HELP-SEEKING BEHAVIOUR FOR DEPRESSIVE DISORDERS AMONG ADULT CADIOVASCULAR PATIENTS OUTPATIENT CARDIAC CLINIC JIMMA UNIVERSITY TEACHING HOSPITAL, JIMMA, SOUTHWEST ETHIOPIA 2014

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A THASIS SUBMITED TO THE DEPARTMENT OF PSYCHIATRY, COLLEGE OF PUBLIC HEALTH AND MEDICAL SCIENCES, JIMMA UNIVERSITY, IN PARTIAL FULFILLMENT FOR THE REQUIREMENTS OF THE DEGREE OF MASTER OF SCIENCE IN INTEGRATED CLINICAL & COMMUNITY MENTAL HEALTH(Msc)

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Abstract

Background*: Depression in healthy persons without cardiac disease has been associated with the development of coronary artery disease and cardiovascular disease also risk factor for development of depression. This has devastating effect the patient's quality of live, illness progression, morbidity and mortality. Despite this fact help seeking behavior of cardiovascular patients with depression has not been addressed in Ethiopia.*

Objective*: To assess the help-seeking behaviors of adult cardiovascular patients with depression for their depressive disorders in Jimma university teaching hospital.*

Method: *This was Institution based cross sectional study conducted October to December in 2014. The study was conducted on 353 cardiovascular patients who attended the cardiac clinic at Jimma University Teaching Hospital. Depression was assessed using patient health questionnaire version nine(PHQ-9)which is validated in Ethiopia, Help seeking behavior using actual help seeking questionnaire and social support using oslow social support - 3 item scale.*

Result: *From the total of 339 participants, 57.5% (n=195) of them fulfill the case definition of depression and 12.1 %(n=41) of participant reported idea of hurting themselves. Out of patients who fulfill case definition of depression, only 33.3% sought help for their depression. From those participants who sought help 88.6% sought help from one or more of informal help source. Traditional healers, ministers and husband/wife were most frequently visited help source. Occupation (odds of = 4.24, 95% confidence interval (CI) =1.31, 13.78), education level (AOR 7.6,CI=2.13,27.11), presence of history of mental illness in the family (AOR 7.33, CI=2.72, 19.80), ideal of hearting themselves, knowing availability of the psychiatric service in this hospital and having previous seeking help were significantly associated with help seeking.* ***Conclusion and recommendation:*** *the number of patients not seeking help for depression is high. There for scaling up mental health service in tertiary hospitals through multidisciplinary approach should be given high priority.*

Key words: *Cardiovascular disease, Depression, help seeking behavior, determinant of help seeking, Ethiopia*

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LIST OF ACRONYMS AND ABBREVIATIONS

AHSQ	Actual Help Seeking Questionnaire
CAD	Coronary Artery Disease
CVD	Cardiovascular disease
DALYs	Disability Adjusted Life Years
DDM	Diabetes related heart disease
GP	General Practitioner
HF	Heart Failure
HIV/AIDS	Human Immune virus / acquired immune deficiency syndrome
HHD	Hypertensive related heart disease
IHD	Ischemic heart disease
JU	Jimma University
JUSH	Jimma University specialized hospital
LMIC	low- and middle-income countries
MD	Major Depression
OSS-3	Oslo social support scale -3
QOL	Quality of Life
PHQ-9	Patient Health Questionnaire
SPSS	statically package social science
WHO	World Health Organization

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1. INTRODUCTION

1.1. Background

According to World Health Organization (WHO) mental health is defined as a state of subjective well being in which an individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community. In this sense, mental health is the foundation for individual well-being and the effective functioning of a community and it can have impact on or be affected physical illness [1]. But in the other report of this organization illustrate that in low and middle income countries (LMIC) four out of five patients with mental illness do not receive any mental health Services(2).

Depression is a serious medical illness that affects one's thoughts, feelings, behavior, mood and physical health. Depression is a life-long condition in which periods of wellness interchange with recurrences of illness (3). Cardiovascular disease (CVD) refers to any disease of the heart and blood vessels. The most common ones are diseases of the heart muscle, strokes, heart attacks, heart failure and heart disease caused by high blood pressure(4). Comorbid depression is the existence of a depressive disorder (i.e. major depression, dysthymic or adjustment disorder) along with a physical disease. Those co occurrence of diseases increased patients' risk of disability and mortality (5)

A total of 57 million deaths occurred in the world during 2008; (63%) were due to NCDs, mainly cardiovascular diseases, diabetes, cancer and chronic respiratory diseases. Almost 80% of these NCD deaths occurred in LMIC (6). Chronic non-communicable cardiovascular diseases are the leading cause of death in the world (3) and also rapidly overtaking infectious diseases as the major cause of death and disability in the developing world (7). Depression is one of the leading contributors of the burden of disease globally and in low- and (LMIC), and is projected to be, overall, the second leading cause of burden of disease by 2020 (8, 9).

Major depression disorder (23.8%) and sub-syndromal symptom of depression (20.8%) is highly prevalent among Myocardial Infraction patients. but depression depression among this groups of patients remain unrecognized and untreated (10).

The syndrome of major depression is present in approximately 15% of patients with cardiac disease; such a rate is substantially higher than that seen in the general population (4% to 5%) Or

primary care patients (8% to 10%). And also in other study depression in healthy persons without cardiac disease has been associated with the development of coronary artery disease; it associated with a 60% increase in cardiac disease (11-14). Depression is an independent risk factor for the development of CAD. Patients with CAD have a high rate of depression, which worsens their prognosis (15). Depression among hyperteisive patients is also highly prevalent; it also not only chronicity of hypertention increase depression prevalence, instead pathophsiologicaly bidirectionaly related. Comorbidity of depression and hypertension fasten disease progression to cardiac complication (16). In our countery also NCD are the leading contributor of (51%) death among adults in Addis Ababa, where the health care system is still gives great attention toward addressing communicable diseases (17).

Over all depression is a major public health problem worldwide; but its' burden increased while it co occur with chronic medical lines like cardiovascular. Prevalence of depression become alarmingly increase with patients who have chronic co morbid medical illnesses such as cardiovascular disease. Patients with depression do not seek-help, even if it has great negative impact on quality of life, productivity, social functioning and accelerating chronic disease prognosis it still remain undetected and under treated.

1.2 Statement of the problem

According to the existing information obtained from the background information and reviewed literature, NCD contributed 63 % of all deaths worldwide in 208; 80% of these deaths occured in LMIC countries in the same year. Among NCDs, CVDs are the leading cause of deaths through out the world. They are over taking infectious desese as amajor causes of death and disability in the developing world as well. Among mental health illnesses, depression is one of the leading causes of GBD in developed as well in the developing countries, ranking the 3rd among contributers to GBD.

After fully adjusting for all variables, being having a one diagnosis of chronic non communicable disease had a higher risk for occurrence of depression episodes and having two or more diagnoses of chronic non communicable illnesses further increases the likelihood for the existence of depression episodes as compared to those with no life time diagnoses of non communicable diseases(18).When it comes to the relation between depression and cardiovascular illnesses, depression is an independent risk for CAD whereas CAD itself is also an independent risk factor for depression. Moreover, they worsen the course of one another leading to high morbidity and mortality.

People suffering from mental health problems such as depression very often delay seeking professional help, or avoid seeking help at all, which in turn significantly compromises appropriate care and treatment given to the patient from responsible bodies not only their mental health problem but also their comer bid medical disease. Reducing delays in depression treatment seeking has the potential to accelerate reduction even elimination of depression symptoms and fasten improvements in quality of life, social function and occupational productivity.

In our society, mental illness is more often attributed to supernatural causes, for example spirit possession, bewitchment or evil eye, rather than as a result of biomedical or psychosocial causes. The attetuide of them to seek help from formal sources is scare. instead, seeking help for ther mental illness problem(depression) most often limited to the family or local community, and also depression usually remains undetected in general health settings, which leads to inappropriate prescribing of ineffective treatments and is a missed opportunity for suicide prevention.

Dispite this fact information regarding help seeking behavior for depression among patients with CVD is lacking in Ethiopia and perhaps in all sub-sahran Africa; although the impact of their comorbidity is huge. Therefore, addressing this issue in countries where scaling up of mental services is given attention is very important for priorty setting. So to day, it needs research to be done on cardiovascular patients to investigate help seeking behavior for their depression and associated factors to help seeking for their depression. These diagnosis include ischemic heart disease, hypertensive related heart disease, coronary heart disease and others.

2.1 LITERATURE REVIEW

The cross sectional study done in 18 countries the result shows that the average lifetime and 12-month prevalence estimates of DSM-IV MDE were 14.6% and 5.5% in the ten high-income and 11.1% and 5.9% in the eight low- to middle-income countries. Retrospectively, the average onset of major depressive episode was 25.7 and 24.0 in high-income and low- to middle-income countries respectively. The functional impairment was due to recurrence of MDE and also cognitive impairment even continues in period of full remission. This study also clearly put that the twelve-month prevalence of MDE younger age and older age was associated with greater chance, the in high-income and several low- to middle-income countries respectively (20). Study conducted in South Africa in the total sample of 4,351 adults, which is representative of country, the prevalence of major depressive episode (MDE) in the total sample was 9.7% for lifetime and 4.9% for the 12 months prior to the interview (21).Study done in china which was a hospital-based cross-sectional survey by Li G, et al, (2014), among 2,123, in the cardiovascular out-patient departments of 14 tertiary general hospitals to assess the prevalence of depression or anxiety disorder using Hospital Anxiety Depression Scale (HADS); in this study population the high prevalence of depression or anxiety disorder found. The prevalence rate the depressive and/or anxiety disorder was 14.27%.The adjusted prevalence of lifetime depressive and anxiety disorder was 5.37%. Depressive and/or anxiety disorder was 16.91% (22). Patients with major depression and diabetes were 1.5- to 2-times more likely to have 3 or more CVD risk factors as patients with diabetes without depression (23). In addition to this depression present in one out of three out patients with congestive heart failure and one out of five out patients with coronary heart disease, yet the majority of cases is not recognized or appropriately treated (24).

The study done in Pakistan in 2012 shows that overall prevalence of post stroke depression was 38%. The prevalence in male was found 47% whereas in female it was 25% and highest in young age group <45 years (68.8%) (25). And also other study done non- institutionalized 18-84 year old individuals (6015) were screen for major depression using the Mini-International Neuropsychiatric Interview. From this study the following result was found. The prevalence of 12-month help-seeking for emotional symptoms was 4.8%. The rate of 12-month help-seeking in the depressed sample was 34.1%. Depressed people used non-mental health services 1.5-3 times more than non-depressed persons even when adjusted for the chronic somatic disorder. Only one

third of depressed persons sought help, which was most of all associated with severity of depression (26).

A total of 155 patients with stable New York Heart Association functional class II, III, and IV HF and an ejection fraction 40% were given questionnaires to assess QOL and depression, of this a total of 48% of the patients scored as depressed. Depressed patients tended to be younger than non depressed patients. Women were more likely (64%) to be depressed than men (44%). Among men, blacks (34%) tended to have less depression than whites (54%) (27).

WHO health survey conducted on 245 404 participants from 60 countries in all region of the world an average of between 9.3% and 23.0% of participants with one or more chronic physical disease had co morbid depression. This result was significantly higher than the likelihood of having depression in the absence of a chronic physical disease. Depression had the biggest consequence on worsening mean health scores compared with the other chronic conditions (28).

A cross-sectional institutional based study done by A. Obadeji, et al, (2015), among 272 newly registered patients attending the general medical service out-patient in Nigeria. Out of those patients 47.8% had significant depressive symptoms; with 49.2% classified as mild, 35.4% as moderate, 10.8% as moderately severe, and 4.6% as severe (29). Other study had done in similar country at teaching hospital among hospitalized and stable outpatients heart failure patients the result showed that depression was present in 67% of hospitalized and 30.50% of the out patients(30).

Belete H. et al in Jimma specialized hospital conduct hospital based cross-sectional study, they found that out of 781 cardiac patients 256 (32.8%) had RHD, 189(24.2%) HHD 158(20.2%) cardiomyopathy, 94(12.0%) IHD, 30(3.8%) Cor-pulmonale 27(13.5%) arrhythmia and 27(3.4%) had other sorts of heart diseases (31).

HELP SEEKING TENDENCY

According to the WHO report patients with severe mental disorders did not get proper treatments; even patients between 76% and 85% in LMIC and 35% and 50% in high-income countries receive no treatment (32)**.** A study done in New York by mark O. in 2012, a majority

(61.3%) of respondents with lifetime major depression disorder (MDD) (N=5,958) reported having sought treatment for depression (33).

Study done among Africa Americans for screening depression using the International Diagnostic Inventory, out of 441 participants 66.4% were classified as affective depression, 17.8% as complicated depression, and 15.8% as physical depression. From these groups complicated depression group was associated with increased likelihood seeking treatment from a mental health professional. Seeking treatment from a family doctor was associated with physical depression. Seeking care from three or more different healthcare providers was associated with complicated depression (34).

Community based screening study done in Butajira, Ethiopia 2009, indicated that over half of the cases (55.9%) had never sought help from modern health care sector, and only 13.2% had ever been admitted to psychiatric hospital (35).

