መጠበቅ ወይም ክብደት መቀነስ	1 አዎ 2 አይደለም
9.	በምግብዎ ውስጥ ማናቸውንም ስኳር ያላቸውን መጠጦች መቀነስ	1 አዎ 2 አይደለም