These data suggest that pharmacological and non-pharmacological treatment of depression might improve the quality of life (QOL) of heart failure (HF) patients (20). Thus heart failure patients who get treatment for their depression, quality of life will improve.

Study done in Italy among 18-69 years old using phq2 (patient health questionnaire version 2) as 1757(9.4%) persons meeting case definition of depression, data on whether they sought help was available for 1194. A third (34%) had sought help from a health professional, 13% from family or friends, 6% from both. The remaining 47.2% had no sought help. The proportion of who sought help increases from 43% among those with a depression symptoms score of 3 - 61% in those who had maximum score of 6. Factors significantly associated with not having helped sought from any (either) source were male sex, being regularly employed and age 18-34 years old (36). Study done in the Meskan and Mareko district in Ethiopia among general population only 33.4% of respondents with persistence depression sought help from any kind in the 3 months follow up assessment. Out of respondents with persistence depression; 16.7% use government primary health care service, 9.3% private healthcare and 7.4% traditional and religious healers (37).

FACTORS INFLUENCING HELP SEEKING

In Norway, among adult patients with anxiety disorder and depression, positive response on help seeking was more often found among persons with lowest level of education, those who had seen a General practitioner (GP) previous year, and those who did not have adequate good friends (38).

Bland R.et al, (1997), shows that help seeking behavior has been determined by the following factors. Those factors were co-morbid diagnosis, female gender, and age under 45. Help-seeking rate for those with one diagnosis was 20.3%; for those with more than one diagnosis, the rate was 42.8%. Fourty six point seven percent of those with a major depressive episode sought help for their depression (39).

Females sought treatment significantly more rapidly than males and whites sought treatment more rapidly than blacks or Asians. Onset of first depression over the age 55 years was also strongly associated with faster treatment seeking than earlier ages of onset. Among respondents with depression onset at age 21 or older, 13+ years of formal education at depression onset was associated with significantly faster treatment seeking and married sought treatment more promptly than those who had never been married. Co morbid psychiatric disorders, especially panic, generalized anxiety, substance use, and dysthymic disorders, appear to play an important role in accelerating treatment seeking for MDD (34).

A study done by Solomon H. et al, 2012, using Ethiopia national health survey data found the prevalence of depressive episode was 9.1%. Depression was highly associated with older age, divorced and widowed, number of diagnosed chronic non communicable diseases and alcohol drinking status. The proportion of attending health service among those with depression episodes was 22.9%. Attending service for their depressive episodes were associated with their educational status being in grade 5–8 and 9–12 grade (18).

Study done at Jimma university specialized hospital (JUSH) found that age, marital status, presence of other family member with mental illness, the type of diagnosed mental illness, and source of information about mental health service had significant statistical association with early treatment seeking behavior. Having other neurotic symptoms, interpersonal problems,

suicide attempt, headache, abdominal pain and fever also had significant statistical association with early treatment seeking for mental illness (40).

Research done on 40 depressed Patient using covenant sampling methods to assess their perception to their illness result show the following lack of insight regarding depression severity substantially delayed patient engagement in treatment seeking and decision-making (41).

Menke., Et al (2009) Multivariate analyses showed that greater depression severity fully mediated the relationship between stigma and treatment use, and that patient with the highest depression scores had significantly higher stigma scores as well. These results suggest that greater severity of depressive symptoms may override stigma and other beliefs about mental health in determining treatment use (42).

Study done in non-institutionalized individuals aged 18-84 years (n = 6105) in 2006 by Kleinberg A.,etal.the result shows that the major predictors to have depression were Low frequency of contacts with one's friends and parents, emotional loneliness, external locus of control and emotional dissatisfaction with couple relations. Help seeking behavior for depression was highly associated with external locus of control. And also Interactions of emotional loneliness, locus of control and frequency of contacts with parents significantly predicted help-seeking in the depressed sample (43).

Qualitative study done in United Kingdom among 26 coronary heart disease or diabetic patients to assess their belief on depression the patients did not consistently talk about depression as an illness-like disorder. Patients were unsure about seeking help from GPs and felt a personal responsibility to overcome depression themselves. Depression free patients belief that suicide only considered to seek help for depression (44).

To the best knowledge of the principal investigator there is no any study in help seeking behavior of cardiovascular disease patients with depression for depression.

2.2. CONCEPTUAL FRAME WORK

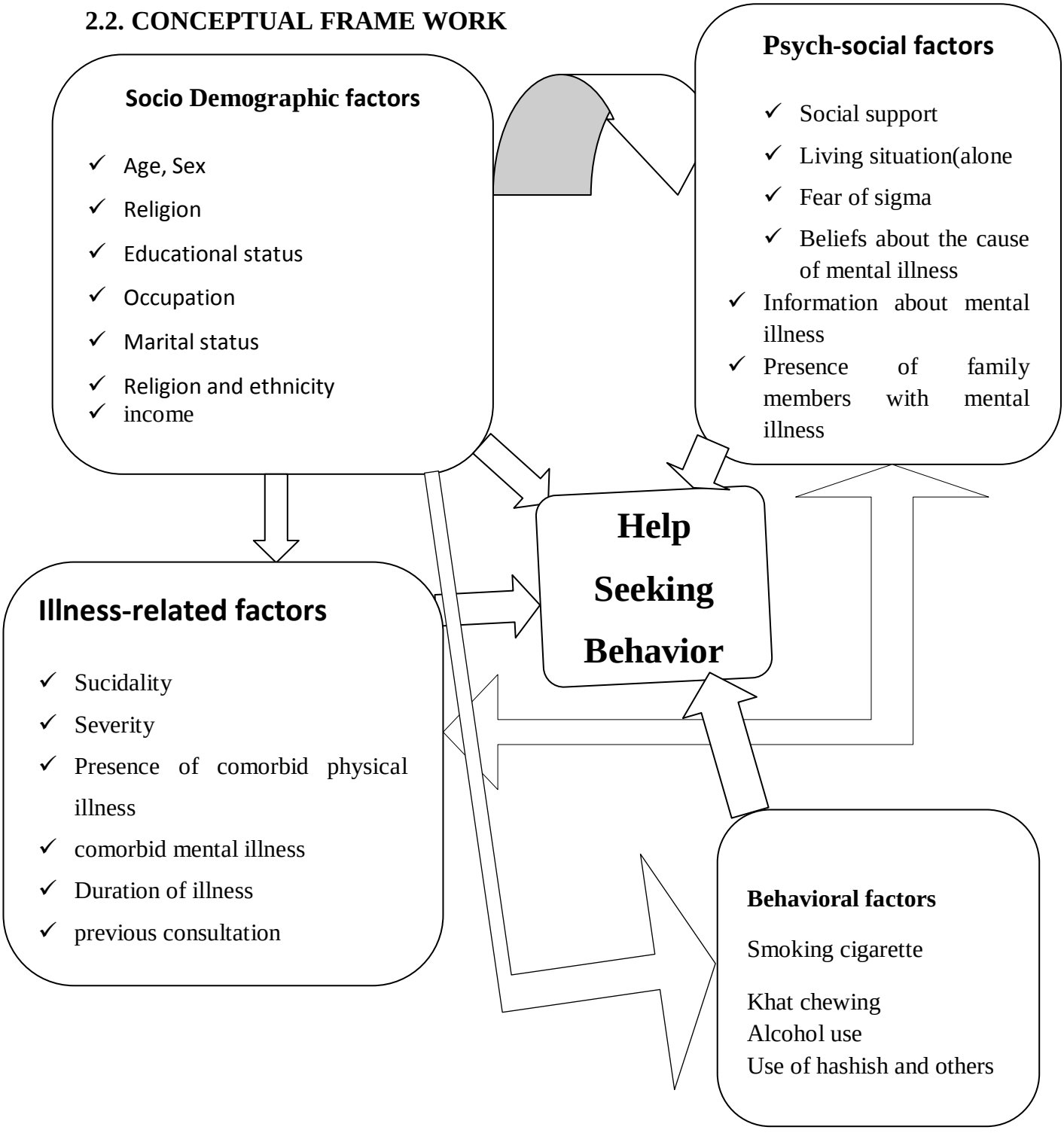

Figure 1: showing the relation between independent variables with the dependent variable and with each other

3. **SIGNIFICANCE OF THE STUDY**

Absence or delay seeking treatment for depression is important thing that ought to improved because it costs a significant consequences like it lead poor prognosis of cardiac illness, risk development of cardiac diseases, worsen depression symptoms with the extent of killing one self and also it become chronic that oblige the patient have poor quality of life, social function and occupational productivity.

to the best knowledge of the invistigator there are only two published studies on help seeking pattern of patients with mental disorder in Ethiopia,Adddis Abea. Though, both of the studies focus on delay and pathways to care among psychiatric attendees rather than chronic medical patients that have increased risk of developing depression. These are groups of people come for medical treatment but have no chance to psychiatric evaluation. Above on this in Ethiopia, perhaps sub-Sahara; there is no research done on treatment seeking for depression among depressed cardiac patients, even though thus two diseases has bidirectional effect on each other.

Understanding of the way cardiac patients seek care for depression disorder is essential for better understanding potential barriers that hinder early treatment seeking and thus improve access to psychiatric service that require by the cardiac patient.

whereas it will be the first research done on cardiac patients with depression concerning seeking treatment for their depression in Ethiopia, perhaps sub-Sahara; the finding of this study can serve as a baseline to provide government bodies, non-governmental organizations, policy makers and health planners with relevant information for future planning and interventions of appropriate strategies to prevent the consequences of untreated depression on cardiac patients.

4. **OBJECTIVE**

4.1. General objective

To assess the prevalence of help-seeking behaviors, and associated factors with seeking help for depressive disorders among cardiovascular disease patients in JUTH 2014

4.2. Specific objectives

1. To determine the frequency of help seeking behavior for depressive disorders among cardiovascular patients in JUTH, 2014.
2. To identify the factors associated with seeking any form of help for depression among cardiovascular disease patients in JUTH, 2014.

5. METHODS AND MATERIALS

5.1 Study area and period

This study was conducted in Jimma University Teaching Hospital is located 352 km south west of the capital city from Ethiopia, Addis Ababa, at Jimma town with an area of 167 hectares. Jimma has a latitude and longitude of 7°40'N 36°50'E and altitudinal 1716 meters above sea level. Jimma University Tertiary Teaching Hospital is one of the oldest public hospitals in the country. It was established 1937 during Italian occupation to give service for their soldiers. It has been running as public health care institution under Ministry of Health by different names at different time. Initially it was called "Ras Desta Damtew Hospital", after one of the reknowned patriot during resistance against Italian Occupation. Currently, named as "Jimma University Tertiary Teaching hospital" after the transferring of its management from Oromia regional health bureau to Jimma University under federal ministry of education It provides services for approximately 9,000 inpatient and 80,000 outpatient attendances a year coming to the hospital from the catchment population of about 15 million people (45).

Cardiac Clinic is one of the follow-up clinics giving service for patient with chronic CVDs among others clinics that give service for patients with other chronic NCDs. It provides an outpatient and inpatient services and is staffed with one Internist, one BSc nurse 8 diploma nurses who are trained in specific chronic disease patient follow-up. It also has residents and medical interns that rotate in scheduled manner. This clinic gives service for a total of 1939 adult cardiac patient for follow up their cardiac status and to take medication. Patients are appointed every two weeks to three months depending on patients' condition and the distance of thier residence from JUSH. Data were collected from adult people from October to December 2014.

5.2. Study design

A cross-sectional, University Teaching Hospital-based study design was used.

5.3. Source and study population

5.3.1. Source of Population

All adult patients with cardiovascular disease who were on follow up at JUTH during study period 2014.

5.3.2 Study population

Patients who had cardiovascular diseases age18 years and above who came for follow-up at Jimma University Teaching Hospital cardiac clinic during the study period, October to December 2014, were considered as study population.

5.4. Inclusion and exclusion criteria

5.4.1. Inclusion criteria

Age 18 years or older

Cardiovascular patients who were registered at the cardiac follow up clinic of JUTH.

5.4.2 Exclusion criteria

Patients with severe mental illness, except depression but patients with psychomotor retardation/catatonic features were excluded from the study; that had difficulties to participate in the study

New patients

Patients who were acutely ill and too weak to participate in the study

Patients with difficulty of hearing problem

5.5. Sample size assumptions and sampling procedure

5.5.1 Sample size assumptions

The sample size was determined by assuming help seeking rate 50%, giving any particular out come to be with 5% margin of error and 95% confidence level. Based on this assumption, the actual sample size for the study was computed using one-sample population proportion formula as indicated below.

$$n= (z\alpha/2)^2 P\times (1-p) /d^2$$

Where:

n = Sample size

z = standerd normal variable at 95% confedence level (95%)

α/2= confidence level

P= expected prevalence of estimated help seeking behavior in the study populations = 0.5

d= margin of error=0.05 (5%)

Therefore the value of n is calculate as follow

$$n= \frac{(1.96)^2 x 0.5 (1-0.5)}{(0.05)^2} = 384.16 \text{ (approximately = 384)}$$

Since the total population was less than ten thousands it is necessary to use correction formula to get the desired sample size

nf = n/ (1+n/N)

= 384/ (1+384/1939(total adult cardiovascular patient getting services at this time))

≈ 321 and adding 10% non-resonance rate

Total = **353**

A total of one month was required to obtain data from the specified sample size. All attendee during data collection and full fill the inclusion criteria will be asked to be involved in the study.

5.5.2 Sampling procedure

All eligible adult attendees of the cardiac clinic at JUTH during the study period were consecutively invited to participate in the study. And those who PHQ -9 score 5 or greater were interviewed for help sought for depression using standardized (actual help seeking AHQ) questionnaires.

5.6. Variables

5.6.1. Dependent variables

Help seeking behavior

5.6. 2. Independent variable

Demographic characteristics

Age
Sex, religion, Ethnicity

Educational status, occupation, residency, marital status

Psycho-social related factors

Information about mental illness
Beliefs about the cause of mental illness
Social support
Income
Khat use
Alcohol use
Cigrate smoking
Using hashish and other substance

Illness-related factors

Previous consultation
Presence of family members with mental illness
Severity of depression
Co morbid physical illness other than heart disease (cardiac illness)
Co morbid Mental illness

5.7. Data collection procedures and instruments

A structured interviewer administer questionnaire was used, which has five different sub-sections: a socio-demographic questionnaire, questionnaire to assess illness-related factors, questionnaire to assess Social and behavioral factors, questionnaire to assess depression and questionnaire to assess help seeking behavior. Depression was measured using Patient Health Questionnaire nine (PHQ-9) which is a validated instrument in Addis Ababa, Ethiopia. Based on the research that shows the PHQ-9 items showed good internal (Cronbach's alpha=0.81) and test re-test reliability (interclass correlation coefficient=0.92). It reported a PHQ-9 threshold score of 10 offered optimal discriminatory power with respect to diagnosis of major depressive disorder via the clinical interview (sensitivity=86% and specificity=67%) (46). For help seeking behavior, we used the Actual Help Seeking Questionnaire designed and used for the assessment of recent help seeking of patients with CVD for emotional problems for the last two weeks just prior to the date of being interviewed (47). The questionnaires were prepared in English, translated into the official language (Amharic) and local language (fan Oromo), and back translated to English, so as to

ensure its consistency. The data collection methods, tools and how to handle ethical issues was discussed with the data collectors and supervisor based on questionnaires. Pre-test was conducted on 5% of the sample size before the main study was done to identify impending problems in the proposed study such as data collection tools and to check the performance of the data collectors. Data collected in the pre-test was not included in the analysis as part of the main study. Amharic and Oromifa version of questionnaire were used for data collection. Data were collected by six trained BSc nurse. Each subject was interviewed separately and had chance to ask question if there is an ambiguity.

5.8. Data collectors' selection and training

Data were collected by six BSc nurses. Supervision was made by one Masters in Public Health and principal investigator. Data collectors and supervisor were trained for one day by the principal investigator on the study instrument, consent form, how to maintain confidentiality and data collection procedure based on AHSQ.

5.9. Data quality management

One day training of data collectors was given on how to collect data. Regular supervision by the supervisor and the principal investigator was made to ensure that all necessary data were properly collected. Each day during data collection, filled questioners were cheeked for completeness and consistency. Questionnaire which was not completely filled it will be discarded. The collected data were edited and processed timely and enter from a paper on to computer using statistical package for social science (SPSS 21).

5.10. Data processing and analysis

After data collection was finished; the necessary information was obtained, data were checked for completeness and a particular questionnaire with incomplete data was ckecked. Data were edited, coded and entered in to computer, cleaned and analyzed by SPSS version 21 for windows. Bivariate analysis was employed to find the variable that had dependent association with help seeking behavior. Lastly variables which had dependent predictor to help seeking behavior were entered in to logistic regression in order to control confounders. Multiple logistic regressions were used to identify the independent predictors of help seeking behavior. This was done by entering each independent variable separately into binary logistic regression.

Then, variables had p-value of less than 0.25 on binary logistic regression were entered into multivariable logistic logistic regression. Then, variables which showed statistical significant association with p-value less than 0.05 on final model were considered as predictors of help seeking behaviors.

5.11 Operational definitions of concepts

Depression: is characterized by low mood most of the day, nearly every day, as indicated by either subjective report (e.g., feels sad or empty) or observation made by others e.g. appears tearful), feelings of hopelessness and worthlessness, changes in sleep patterns or appetite, loss of motivation, loss of pleasure in pleasant activities, which lasts for more than two weeks.

Patient health questionnaire -nine: this instrument has nine items and each nine item has four grading 0= not atall, 1=several days, 2= more than half days and 3= nearly every day. Each item scored is sum up give the severity of depression: a score of 1-4 indicates no/minimal depression, 5-9 indicates mild depression, 10-14 indicates moderate depression, 15-19 indicates moderately severe depression, and 20-27 indicates severe depression.

Depressed cardiovascular patients: According to the PHQ-9, in this study patient who scores PHQ-9 five or greater than five was leveled as case of depression.

Cardiovascular disease: Syndrome caused by cardiac or non cardiac factors (heart disease resulted from diabetes mellitus, hypertension, thyrotoxocosis, rheumatic fever...).

Help seeking: is a term that is generally used to refer to any actions aimed at problem-solving, through requesting advice and/or material and emotional assistance from one of the formal or Informal help sources listed on the AHSQ. According to this study -

Help seeking from Informal help source: - is seeking help from informal sources like intimate partner, friend, other relative/family members, minister or religious leader, traditional healers, or other help sources like praying, reading books, watching TV.

Help seeking from formal help source: - is from professional sources of help; that is, professionals who have a recognized role and appropriate training in providing help and advice, such as mental health professionals, teachers and other health professionals.

Social support: for this study social support is measured using Oslo 3-items social support scale. Score as follows:

- ✓ A score of 3-8 is **poor support**.
- ✓ 9-11 is **moderate support** and
- ✓ 12-14 is **strong support [48]**.

Living with family members: refers to living circumstances of respondent that live with his/her children/spouse/parents.

Suicidal ideation: The personal report of having thought of harming/ ending once life without specific plan.

Life time substance use: - use of any psychoactive substance in the past, even once.

Current substance use:- use of psychoactive substance one or more days in the preceding three months of the survey .

Functionality: is the subjective reporting of the respondant how their problem (depression) affect to do their work and/take care of things at home. It is rated as follows by patients; not difficult at all, somewhat difficult, very difficult and extremely difficult.

5.12 Ethical consideration

And the study was conducted after ethical clearance was obtained from the ethical review board of College of Public Health and Medical Sciences, Jimma University. Official letter was written to the medical director of Jimma university teaching hospital. Ethical issues were fulfilled include: consent of participants to be included in the study, the right to and get interventions, and patient data confidentiality. There for; Oral consent obtained forms the patients who cannot read and write or for some other reasons and written consent that could write was obtained before the actual interview was started.

5.13 Dissemination plan

The finding of this study will be submitted to Jimma University of psychiatric department, college of Public Health and Medical Sciences and JUTH. As well findings of the study will be communicated to the JUTH community on presentation and also it will be submitted to other relevant stake holders through report and presentation. In addition publication in scientific journals will be considered in advance

6 RESULT

6.1. SOCIO-DEMOGRAPHIC RISK FACTOR

From the total of 353 cardiovascular patients in the sample 339 of them completed the questionnaire a response rate of 96%.This is due to the fact that secondary data were not filled because of loss of patients' card, data collection was conducted once a week even half a day, interruption of interview that patient called to examination room; we tried to continue the interview after the examination but patients were hurry to go home. Among the 339 respondents 53.1% (n=180) were females making female to male ratio of 1.13:1. The mean age of the study participants was 50.1 (SD ± 17.11; median 51.22) year. The maximum age of the studied sample was 90 year and a minimum was 18 year. Among the respondents, Oromo ethnic group constituted 77.3 % (n=262). Majority of the study population were married (76.4%). In terms of residence, rural study participants surrounding Jimma Town constituted the majiority (64.0%). Among major religions, the followers of Islam constituted a great majority (75.2%). Forty-four percent of the study population worship at least once per week in their respective places of worship. Where as, those attending their worship places on daily basis were 35.1%. With regards to occupation, out of the study population more than half of them were farmers (50.7%). The median annual income of the participants, as reported by them, was 3,000.00 (mean, 7,862.94) Ethiopian Birr (ETB). According quartile income classification, most of the respondents (28.0%; n= 95) earn annual income of greater than 10,000 E Birr. Twenty-five point one percent (n=85) earn annual income of 3,000-9,999 Birr, followed by less than 900 Birr (24.8% n=84). The rest 22.2% (n=75) earn 900- 2,999 Birr (Table 1).

Table 1**:** Socio-demographic characteristics of the study participants and association with seeking any form of help, Jimma University Teaching hospital, Ethiopia December 2014

Factors		**Frequency**	
		Number(n=339)	**Percent**
Sex	Male	159	46.9
	Female	180	53.1
Age of the respondent	18-27	45	13.3
	28-37	48	14.2
	38-47	55	16.2
	48-57	55	16.2
	58-67	81	23.9
	>=68	55	16.2
Occupation	Farmer	172	50.7
	Unemployed	67	19.8
	Housewife	29	8.6
	Merchant	23	6.8
	Employed	18	5.3
	Daily laborer	8	2.4
	Retired	13	3.8
	Others*	9	2.7
Income of the respondent (Birr)	<900	84	24.8
	900-2999	75	22.1
	3000-9,999	85	25.1
	≥10,000	95	28.0
Marital status	Married	259	76.4
	Others**	80	23.6
Ethnicity	Oromo	262	77.3
	Amhara	37	10.9
	Yem	16	4.7
	Gurage	8	2.4
	Others***	16	4.8
Religion	Muslim	255	75.2
	Orthodox	71	20.9
	Protestant	13	3.8
Attending place of worship	Daily	119	35.1
	2-3 times per week	45	13.3
	Once per week	150	44.2
	Less than a week	25	7.3
Educational level	Illiterate	180	53.1
	Able to read and write only	68	20.1
	Formal education	91	26.8

NB. Others*= student, house servants others** = single, divorced separated others*** = Tigra, Dawero, Welayeta and Kefa

6.2. Illness related characteristic of cardiovascular patient outpatient cardiac clinic

Concerning the illness related characteristic of the study population, out of the total of 339 CVD patients, 7.1% (n=24) reported past history of thought of hurting themselves and also 12.1% (n= 41) of participants reported having current thinking of hurting themselves within the study period. When we see the comorbid illness, nearly half of patients reported one or more independent comorbid medical health problem in addition to CVD. Out of depressive CVD patient who had previous consultation for their depression was 15.4% (n=30) sought help for their depression. Regarding the diagnosis; majority of them (34.8%) had hypertensive related heart disease. Followed by 28.0% (n=95) had ischemic heart disease, myocardial infarction, and Acute coronary syndrome. With regard to duration of CVD of the respondents; around 26 % of participants had one to three years (Table 2).

Table 2: Illness related characteristic of cardiovascular patients in outpatient cardiac clinic JUTH south west Ethiopia, December 2014

Factors		**Frequency (n=33 9)**	
History of suicidal thought	Yes	24	7.1
	No	315	92.9
Suicidal ideation	Yes	41	12.1
	No	298	87.9
Comorbidity other than heart disease	Yes	168	49.6
	No	174	50.4
Diagnosis	HHD	118	34.8
	IHD*	95	28.0
	Cardiomyopathy	48	14.2
	VHD/RF	34	10.0
	DHD	29	8.6
	corpumonary	10	2.9
	Others**	5	1.5
Duration of CVD disease	< one year	82	24.2
	1-3 years	90	26.5
	4-5 years	70	20.6
	6-7 years	44	13.0
	≥ 7 years	53	15.6

NB: HHD – Hypertensive related heart disease, VHD- vulvular heart diseases, and RF- heart disease due to rheumatic fever and DHD- diabetic related heart disease

* Ischemic heart disease (IHD), acute coronary syndrome, myocardial infarction and angina

Others**- arrhythmia and thyrotoxocosis

Regarding severity of depression; according to PHQ-9 42.5% (n=144) had no depression; 30.7% (n=104) had mild depression (PHQ-9 5-9) while 20.0 %(n=68) of them moderate depression (PHQ-9 10-14). Participants with severe depression were 6.8% (n=23) severe depression (moderately sever with PHQ-9 15-19 or severe depression with (PHQ-9 20-27) (Figure 2).

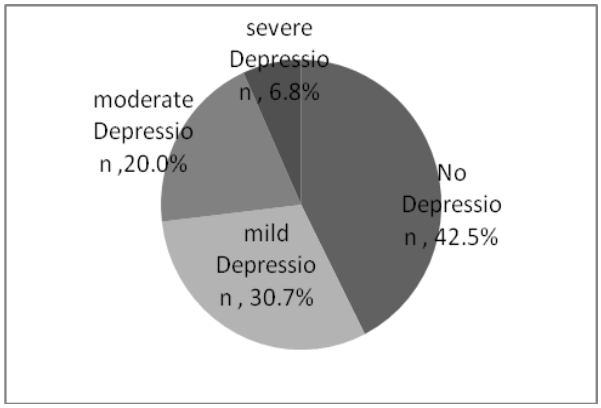

Figure 2**:** Severity of depression of CVD patients' cardiac clinic JUTH southwest Ethiopia December 2014

Based on the patients' report on functionality, 37.4 %(n=73) where somewhat impaired whereas 22.6 %(n=44) were severely impaired and 5.6 %(n=11) reported extreme impairment to accomplish their day to day activities because of the depressive symptoms for the last two weeks prior to data collection period. Even if patients had sign and symptom of depression, 34.4% (n=67) reported their functionality was intact (normal). (Figure 5)

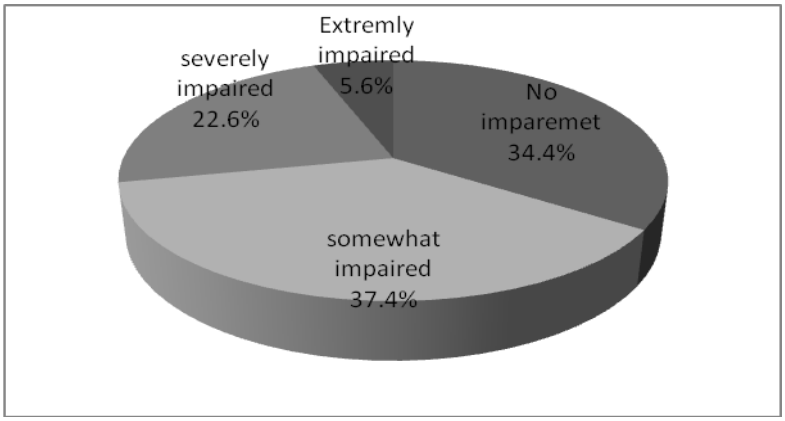

Figure 3**:** Functionality of CVD patients with depression in cardiac clinic JUTH, December 2014

6.3. Psycho-social and behavioral factors

Among the total sample of cardiovascular patients who were interviewed during data collection, 132 participants reported poor social support (38.9%), 38.3% moderate support and the rest (22.2%) strong social support. Regarding the living condition, majority of them were live with their family. Concerning information about mental illness, 63.7% (n=216) had heard about mental illness. Neighbors were the primary sources of information about mental illness accounting for 42.6 %(n= 92). Mass media was the second source of information about mental illness for this study population (42.1%). Of the study participants, 19.2% reported family history of mental illness. More than half of the sample CVD patients were aware of the availability of psychiatric service in this hospital. From the total of 339 respondents 44.4% (n=152) CVD patients believed life stressors alone as a cause for mental illness; and followed by 31.9% (n=108) who stated mental illness may be caused from more than one of the mentioned reasons. Regarding the use of psychoactive substance, majority of the respondents claimed to have never used any. Among sample population, 91.2% (n=309) have never smoked cigarettes, as well as never drunk alcohol (n=308; 90.9.) and chewed khat (n=250; 73.7%). When we see the pattern of life time and current cannabis use was 1.8% (n= 6) and 1.2 %(n=4), respectively. From 195 respondents who were depressive cases only 11 %(n=22) reported that theydid not seek help for their problem because of fear of rejection/isolation from society (Table 3).

Table 3: Psycho-social and behavioral factors of cardiovascular patient outpatient cardiac clinic JUTH, southwest Ethiopia, December 2014

Factors		Frequency (n=339)	percent
Living condition	With family	304	**89.7**
	Live alone	24	**7.1**
	Other*	11	3.3
Social Support	Poor	132	38.9
	Moderate	130	38.3
	Good	77	22.7
Information about MI	Yes	216	63.7
	No	123	36.3
MI information Source	neighborhood	92	42.6
	From religious leaders	33	15.3
	From mass media	91	42.1
Presence of other mental illness in the family	Yes	65	19.2
	No	274	80.8
Awareness of MH service availability Hospital	Yes	204	60.2
	No	135	39.8
Cause of MI	Evil or bad sprit	37	10.90%
	Stress life events	152	44.80%
	Genetic predisposition	42	10.90%
	More than one of the above	108	31.90%
Fear stigma from the public	Yes	22	11.3
	No	173	88.7
Life time Cigrate use	Yes	30	8.8
	No	309	91.2
Current Cigrate use	No	325	95.9
	Yes	14	4.1
Life time Alcohol use	Yes	41	12.1
	No	298	87.9
Current Alcohol use	No	320	94.4
	Yes	19	5.6

N.B: Other* - live with relative, homeless or living in employers'home

6.4. PREVALENCE OF HELP SEEKING BEHAVIOR FOR DEPRESSION AMONG CARDIOVASCULAR PATIENTS

6.4.1. **Help seeking behavior associated with socio-demographic factors**

Using Actual Help Seeking Behavior Questionnaire (AHSQ), 33.3 % 95%CI (26.69, 39.91) (n=65) of depressed cardiovascular sought help for their depression in the last two weeks. But majority of respondents did not seek help from any form of help source (66.7%). Significant portion of females did not seek help for their depression (77.7%; n=78). Nearly half of the participants with age group 58-67 sought help. Out of respondents with depression who were in the age group greater than or equal to 68, 40.0 %(n=14) of them sought help for depression from any form of help sources. Majority of single, divorced and windowed patients never sought help (75%, n=37). With regards to religious practice among CVD patients with depression, 72.3% (n=60) who attended worship places once per week never sought help. But out of study population with depression who attended his/her respective place of worship, 46.7 %(n=7) sought help for their depression two weeks prior of the study period.

Those who were able to read and write 76.1% (n=35) as well as 72.5% (n=37) of the illiterates never sought help. Out of CVD patient with depression who had annual income less than 900.00 Ethiopian Birr, 67.2 %(n= 72) did not sought help for their depression. Finally, from demographic part, residence is the factor that have implication on help sought among depressive CVD patients; so 67.7 % (n=84) patient who live from rural part of Jimma Town never sought (Table 4).

Table 4: Distribution of socio-demographic factors of actual help seeking behavior for depression by socio-demographic characteristics, Jimma University, Ethiopia, November, 2014

Factors		Help seeking		COR(95%CI)	P-value
		Yes	No		
Sex	Male	42(44.7%)	52(55.3%)	2.74(1.47-5.08)	**0.001**
	Female	23(22.8%)	78(77.2%)	Ref	
Age of respondent	18-27	5(20.8%)	19(79.2%)	0.32(0.1-0.99)	0.49
	28-37	7(20.6%)	27(79.4%)	0.31(0.11-0.86)	0.025
	38-47	10(40.0%)	15(60.0%)	0.8(0.0.29-2.16)	0.66
	48-57	9(27.3%)	24(72.2%)	0.45(0.17-1.18)	**0.1**
	58-67	20(45.5%)	24(54.5%)	Ref	
	>=68	14(40.0%)	21(60.0%)	0.8(0.32-1.96)	0.63
Marital status	Married	53(36.3%)	93(63.7%)	Ref	
	Others *	12(24.5%)	37(75.5%)	0.57(0.27-1.18)	**0.13**
Ethnicity	Oromo	53(34.6%)	100(65.4%)	Ref	
	Amhara	5(26.3%)	14(73.7%)	0.67(0.23-1.97)	0.47
	Others **	7(30.4%)	16(69.6%)	0.82(0.32-2.13)	0.69
Religion	Muslim	53(34.6%)	100(65.4%)	Ref	
	Christian	12(28.6%)	30(71.4%)	0.75(0.36-1.59)	0.46
Attending place of worship	Daily	24(33.8%)	47(66.2%)	1.33(0.67-2.65)	0.41
	2-3 times per week	11(42.3%)	15(57.7%)	1.91(0.77-4.77)	**0.16**
	Once per week	23(27.7%)	60(72.3%)	Ref	
	Less than per week	7(46.7%)	8(53.3%)	2.28(0.74-7.01)	**0.15**
Educational level	Illiterate	35(32.7%)	72(67.3%)	1.55(0.70-3.40)	**0.27**
	Able to read & write only	11(23.9%)	35(76.1%)	**Ref**	
	Formal education	19(45.2%)	23(54.8%)	2.63(1.10-6.53)	**0.037**
Annual Income of respondent (Birr)	Less than 900	14(27.5%)	37(72.5%)	**Ref**	
	900-2,999	12(27.9%)	31(72.1%)	1.02(0.413-2.53)	0.96
	3,000-9,999	16(32.0%)	34(68.0%)	1.24(0.53-2.93)	0.61
	≥ 10,000	23(45.1%)	28(54.9%)	2.17(0.95-4.96)	**0.06**
Occupation	Unemployed	10(18.2%)	45(81.8%)	Ref	
	Employed	7(38.9%)	11(61.1%)	2.86(0.89-9.22)	**0.07**
	Farmer	41(42.7%)	55(57.3%)	3.35(1.51-7.43)	**0.003**
	Others***	7(26.9%)	19(73.1%)	1.66(0.55-5.00)	0.37
Residence	Rural	40(32.2%	84(67.7%)	Ref	
	Urban	25(35.2%)	46(64.8%)	1.14(0.62-2.11)	0.67

NB.***=** single, windowed/ divorced

****=** Yem, Tigra, Dawero, Gurage, welayeta and/ kefa

*****=** In occupation who are house wife, student and retire

6.4.2. **Help sought for depression associated with illness-related, psycho-social and behavioral factors**

1. Illness related factors

Regarding illness related characteristics of respondents with depressive cases; who sought help for their depression the following results were found. Among study population who had suicidal thought only 51.4% (n=19) them had visited one or more help sources. Regarding severity of depression among cardiovascular patients, only 27.9% (n=29) of mild depression sought help from any source. Out of CVD patients with depression who reported having of extremely functional impairment, 54.5% (n=6) sought help for their depression. Out of those who had previous consultation for their depression nearly two third of them currently also sought help (Table 5).

Table 5: Distribution of help seeking behavior for depressive disorders in related to illness related factors of CVD patients JUTH, Jimma South west Ethiopia, 2014

Factors		Help seeking		COR(95%CI)	p-value
		Yes	No		
History of suicidal attempt	Yes	8(42.1%)	11(57.9%)	**Ref**	
	No	57(32.4%)	119(67.6%)	0.66(0.25-1.73)	0.34
Suicidal ideation	Yes	19(51.4%)	18(48.6%)	2.57(1.24-5.33)	
	No	46(29.1%)	112(70.9%)	**Ref**	**0.01**
Co morbidity medical illness other than heart disease	Yes	31(31.9%)	66(68.1%)	**Ref**	
	No	34(34.7%)	64(65.3%)	1.13(0.62-2.05)	0.68
Duration of CVD illness	< 1 year	12(27.9%)	31(72.1%)	0.57(0.24-1.35)	**0.20**
	1-3 years	21(40.4%)	31(59.4%)	**Ref**	
	3-5 years	16(39.0%)	25(61.0%)	0.94(0.41-2.18)	0.89
	5-7 years	9(32.1%)	19(67.9%)	0.47(0.26-1.84)	0.47
	>7 years	7(22.6%)	24(77.4%)	0.43(0.16-1.18)	**0.10**
Severity of depression	Mild	29(27.9%)	75(72.1%)	**Ref**	
	Moderate	25(36.8%)	43(63.2%)	1.50(0.78-2.89)	**0.22**
	Sever	11(47.8%)	12(52.2%)	0.06(2.37-0.94)	**0.06**
Functionality impairment	No difficulty	18(25.0%)	54(75.0%)	**Ref**	
	Somewhat difficult	20(29.0%)	49(71.0%)	1.22(0.58-2.58)	0.6
	Very difficult	21(48.8%)	22(51.2%)	2.86(1.28-6.38)	**0.01**
	Extremely difficult	6(54.5%)	5(45.5%)	3.6(0.98- 13.22)	**0.05**
Previous consultation	Yes	30(66.7%)	15(33.3%)	Ref	
	No	35(23.3%)	115(76.7%)	0.15(0.07-0.32)	**0.001**

2. Psycho-social and behavioral factors

When we see the psycho-social and behavioral characteristics of depressive CVD patients associated with help sought for their depression the following results were found. Concerning

living condition, out of depressive cardiovascular patients who live with his family 58.5% (n=114) did not sought help for their depression. Regarding social support, those participants with depression who have strong social support nearly half (46.8%, n=22) of them sought help for their depression. While those one with poor social support only 26.1% sought help for their depression. Out of respondents with depression who had no information about mental illness 74.7 %(n= 59) never sought help for their depression. Out of participants with depression who had presence of mental ill patients in the family members 65.1% sought help. Among depressed cardiovascular patients who believe cause of mental illness was from genetic predisposition only 25.0%, 35.0% evil or bad sprit, 37.0% more than one of the mentioned causes ware sought help their depression (Table 6).

Table 6: Distribution of help seeking behavior for depression disorders in related to behavioral and psycho-social factors of CVD patients JUTH, Jimma December 2014

Factors	**Help seeking**	**COR(95%CI**	**p-**

		Yes	No	)	value
Living condition	With family	60(34.5%)	114(65.5%)	**Ref**	
	Others*	5(23.8%)	16(76.2%)	1.68(0.59-4.80)	0.33
Social support	Poor	23(26.4%)	64(73.6%)	2.45(1.16-5.16)	0.019
	Moderate	20(32.8%)	41(67.2%)	1.80(0.82-3.95)	0.14
	Strong	22(46.8%)	25(53.2%)	**Ref**	
Information mental illness	Yes	45(38.8%)	71(61.2%)	**Ref**	
	No	20(25.3%)	59(74.7%)	1.87(1.02-3.51)	0.051
Source of information about mental illness	Neighborhood	22(38.6%)	35(61.4%)	0.88(0.32-1.97)	0.75
	Religious leader	7(41.2%)	10(58.8%)	0.79(0.25-2.47)	0.68
	Mass media	16(35.6%)	29(64.4)	**Ref**	
	I did not hear information	20(26.3%)	56(73.7%)	1.54(0.69-3.42)	0.28
Presence of mental illness in the family	Yes	28(65.1%)	15(34.9%)	**Ref**	
	No	37(24.3%)	115(75.7%)	5.8(2.8-12.02)	0.001
Availability of MI service in this hospital	Yes	43(39.4%)	66(60.6%)	**Ref**	
	No	22(25.6%)	64(74.4%)	2.0(1.02-3.52)	0.04
Believe of respondent about Case of MI	Bad/evil sprit	6(35.3%)	11(64.7%)	1.10(0.36-3.32)	0.87
	Stress	27(31.4%)	59(68.8%)	1.31(0.68-2.52)	0.42
	Genetic predisposition	5(25.0%)	15(75.0%)	1.80(0.58-5.51)	0.3
	More than one of the above	27(37.5%)	45(62.5%)	**Ref**	
Life time cigrat use	Yes	10(47.6%)	11(52.4%)	0.58(0.20-1.27)	0.15
	No	55(31.6%)	119(68.4%)	Ref	
Current cigrate use	No	60(32.8%)	124(67.2)	Ref	
	Yes	5(41.7%)	6(58.3%)	0.58(0.17-1.98)	0.38
Life time alcohol use	Yes	9(47.4%)	10(52.6%)	0.52(0.20-2.34)	0.48
	No	56(31.8%)	120(66.7%)	Ref	
Current alcohol use	No	60(32.8%)	123(67.2%)	Ref	
	Yes	5(41.7%)	7(58.3%)	0.68(0.21-2.24)	0.53
Life time khat use	Yes	24(43.6%)	31(56.4%)	0.54(0.21-1.02)	0.05
	No	41(29.3%)	99(70.7%)	Ref	
Current khat use	No	60(33.1%)	121(66.9%)	Ref	
	Yes	5(35.7%)	9(64.3%)	0.89(0.29-2.78)	0.85

NB. Others* -living alone, live with relative and homeless

6.3. Pattern of help seeking of depressed cardiovascular patients

Among depressed cardiovascular patients, only 33.3 %(n=65) had sought help for their depression, the rest which account 66.7 %(n=130) did not sought help for their depression within two weeks before the day the data collection started. Among help source visited by patients; the most frequently visited help was informal help source (88.6%; n=156). In contrast to

this, only 11.4% (n= 20) had sought help from formal source of help for their depression. Out of informal help source that mostly visited were traditional healer (27.3%), followed by husband/wife/intimate partner and minister/religious leader each account 17.0% (Table7).

Table 7: Help Sources with depressed cardiovascular patients actually seek help on the past 2 week for their depression, Jimma University, Ethiopia, December 2014

Help source		**Frequency**	**%**
Informal help source	Traditional healer	47	27.3%
	Relatives	25	14.2%
	Husband/wife/intimate partner	30	17.0%
	Minister/religious leader	30	17.0%
	Neighbor	13	7.4%
	Parent	10	5.7%
	Total	156	88.6%
Formal help source	Mental health professional	3	1.8%
	Doctor/GP or other health professional	17	9.6%
	Total	20	11.4%

NB. The total number of help sought greater than sample of patients (65) who had sought help for their depression because of multiple responses given by the participants.

We also assess previous history of help seeking behavior; 23.1% of depressed CVD patient had sought help for their depression, and of thus 84.5% had sought help from informal help sources for their depression. When we see how frequently help source was visited, nearly greater than half (53.3%) of respondent had fewer contact. Out of depressive cases that had previous history of help sought; significant portion (75.0%) of them reported that help sought was helpful.

Table 8: Past history of seeking help among depressed of cardiovascular patient, Jimma university teaching hospital Jimma Ethiopia December 2014

Factors		*Frequency N (%)*
Previous history of seek help	*Yes*	*45 (23.1%)*
	No	*150(76.9%)*
Types of help source visited by depressed CVD patient	*Informal*	*27(84.5%)*
	Formal	*7(15.5%)*
Frequency of visited the help source by CVD patient	*Few*	*24(53.3%)*
	many	*21(46.7%)*
Helpfulness of source visited	*Helpful*	*34(75.6%)*
	Not helpful	*11(24.4%)*

NB. Few –the participant visited the help source less than or equal to 9 times.

Many-the study population visited greater than 9 times.

6.4. ASSOCIATED FACTORS WITH SEEKING ANY FORM OF HELP

I. **Factors that associated with help seeking behavior for depression in first model analysis among depressive case of cardiovascular patient JUTH.**

Out of different groups of variables marital status (p=0.13), frequency of attending place of worship who attended 2-3 times per week and less than a week p=0.16 and 0.15, respectively, annual income of the respondent that had greater than 10,000.00 Birr associated with help sought with p= 0.06, 0.08 and 0.18 respectively. Mild depression with p=0.06, history of life time chat use p=0.05, information about mental illness (p=0.05), duration of CVD illness which had less than one year and > 7 years with p= 0.2 and 0.1, respectively, history of life time alcohol use p= 0.17, history of life time cigrate use p= 0.15 were associated with help seeking behavior of CVD patients for their depression (p<0.25).

Other variables such as male (p=0.001), age from 28-37(p=0.025, able to read and write (p=0.037), unemployed(p= 0.003), poor social support(p= 0.019), presence of mental illness in the family(p=0.001), awareness of availability of psychiatric service in JUTH (p=0.04), current suicidal thought(p=0.01), very difficulty about burden of depression that affect his life(p=0.01),

and previous consultation(p= 0.001) were associated with help sought in binary logistic regression analysis at p-value < 0.05 (Table 4, 5 and 6).

II. Factors that associated with help seeking behavior for depression in final model

The final model was made using backward LR stepwise logistic regression method. The Hosmer and Lemeshow statistic has chi-square value of 7.814 and a significance of 0.452 which means that Hosmer and Lemeshow test is not statistically significant and therefore the model is quite a good fit. Because p-value exceeds level of significance (α=0.05), that shows, there is no significant difference between the observed and predicted model values. The model used to compute the predictors of the independent variable fits the data well.

In order to control for confounding variables and to identify the associated variables with help sought for depression in the final model we used a logistic regression analysis. Those variables that associated with help seeking behavior with p-value <0.25 in binary analysis, entered into final model. P-value < 0.05 in multiple logistic regression considered as significantly associated with help seeking behavior for depression.

In chi-sequare test sex is associated with help seeking behavior for depression with male participants with depression 2.74 increased odds to seek help for their depression than female participants, COR = 2.74, 95%CI (1.47- 5.o8); p= 0.001. But it becomes no more significant in final model while holding other confounders AOR 1.46(0.39-5.40).

From socio-demographic factors that have independent significant association with help sought for depression of study participants were occupation and educational status of respondent. Those with patients with farmer in occupation 4.24 increased odds of seeking help than those who were unemployed in occupation AOR 4.24(1.3, 13.78; p = 0.007). In the same way, those respondents with educational status who had some formal education 7.59 times greater odds of to seek help for their depression than who able to read and write only, AOR 7.59(2.13-27.11); p=0.002).

The other variable which had independent significant association with help sought for depression was family history of mental illness. Patients who had family history of mental illness 7.33 increased odds of seeking help for their depression than study participants who had no family history of mental illness, AOR 7.33(2.72-19.78; p<0.001). Next variable that has independent association with dependent variable was awareness about availability of psychiatric service in

this hospital. Depressive cardiovascular patients who had aware of the availability of psychiatric service in this hospital 3.54 greater odds of seeking help for their depression than those had no awareness to service given in this hospital, AOR 3.54(1.41-8.92; p=0.012). Similarly, CVD patients with depression who had current suicidal ideation 4 greater odds of seeking help for their depression than those who had no current suicidal ideation, AOR 4.0(1.33-12.03; p=0.013). Regarding functionality of the CVD patient wwith depression with respect to depression the following result was found. As we know the more severe the severity depression the more it affect the functionality of the respond. so, those who reported had very difficulty of impairment dueto the symptom of depression 5 times increased odds of help sought from any source as compaired to thos with no functional impairment **AOR**= 4.98 (1.50-16.50.)Lastly, cardiovascular patients who had no previous history of seeking help for their depression were 87% less likely to sought help for their depression than those who had previous history of consultation, AOR o.13(0.04 -0.34; p<0.001) (Table 9).

Table 9: Multivariate logistic regression of factors associated with help seeking behavior for depression among cardiovascular patient with current depression JUTH, Jimma Southwest Ethiopia December 2014

Factors		**Help seeking**		**COR95%CI**	**AOR(95%CI)**
		yes	**No**		
Occupation	Unemployed	10(18.2%)	45(81.8%)	Ref	**Ref**
	Employed	7(38.9%)	11(61.1%)	2.86(0.89-9.22)	2.07(0.39-10.87)
	Farmer	41(42.7%)	55(57.3%)	3.35(1.51-7.43)	**4.24(1.30-13.78)**
	Others*	7(26.9%)	19(73.1%)	1.66(0.55-5.00)	0.40(0.08-1.96)
Educational level	Illiterate	35(32.7%)	72(67.3%)	2.52(0.84-7.53)	2.52(0.84-7.53)

	read & write only	11(23.9%)	35(76.1%)	Ref	**Ref**
	Formal education	19(45.2%)	23(54.8%)	7.59(2.13-27.11)	7.59(2.13-27.11)
MI in the family	Yes	28(65.1%)	15(34.9%)	5.8(2.8-12.02)	7.33(2.72-19.8)
	No	37(24.3%)	115(75.7)	Ref	Ref
Awareness of MI service in this hospital	Yes	43(39.4%)	66(60.6%)	1.89(1.02-3.51)	3.15(1.3-7.69)
	No	22(25.6%)	64(74.4%)	Ref	Ref
Suicidal ideation	Yes	19(51.4%)	18(48.6%)	2.57(1.23-5.33	4.0(1.33-12.03)
	No	46(29.1%)	112(70.9%	Ref)	Ref
Distress felt by patients	No difficulty	18(25.0%)	54(75.0%)	Ref	Ref
	Somewhat difficult	20(29.0%)	49(71.0%)	1.22(0.58-2.58)	1.45(0.55-3.85)
	Very difficult	21(48.8%)	22(51.2%)	2.86(1.28-6.38)	4.98(1.50-16.50)
	Extremely difficult	6(54.5%)	5(45.5%)	3.6(0.98- 13.22)	2.99(0.36-24.90)
Previous consultation	Yes	30(66.7%)	15(33.3%)	Ref	Ref
	No	35(23.3%)	115(76.7)	0.15(0.07-0.32)	0.13(0.04-0.34)

Others * = in occupation who are house wife, student, retire, house servant and ouse servant

7.1. DISCUSSION

This is the first of its kind study on help seeking behavior of adult CVD patients with depression in Ethiopia and perhaps in sub-Saharan Africa to my knowledge. The finding that more than two third of the total CVD depressed patients did not seek help is very high. It needs due attention of policy makers, health service program designers and team approach from different specialty clinical of discipline. Because of this it was not possible to compare results with those studies conducted on help seeking behavior of patients with other health problems. However comparing this result, with other study might be indicative of the awareness and magnitude of CVD patients suffering from comorbid depression compared to other patients' help seeking behavior. From Cardiovascular patients with comorbid depressive disorders, only one third of participants were

found to seek help for their depression from any form of help sources. This could be explained by that CVD patients with depression might not be aware of that depression is treatable, may perceive their feeling result of CVD or those who have awareness might not seek help in mental health setup fear of sigma. This result is higher than study done in Ethiopia (18). Firstly, the reason might be presence of chronic co morbid medical illness. Patients with comorbidity more likely to seek help for their depression than those did not have comorbid illness (39). Secondly, this might be due to that the last study took in consideration only individuals that sought help from psychiatrist. But our study includes utilization of other source like mental health professional, counselor, GP, health officer, other health professionals and informal help sources. Similarly, patients in this study had contact with health professional and might get advice from treating health professionals to seek help for their emotional problem. Type of help sources used by the participants for their depression could be the other reasons that contribute for large number of patients sought help in this study. But it is lower than studies conducted in developed countries like from Italy (52.8%), New York (61.3%) and South London (66.7%) (36, 33 and 37). The first possible explanation for the difference might be knowledge gab about depression. Our study population might not consider depression as an illness which can be needing treatment. In developed world, populations have accessed information about depression from different media. The other possible reason could be people working at cardiac clinic do not identify/ pay attention for depression and consult. The third reason could be, generally lack of mental health service which is given integrated manner with other health services in health institution like health center, general hospitals. This will contribute for small numbers of patients with depression were sought help. Similarly other possible reason is socio-demographic difference might had effect on the result obtained. In the current study, most of the participants were from rural area (64%) where there is limited access to information about depression as compared to people live in developed countries. As a result; the study subjects might not consider depression as one of mental illness. So our participants might not know that depression could be treated biomedically. Many of them might not believe to seek help for depression. In addition sample size difference might be other possible explanation for this variation on help seeking for depression between this study and studies conducted in developed countries. In our study, number of participants is lower than other studies. CVD patients with depression delay

seeking help for their depression because of symptom similarity between vegetative symptom of depression, CVD and other comerbid medical diseases.

Our study help sought from formal source is very low as compared to other studies. This shows that patient who sought help for depressive disorder from psychiatrist, mental health professional, and psychologist and even general practitioner and other health professional is minimal. But the prevalence of depression among thus study population is high. Treating physician did not pay attention to screen for comer bid depression. So this implies treating physician should screen them for depression and transfer to psychiatric clinic. Patients who come for follow up are might not aware having depression that might hinder them to ask help from doctors for their low mood. Similarly some of them might aware it but did not discuss about it to her/his doctor.

In our study, educational level of patients with depression is one of the independent predictor of help seeking for depression. Accordingly, CVD patients with depression who had some formal education were 7.6 times increased odds of seeking help as compared to those able to read and write only. But it was in similar with the study done from Ethiopia who reported patients with educational level 5-12 grade have greater odds of visiting health facility than illiterate(18). This is contradicting with the Study done in Norway, among adult with anxiety disorder and depression (38). Firstly, possible reason might be socio cultural difference. In our study, formally educated one has more too modern technology like internate, they could have read about depression. Still reason behind this discrepancy is unclear well; so it need research to investigate what cultural, environmental and attitude people as a barrier for those participants with formal educational did not sought help. Study done in psychiatric clinic of this hospital on pattern of treatment seeking behavior for mental illness in 2011, depict that presence of other family members with mental illness associated with increased likelihood of help sought for their mental disorder (40). Our finding olso similar with the above mentioned study. CVD patients with depression who had famly members with mental illness had increased chance to seek help for their depression as compaired to no mental illness in the family members. The possible explanation could be awareness about depressio. Patients with having other family members with mental ill had chance to got information because they may come to psychiatric service giving area to acomany their relative. They understand mental illness can be treated. This might force

them to sought help to themselves again. The othe possible explanation is severity of depression. CVD patients with depression and there is mentally ill in the house had give care to them. This will increase burdento them. This will lead more depressed than others.

Socio-economic status of the patients could be one of the factors that determine their help sought for their emotional problem. The individual with full time or par time worker 1.4 times odds of seeking help for their depression than who did not work (36). Similarly, in this paper also, being farmers 4.24 increased odds of help sought for their depression than unemployed. The possible reason is that most of our participants seek help from informal source of help; so they have easily assessed them which need lower cost. Severity of their depression could be the other possible reasons that enforce them to sought help for severe emotional problem.

Those participants who have awareness availability of psychiatric service in this hospital 3.5 times increased odds of help seeking for their depression than those participants that have no awareness availability of the service. This result is unique for this study and it may consider as new finding. Possible reason could be patient with depression who aware mental illness is treated in this hospital; might aware that depression is one of mental illness that can be treated here. Qualitative study done in United Kingdom; among coronary heart disease or diabetic patients to assess believe about depression. Depressed patients were unsure to seek help for their depression from others even they had suicidal ideation. In the same study, depression free patient believe that suicide is only consider seeking help for depression (44). In our study CVD patients with depression who had current suicidal ideation has increased chance of seeking help for their depression as compared to those has no suicidal ideation. This could be because of patients with suicidal ideation were severely impaired that might enforce them to seek help. In our societ, people with depression will handle it by themselves instead of seeking treatment. But sucidality ideation is severing which is not accepted socialy/religously, so they enforced to search help consultation to their syptom of depression. The other possible reason is CVD patients without suicidal ideation consider symptom of depression was attributed from medical illness they had. This might hinder them to seek help to their depression from any help sources. In addition, previous consultation for help seeking for depression is the variable from illness-related factor which become independent predictor of help seeking behavior. Out of CVD patient with depression, who had no past history of seeking help for their depression is 87% less likely to seek help than those participants with past history of consultation. These patients with previous

consultation had increased chance of to seek hlp for current depression as well. The possible reason could be they were might satisfied on previous consultation, and again they use. Their sutistaction about previous consultation is supported by our participants report; 75% of them were found it as helpful. Generally people consult someone for their problem while that problem affects their lives in one or in the other way. Performing day to day activities is one of the life cycles a man can do. In this study, CVD patient with depression functional impairment independent predictors of help seeking behavior for depression. As a result, it was very difficult to perform their day to day activity three times increased odds of seeking help for their depression as compared to no difficulty. To the best knowledge of investigator, this result might be considered as unique to this study. This could be due to nature of depression itself. Patient with severe depression have greater chance of having trouble to process things fatly. People around them asked them what happen to them. Then they help them to seek to their depression. Severity of depression might be the other reason. In general, the more severity of depression the greater chance of a person impaired to perform their day to day function. So they tried to seek help for depression inorder to accomplish their day to day activities.

STRENGTH OF THE STUDY

This study was the first study conducted in Ethiopia perhaps in Africa; that attempt to explore help seeking behavior for depression in cardiovascular patient. We tried to study both formal and informal help source that the patients used two weeks before to the study conducted and past history of help sought by the depressed CVD patients for their depression.

LIMITATION OF THE STUDY

Like other researches, this study is not error free. So individual who intended to interpret finding take into consideration the following limitation.

1. Information about help seeking behaviors for depression was obtained by only patients report. We did not have other mechanism to justify it. This is prone different bias. As we know our participants were mostly on a long time on follow up, so information given by patient might be fill recall bias. As we know cultural believe of our community, our participants gave socially desirable response. Such things might affect the result.

2. The study is a cross- sectional design; it is difficult to infer casual association.
3. Data were collected during patients come for follow up time; they rush to go examination room. Some time, they give information without thinking in depth. But we tried to minimize it by appointing them after examination was finished but still the limitation might still there.
4. Overlapping of somatic symptom of depressive disorder and cardiac illness. Vegetative symptoms of depression like weightless, fatigability sleep disturbance and weakness also the symptom of CVD disease. Thus patients are not aware for having depression that hinders from seeking help for their depression.
5. This result do not infer to the general population.
6. Since the data were collected from the CVD patiants consecutively because of time constraint and it was conducted once a week and half day. So using logistic regression non-probablity sampling technique is a weakness of analysis.

8. CONCLUSION AND RECOMMANDETION

8.1. CONCLUSION

The result showed alarmingly high numbers of these patients have not sought any kind of help for their depression. This warrants scaling up of mental health service in to general health system with adequate attention to treating such patients with disciplinary team approach. The again the more result is 12.1% of study participant has idea of hurting themselves which inquire immediate action to be taken. Of who sought help only 11.4% seek help from formal help sources. This mean that the large number of patient does not use the modern help seeking site and that depression will lead poor prognosis of already available heart diseases and suicidal action which might be sequel of depression, even it increase chance committing suicide addition of chronic illness. The occupation, suicidal ideation, educational level, presence of other family members with mental illness, previous consultation to their depression, awareness about avvaliablity of mental health service in this hospital and functional impairment due to depression were assiociated variables with seeking help for depression anong CVD patients with depression. This result shows that intervention are needed to improve help seeking tendency of cardiovascular patient from formal help source and again more importantly, those physician working in cardiac clinic should screen patient for depression and link to psychiatric service.

8.2. RECOMMENDATION

To the department of psychiatry

- Multi disciplinary team approach. The help-seeking for depression among CVD patients from formal source is scarce. So it needs inter department collaboration like internal medicine which helps to create awareness about depression and facilitate to treat CVD patients with depression.

To Jimma University Teaching Hospital

- To creat suitable environment for health workers at cardiac stuff and also mental health professional to give health education on mental illness (depression) CVD patients which fasten early help sought for their depression from formal help source**.**

To health care provider working at cardiac unit

- Clinicians who work at cardiac clinic should help patient by screening them to send psychiatric department for proper treatment.
- Health education: health professionals working at cardiac clinic should give eduction on depression especially the overlapping (similarity of syptom of depression and CVD diease) in order to facilitate early help seeking.

To other researchers

- This study does not investigate the personal believe and motivation of the participant underling the help seeking intention of participants. So we encourage other researcher to tranguilite the study with qualitative finding.
- On the other hand, this study only assesses the help seeking behavior and its associated factors for depression among cardiovascular patients with depression. So it needs other research to investigate what hinders the patient to seek help from health professionals for their depression.

To policy makers

- The policy makers should have to use this result as an input to plan cost effective intervention to improve the access of formal help source in addition to increase help seeking behavior of CVD patients for their depression.

To ministry of health: Integrating mental health (depression) services with other health services. This will reduce discrimination and stigma of patients with mental illness**.**

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ANNEX: DATA COLLECTION INSTRUMENTS

I: QUESTIONNAIRE ENGLISH VERSION

JIMMA UNIVERSITY

COLLEGE OF PUBLIC HEALTH AND MEDICAL SCIENCES

DEPARTMENT OF PSYCHIATRY

Questionnaire prepared to assess help seeking behavior for depressed among cardiovascular patient outpatient who have follow cardiac clinic of Jimma University teaching hospital December 2014

Consent Form

I am Mr. Asmare Belete; I am here on behalf of Jimma University, College of Public Health and Medical Sciences, Department of psychiatry. The aim of this study is to estimate the magnitude of help seeking behavior and associated factors among depressed cardiac patients attending services at cardiac clinic of Jimma University teaching Hospital .Your truthfully participation in filling these questionnaires will give us reliable result and show us our real status and help to make intervention; hence we request to participate honestly. Your involvement in filling the prepared questionnaires and every aspect of the study are completely voluntary. You may pass over any question that you prefer not to answer but we would appreciate your cooperation. You may also ask me to clarify questions if you don't understand them or can stop the interview at any time. Your withdrawal from the study will not affect the care you get from the hospital. Finally, all the information that you provide for the study is kept completely confidential. Your responses to our questions are identified only by number, never by name.

Do you agree to participate in this study?

1. Yes 2.No

Thank you for your participation

Name of data collector _____signature _____date _____

Time of start _____
Name of supervisor _____signature _____date _____

Part I: Questionnaire to assess Scio-demographic characteristics and other interpersonal information

S.no	Question	Possible Choice
101	Age	----- --- years
102	Sex	1.Female 2.Male
103	Ethnicity	1.0romo 2.Amhara 3.Gurage 4.Dawero 5.kefa 6. Others (specify)
104	Religion of the patient	1. Orthodox 2. Muslim 3.protestant 4.catholic 5. Other (specify)---------
105	Frequency of attending a place of worship	1. Daily 2. 2-3 times per week 3.once per week 4. Less than weekly 5. Never
106	Educational level	1. Illiterate 2. Read and write only 3. Literate, specify grade completed_____
107	Marital status	1.Single 2. Married 3. Divorced 4. Separated 5. Windowed
108	Occupation	1.Farmer 2. Daily laborer 3. Unemployed 4. Employed 5. Merchant 6. Retired 7. Other specify---------
109	Estimated monthly income in Ethiopian birr or if your income is from agriculture specify the types and its amount in quintal and bundle for khat	Per month_____ Per year _____
110	With whom you are Living?	1. Live alone 2. With family (spouse and children) 3. With relatives (parents, aunts, uncles, etc) 4. Homeless 5. Other (specify)
112	**Comer bid illness (see chart)**	**Medical illness** Psychiatric diagnosis _

	The following 3 questions ask about how you experience your social relationships. The inquiry is about your immediate personal experience. Please circle the option that represents your experience.		
113	How many people are so close to you that you can count on them if you have serious personal problems?	1. None 2. One or two 3. 3-5 4. More than 5	
114	How much concern do people show in what you are doing?	1.No concern and interest 2. Little concern and interest. 3. Uncertain 4. Some concern and interest. 5. A lot of concern and interest	
115	How easy is it to get practical help from friends or husband/wife if you should need it?	1. Very difficult. 2. Difficult 3. Possible 4. Easy 5. Very easy	
116	Do you have any family member with mental illness?	1.yes 2.No	
117	Is there psychiatric service available at your living	1. Yes 2. No	
118	Do you know psychiatric service is available in this hospital?	1. Yes 2. No	
119	Do you have information about mental illnesses?	1. Yes 2. No	
120	From where did you hear about mental illnesses? (Only for who answer yes for Q119)	1. from friends 2. from religious leaders 3. mass media (radio, TV) 4. From other source (specify)	
121	What do you thing the cause of mental illness?	**1.** Evil or bad sprit **2.** Stress life events **3.** Genetic predisposition 4. Others …	
122	In your life, which one of the following substances have you used?		
	A.Tobacco products (cigarettes, chewing tobacco, cigars, etc.) B. Alcoholic beverages (beer, wine, areki, etc.) C. Amphetamine type stimulants (khat,) D. Cannabis (marijuana, pot, grass, hash, etc.) E. Other – specify: Inhalants (nitrous, glue, petrol, Sedatives or Sleeping Pills (Valium,)	1. Yes	2. No
	If "No" to all items, jamp q123 interview. If "Yes" to any of these items, ask Question 123. For each substance ever used.		

123	In the past three months, how often have you used the substances you mentioned *(FIRST DRUG, SECOND DRUG, ETC)*? A.Tobacco products (cigarettes, chewing tobacco, cigars, etc.) 1. Never 2. Once or Twice 3. Monthly 4. Weekly 5. Daily or Almost Daily B. Alcoholic beverages (beer, wine, areki, etc.) 1. Never 2. Once or Twice 3. Monthly 4. Weekly 5. Daily or Almost Daily C. Amphetamine type stimulants (khat,) 1. Never 2. Once or Twice 3. Monthly 4. Weekly 5. Daily or Almost Daily D. Cannabis (marijuana, pot, grass, hash, etc.) 1. Never 2. Once or Twice 3. Monthly 4. Weekly 5. Daily or Almost Daily E. Other – specify: Inhalants (nitrous, glue, petrol, Sedatives or Sleeping Pills (Valium,) 1. Never 2. Once or Twice 3. Monthly 4. Weekly 5. Daily or Almost Daily	
124	Do you have history of hurting yourself	1.Yes 2. No
125	Do you often have thought of ending your life?	1.yes 2.No
126	Is there anything you fear from the public that prevent to seek help for depression?	1. If so can you list … 2. No

Part II Questionnaire used to assess the patient's depression status

	Over the last two weeks, how often have you been bothered by any of the following problems	**Not at all**	**Several Days**	**More than half days**	**Nearly every day**
201	Little interest or pleasure in doing things	0	1	2	3
202	Feeling down, depressed, or hopeless	0	1	2	3
203	Trouble falling or staying asleep, or sleeping too much	0	1	2	3
204	Feeling tired or having little energy	0	1	2	3
205	Poor appetite or overeating	0	1	2	3
206	Feeling bad about yourself or that you are a failure or have let yourself or your family down	0	1	2	3
207	Trouble concentrating on things, such as reading the newspaper or watching television	0	1	2	3
208	Moving or speaking so slowly that other people could have noticed. Or the opposite being so fidgety or restless that you have been moving around a lot more than usual	0	1	2	3
209	Thoughts that you would be better off dead, or of hurting yourself	0	1	2	3

_____+_____+_____+_____

Total _____

210. If you checked off any problems, how difficult have these problems made it for you to do your work, take care of things at home, or get along with other people?

Not difficult at all ____ somewhat difficult _____ Very difficult _____ extremely difficult ____

Part III. Questionnaire to assess depressed cardiac patients' past and current help-seeking behavior for their depression

NB: This part is only answered by those who scored 5 or more in Part II of the questionnaire above. For those who scored 4or less you have finished the questioner thanks for your participation

Below is a list of people whom you might seek help or advice from if you were experiencing a low mood or depressed feeling. Tell me any of these whom you have gone to for advice or support in the past 2 weeks for your depression or low mood.

	Help source	**Seek help from**
301	Intimate partner(e.g., girlfriend, boyfriend, husband, wife)	
302	Friend (not related to you)	
303	Parent	
304	Other relative/family member	
305	Mental health professional (e.g. psychiatrist, psychologist, social worker, counselor)	
306	Doctor/GP / any health care providers	
307	Minister or religious leader (e.g. Priest, Rabbi, Chaplain)	
308	Traditional healers(Holy water, wizard, khat chewer, book reader)	
309	Someone else not listed above (specify)_____	
310	You do not sought help from anyone for your problem.	
311	Have you ever visited any one of the above sources to get help for personal or emotional problems, before the current one? If you circled "no" in question 310, you are finished and stop asking. If you circled "yes" please complete questions below.	1. Yes 2. No
312	Do you know what type of sources you have seen? If so, please specify,---	
313	How many visits did you have with the above source?	_____visits
314	How helpful was the visit?	1.helpful 2. unhelful

II: QUESTIONNAIRE AMHARIC VERSION

ጅማየኒቨርሲቲ

የህብረተሰብጤናእናሕክምናሳይንስኮሌጅ

የአእምሮ ህክምናት/ትከፍል

በድበረትየአእምሮ ችግረ ዙሪያ ልብ ህመምቾችን የእርዳታ ምርጫዎችን ለመጥናትየተዘጋጀቃለ መጠይቅ::

የጥናቱ፡ ቦታ ጅማ ዩኒቨርሲቲ ማስተማሪያ ሖስፒታል ፡ ጥቅምት 2007

ስሜ…….ይባላል::እዚህየተገኘሁትጂማየኒቨርሲቲጤናሳይንስእናህክምናከሌጅየአእምሮህክምናት/ትከፍል ንወክየነዉ።የጥናቱአላማለድበረትየአእምሮ ቸግር የእርዳታ ምርጫዎችን እናተዛማቾችግሮቹንመገመትነዉ።የእርስዎበታማኝነትጥያቄዉንመመለስትክክለኛዉጤትእንደገኝእናትክክለኛእርምጃእንዲወሰ ድይረዳል፤ስለዚህምበታማኝነትእንዲሳተፉ፤እንጠይቅዎታለን።ተሳትፎወበፈቃደኝነትላየየተመሰረተነዉ።መመለስያልፈለጉትን ጥያቄመዝለልይችላሉ፣

ነገርግንየእርስዎንተብብርእንፈልጋለን።ያልገባዎትታቄካለእንዳብራራልዎትሊጠይቁኝይችላሉወይምመጠይቁንበማንኛዉምጊዜ ሊያቆሙይችላሉ።ማቆምዎከሆስፒታሉበሚያገኙትህክምናላይምንምቾግርአያሳደርም።በመጨረሻምእርስዎለዚህጥናትየሚሰጡ ንመረጃምስጢራዊነታቸዉሙሉበሙሉየተጠበቀነዉ።ለሚሰጡንመረጃስምዎትእናማንነትዎአይገለፅም::

ለመሳተፍፍቃደኛነዎት?

1. አዎ _____
2. አይደለምሁም_____

የተሳታፊዉፊርማ _____

ስለተሳተፉእናመሰግናለን!!!

የጠያቂዉስምናፊርማ_____ቀን_____/_____/_____

የተቆጣጣርዉስምና

<u>ክፍልአንድ፡</u> የማህበራዊ እና ስነ ህዝብ እንዲሁም ለሎች ግላዊ መረጃዎችን ለማጥናትየተዘጋጅቃ ለመጠይቅ

ተ.ቁ	ጥያቄ	ምርጫ
101	እድሜ በሙሉ አመት	
102	ጾታ	**1**.ወንድ **2.** ሴት
103	ብሄር	1. ኦሮሞ 2. አማራ 3. ጉራጌ 4. ከፋ 5. ሌላ ካለ ይጥቀሱ……
104	ሐይማኖት	1. ኦርቶዶክስ 2. ሙስልም 3. ፕሮተስታንት 4. ካቶሊክ 5. ሌላካለይጥቀሱ ---------
105	የአምልኮ ቦታ በየምን ያህል ጊዜ ይከታተላሉ?	1.በየቀኑ 2. በሳምንት ከ2-3 ጊዜ 3. በሳምንት አንድ ጊዜ 4. ከአንድ ሳምንት በታች 5. በፍጹም
106	የትምህርት ደረጃ	1. መንበብ ና መጻፍ የማይችል 2. መንበብ ና መጻፍየሚችል 3. የተማረ/ች ከሆነ/ች ያጠናቀቁበትን ክፍል ይግለጹ_____
107	የጋብቻ ሁኔታ	1.ያላገባ/ች 2. ያገባ/ች 3. የፈታ/ች 4. የተለያየ ቦታ የሚኖሩ 5.ባሏ.የሞተባት/ ሚስቱየሞተችበት
108	ሥራ	**1.** ስራ የለዉም/ላትም 2. የቀን ሰራተኛ 3. የመንግስት ሰራተኛ 4. ገበሬ 5. ነጋደ 6. ተማሪ 7. ጡረታ የወጣ 8. ሌላ ካለ ግለጽ ----------
109	አማካይ ወርሀዊ ገቢዎ ምን ያህል ነዉ?(በብር ወይም በግብርና የሚተዳደሩ ከሆነ በአመት የሚያመርትዋቸውን ምርቶች አየነት እና መጠን ይግለፅ; ለምሳሌ ቡና ጤፍ በቀሎ ባቄላ በርበሬ በኩንታል፡ጫት (በእስር)	በወር---------- በአመት_____
110	ከማን ጋር ነው የምትኖረው/ሪው?	1. ለብቻዬ 2. ከቤተሰቦቼጋር 3. ከዘመድ /ከጓደኛጋር 4. ቤት የሌለዉ 5.ሌላይግለጹ_____
111	አድራሻ	1.ገጠር 2.ከተማ
112	የህመሙ ዐይነት	Medical….. Psychiatric……..

HELP-SEEKING BEHAVIOUR FOR DEPRESSIVE DISORDERS AMONG ADULT **CADIOVASCULAR PATIENTS**

ከዚህ በመቀጠል የሚመጡት ሦስት ጥያቄ ዎች የእርስዎን ማህበራዊ ግኑኝነት አና የግል ተሞክሮዎን ይመለከታሉ;; እባክዎትን የእርስዎን የግል ተሞክሮ የሚመለከተውን ምርጫ ብቻ በመንገር ይተባበሩን ።:		
113	ምን ያህል ሠው አደጋ (ችግር) በሚያጋጥሞት ጊዜ በቅርብ የቸግርዎ ተካፋይ ሊሆኑልዎት ይችላሉ?	1.ምንም 2.1 ወይም 2 3.3-5 4.ከ 5 በላይ
114	ምን ያህል ሠው ስለ እርስዎ ግድ ይለዋል?	5.ብዙ 4. ጥቂት 3. አርግጠኛ አይደለሁም 2. በጣም ትንሽ 1. ምንም
115	ከባለቡት ከሚስትዎ ወይም ከቅርብ ዘመግዎ ተጨባጭ እርዳታ የማግኘት እድልዎ ምን ያህል ነው?	5. በጣም ቀላል 4. ቀላል 3. መጠነኛ 2. ከባድ 1. በጣም ከባድ
116	በቤተሰብ ዐዕምሮውን የሚያመው ግለሠብ አለ?	1.አዎ 2.የለም
117	የዐዕምሮ ህክምና በጅማ ዩኒቨርስቲ ቲችንግ ሆስፒታል እንደሚሰጥ ያውቃሉ?	1.አዎ 2.የለም
118	በሚኖሩበት አቅራቢያ የዐዕምሮ ህክምና አገልግሎት አለ?	1.አዎ 2.የለም
119	ሰለ ዐዕምሮ ህመም መረጃ አለዎት?	1.አዎ 2.የለም
120	ለ ጥያቄ ቁጥር 119 መልስዎ ‘‘አዎ’’ ከሆነ መረጃውን የሰሙት (ያገኙት) ከየት ነው?	ከጎረቤት ከሐይማኖት መሪዎች ከመገናኛ ብዙሃን ከሌላ (ይግለጹ------
121	የዐዕምሮ ህመም በምን ምክነያት የሚመጣ ይመስልዎታል?	1.ከመጥፎ መንፈስ (ከሰይጣን) 2.ከጭንቀት 3.በዘር (ከቤተሰብ) የሚወረስ 4. ከሌላ
122	በህይወት ዘመኖ፣ከሚከተሉት ሱስአምጪ ነገሮች ምን ይጠቀሙ ነበር?(በበአል ወይም በሳምንቱ መጨረሳ) ነ.የሲጋራ ምርት(ሚጨስ፣የሚታኝክ ሌላ) 2.አልኮለ ያለው መጠጥ(ቢራ፣ውስኪ፣ሌላም) 3.አነቃቂ ሱሶ አይነቶች(ጫት፣ሌላም) 4. ጋንጃ 5. ሌላ_ዝርዝር ያሚሰተቱ(ናትሮስ፣ ግሉ፣ ፔትሮል, አደንዛዝ ወይም የእንቅልፍ መዳኒት (ቫሊየም፣)	ነ. አዎ 2. አይደለም ነ. አዎ 2. አይደለም ነ. አዎ 2. አይደለም ነ. አዎ 2. አይደለ ነ. አዎ 2. አይደለም

HELP-SEEKING BEHAVIOUR FOR DEPRESSIVE DISORDERS AMONG ADULT **CADIOVASCULAR PATIENTS**

123	ባለፉት 3ወርውስጥ፣በየምንያህልግዜ ከሚከተሉት ሱስአምጪ ነገሮች ይጠቀሙ ነበር? ነ.የሲጋራ ምርት(ሚጩስ፣የሚታኝክ ሌላ) ነ. እድያውም 2. ነ-2 3. በወር 4 በሳምንት 5 በየቀኑ 2.አልኮለ ያለው መጠጥ(ቢራ፣ውስኪ፣ሌላም) ነ. እድያውም 2. ነ-2 3. በወር 4 በሳምንት 5 በየቀኑ 3.አነቃቂ ሱሶ አይነቶች(ጫት፣ሌላም) ነ. እድያውም 2. ነ-2 3. በወር 4 በሳምንት 5 በየቀኑ 4. ጋንጃ ነ. እድያውም 2. ነ-2 3. በወር 4 በሳምንት 5 በየቀኑ 5. ሌላ_ዝርዝር ያሚሰተቱ(ናትሮስ፣ ግሉ፣ ፔትሮል, አደንዛዝ ወይም የእንቅልፍ መዳኒት (ቫሊየም፣)ነ. እድያውም 2. ነ-2 3. በወር 4 በሳምንት 5 በየቀኑ	
124	ራስዎን ለመጉዳት ሞክረዉ ያዉቃሉ?	1.አዎ 2.የለም
125	አሁን ራስዎን ለመጉዳት (ለመግደል)ስሜት ወይም አለዎት?	1.አዎ 2.የለ
126	ለድብርት ህመመህ እርዳታ እዳትጠቀም ያደረገህ ከማህበረሰቡ ምን ፈርተዉ ነዉ?	1.ከለ ይግለፁ…… 2.የለም

<u>ክፍል ሁለት: </u>:የድብርት ምልክቶች መለያ መጠይቅ::

ከዛሬን ጨምሮ ከ2ሳምንት በላይ የቆየ የድብርት ስሜት ምልክት ካሎት የሚከተለውን ይመልሱ::

PHQ-9

ማስታወሻ፡ አልፎ አልፎ ብቻ /2-6 ቀናት/ 1 በዛ ላለ ጊዜ /7-11 ቀናት/፤ ከሞላ ጎደል በየቀኑ /12-14 ቀናት/ መሆኑን ይግለፁ

	ላለፉት ሁለት ሳምንታት ከነዚህ ከምዘረዝራቸው ችግሮች ውስጥ /በየትኛቹ ተቸግረው/ እንደነበር እጠይቅዎታለሁ፡፡		
1	ላለፉት ሁለት ሳምንታት የዕለት ተዕለት ተግባርዎን ለማከናወን /ለመስራት/ የለዎት ተነሳሽነት ወይም ፍላጎት በጣም ቀንሶ ነበር ?	አዎ	1
		የለም	0
	መልስዎ አዎ ከሆነ በሁለቱ ሳምንታት ውስጥ ለምን ያህል ጊዜ ተሰማዎት ?	አልፎ አልፎ ብቻ	1
		በዛ ላለ ጊዜ	2
		ከሞላ ጎደል በየቀኑ	3
2	ላለፉት ሁለት ሳምንታት የመከፋት የመደበር ወይም ተስፋ የመቁረጥ ስሜት ይሰማዎት ነበር?	አዎ	1
		የለም	0
	መልስዎ አዎ ከሆነ በሁለቱ ሳምንታት ውስጥ ለምን ያህል ጊዜ ተሰማዎት?	አልፎ አልፎ ብቻ	1
		በዛ ላለ ጊዜ	2
		ከሞላ ጎደል በየቀኑ	3
3	ላለፉት ሁለት ሳምንታት እንቅልፍ አልወስድ ብሎዎት ወይም በደንብ መተኛት አቅትዎት ይቸገሩ ነበር?	አዎ	1
		የለም	0
	መልስዎ አዎ ከሆነ በሁለቱ ሳምንታት ውስጥ ለምን ያህል ጊዜ ተቸገሩ?	አልፎ አልፎ ብቻ	1
		በዛ ላለ ጊዜ	2
		ከሞላ ጎደል በየቀኑ	3
3.1	ላለፉት ሁለት ሳምንታት እንቅልፍ በዝቶብዎት ይቸገሩ ነበር?	አዎ	1
		የለም	0
	መልስዎ አዎ ከሆነ በሁለቱ ሳምንታት ውስጥ ለምን ያህል ጊዜ ተቸገሩ?	አልፎ አልፎ ብቻ	1
		በዛ ላለ ጊዜ	2
		ከሞላ ጎደል በየቀኑ	3
4	ላለፉት ሁለት ሳምንታት የድካም ወይም የአቅም ማነስ ስሜት ይሰማዎት ነበር?	አዎ	1
		የለም	0
	መልስዎ አዎ ከሆነ በሁለቱ ሳምንታት ውስጥ ለምን ያህል ጊዜ ተሰማማዎት?	አልፎ አልፎ ብቻ	1
		በዛ ላለ ጊዜ	2

		ከሞላ ጎደል በየቀኑ	3
5	ላለፉት ሁለት ሳምንታት የምግብ ፍላጎትዎ ቀንሶ ነበር?	አዎ	1
		የለም	0
	መልስዎ አዎ ከሆነ በሁለቱ ሳምንታት ውስጥ ለምን ያህል ጊዜ ቀንሶ ነበር?	አልፎ አልፎ ብቻ	1
		በዛ ላለ ጊዜ	2
		ከሞላ ጎደል በየቀኑ	3
5.1	ላለፉት ሁለት ሳምንታት የምግብ ፍላጎትዎ ከተለመደው በላይ ጨምሮ ነበር?	አዎ	1
		የለም	0
	መልስዎ አዎ ከሆነ በሁለቱ ሳምንታት ውስጥ ለምን ያህል ጊዜ ጨምሮ ነበር?	አልፎ አልፎ ብቻ	1
		በዛ ላለ ጊዜ	2
		ከሞላ ጎደል በየቀኑ	3
6	ላለፉት ሁለት ሳምንታት ራስዎን የመጥላት ወይም ዋጋ የለኝም የማለት ወይም ራሴንም ሆነ ቤተሰቤን አሳዝኛለሁ የሚል ስሜት ተሰምትዎት ነበር?	አዎ	1
		የለም	0
	መልስዎ አዎ ከሆነ በሁለቱ ሳምንታት ውስጥ ለምን ያህል ጊዜ ተሰማዎት ነበር?	አልፎ አልፎ ብቻ	1
		በዛ ላለ ጊዜ	2
		ከሞላ ጎደል በየቀኑ	3
7	ላለፉት ሁለት ሳምንታት በሚሰሩት ስራ ላይ ሃሳብዎን ለመሰብሰብ/ትኩረት መስጠት አስቸግርዎት ነበር? /ለምሳሌ ከሰዎች ጋር ሲጨዋወቱ ትኩረት ስጥቶ ማዳመጥ/?	አዎ	1
		የለም	0
	መልስዎ አዎ ከሆነ በሁለቱ ሳምንታት ውስጥ ለምን ያህል ጊዜ ተቸግረው ነበር?	አልፎ አልፎ ብቻ	1
		በዛ ላለ ጊዜ	2
		ከሞላ ጎደል በየቀኑ	3
8.1	ላለፉት ሁለት ሳምንታት ለሌሎች ሰዎች እስከሚታወቅ ድረስ በእንቅስቃሴዎ ወይም በንግግርዎ በጣም ቀስ ብለው ነበር?	አዎ	1
		የለም	0
	መልስዎ አዎ ከሆነ በሁለቱ ሳምንታት ውስጥ ለምን ያህል ጊዜ ተቸግረው ነበር?	አልፎ አልፎ ብቻ	1
		በዛ ላለ ጊዜ	2
		ከሞላ ጎደል በየቀኑ	3
8.2	ለሌሎች ሰዎች እስከሚታወቅ ድረስ መረጋጋት አቅቶዎት አንድ ቦታ አርፎ መቀመጥ ወይመ መቆም እስከማይችሉ ሆነው ነበር ?	አዎ	1
		የለም	0
	መልስዎ አዎ ከሆነ በሁለቱ ሳምንታት ውስጥ ለምን ያህል ጊዜ ተቸግረው ነበር?	አልፎ አልፎ ብቻ	1
		በዛ ላለ ጊዜ	2
		ከሞላ ጎደል በየቀኑ	3
9	ላለፉት ሁለት ሳምንታት ከምኖር ብሞት ይሻለኛል ብለው አስበው ወይም ራስዎን በሆነ መንገድ ሊጎዱ አስበው ነበር?	አዎ	1
		የለም	0
	መልስዎ አዎ ከሆነ በሁለቱ ሳምንታት ውስጥ ለምን ያህል ጊዜ ተሰምትዎት ነበር?	አልፎ አልፎ ብቻ	1
		በዛ ላለ ጊዜ	2
		ከሞላ ጎደል በየቀኑ	3

Total _____

10. ከተዘረዘሩት ችግሮች ለአንዳቸውም አዎ የሚል መልስ ከተሰጠ የሚከተለውን ይጠይቁ፡፡ በነዚህ ችግሮች ምክንያት ስራዎን ለመስራት የቤት ኃላፊነትዎትን ለመወጣት ወይም ከሰዎች ጋር ተስማምተው ለመኖር ምን ያህል አስቸጋሪ ሆኖብዎት ነበር?

1. በጭራሽ አልተቸገርኩም **2**. በመጠኑ ተቸግሬ ነበር

3. በጣም ተቸግሬ ነበር **4.** እጅግ በጣም ተቸግሬ ነበር

ክፍል ሦስት፡ የመላሾችን የበፊት እንዲሁም የአሁን የእርዳታ ምርጫዎችን ለማጥናት የተዘጋጀ መጠይቅ፡፡

ከፍል ሁለት ድምር 5 እና ከዚያ በላይ ላስመዘገቡ ብቻ የሚ ሞላ፡፡ከዚህ በታች የመከፋት የመደበት የስሜት መረበሽ በሚገጥምህ/ሽ ጊዜ ልትጎበኛቸው/ኛቸው የሚችሉ የእርዳታ ማግኛ መንገዶች ተዘርዝረዋል፡፡ ባለፉት 2 ሣምንታት የተገለገሉባቸውን የእርዳታ ማግኛ መንገዶች ብቻ

ተ.ቁ	**የእርዳታ ምርጫዎችን**	**እርዳታ አግኝቻለሁ**
301	የልብ ጎደኛ (ምሳሌ፣ የሴት/የወንድ የፍቅር ጎደኛ፣ ባል/ሚስት)	
302	ከጎረቤት	
303	ቤተሰብ (እናት/አባት)	
304	ዘመድ	
305	የአእምሮ ጤና ባለሙያ (ምሳሌ፣ ሳይካትሪስት፣ ሳይኮሎጂስት፣ ሶሻል ዎርከር፣ የምክር አገልግሎት ሠጪ)	
306	ማንኛውም አይነት የጤና ባለሙያ (ዶከተር፣ ነርስ፣ ጤና-መኮንን)	
307	የሀይማኖት መሪዎች (ቄስ፣ ሼክ፣ ፓስተር ወ.ዘ.ተ)	
308	ባህላዊ ዘዴዎች (ፀበል፣ ጠንቋይ፣ ጫት ቃሚ፣ መፀሀፍ ገላጭ፣ ወ.ዘ.ተ)	
309	ከዚህ በላይ ከተዘረዘሩት ውጭ (ይግለፁ----------	
310	የትኛውንም አይነት የእርዳታ ምንጭ አልተጠቀምኩም	
311	ከአሁኑ ችግር በፊት ከላይ የተጠቀሱትን የእርዳታ ምንጮች ተጠቅመዋቸው ያቃሉ ወይ?	1. አዎ 2.አላቅም
312	ለጥያቄ 310 መልስዎ ‘‘አዎ’’ ከሆነ የጎበኙትን የእርዳታ ምንጭ ስም ሊነግሩኝ ይችላሉ?	……
113	ለምን ያህል ጊዜ ተመላለሱ?	---------- ጊዜ
114	ምን ያህል ጠቅምዎታል?	1. አልጠቀመኝም 2. ጠቅሞኛል

ጥያቄቹን ጨርሰዋል_ጊዜዎን በመስጠት እና በመልካም ስነ_ምግባር ስለ ተባበሩን እጅግ በታም እናመስግናለን::

III. QUESTIONNER OROMIC VERSION

Gaaffiwwan afaan oromoon qophaa'an

University jimmatti koleejjii saayinsii fayyaa hawaasaa fi medikalltti kutaa fayyaa samuu

Hospitala barsisummaa yuniiversittii jimmaa

Kaayyoo qorannichaa hubachuudhaan waiigaltee fedhii irrati hundaa'e

Lakkofsa addaa gaaffichaa_____ maqaa dhaabbata fayyaa_____

Gosa dhaabbata fayyichaa _____ koodiiidhaabata fayyichaa.

Bakka argama dhaabbata fayyichaa_____

Nagaa!

Itti galumsa

Maqaan koo _____ n jedhama. Kanaan hojjedhu yuuniversittii jimmaatti garee qorannaa kan digrii lammaffaa keessadha. Kanan si gaafachuu barbaadu mallattolee gaddaa akkasumas haalawan isaan walqabat kan dhuukkuba onee ati qabduu wajjin walliti dhufeenya qabu yoo ta'u galmeekees ilaaluudhaan odeeffannoo muraasa nan fudhadhaa. Kaayyoon qo'annaa kanaa baayinaa fi waan isaan walqabatan kan dhukkuba dibbirttii ga'eessota dhukkuba onnee qaban irratti mul'atu fooyyeessuu fi tajaajila kennmus kutaa wallaansssa sammuu waliin ta'uun haala jireenya dhukkubsataa fi dhukkuba fooyyessufiidha. Fedhii fi tums ati gaaffii kana seessatti hirmaachuudhaan gootu rakkowwan dibbirtii fi halaa isaan walqabata ga'eessota dhukkuba gaggabdoo qaban irratii jiru adda baasuuf baayee barbaachisaadha. Gaaffii kana irratti maqaankee hin barreeffamuu akkasumas odeeffannoo ati nuuf kennitu dhoksaan isaa eegamaadha. Kardiinkee dhoksaan isaa eegamaadha. Gaafficha keessatti hirmaachuun fedhii irratti kan hundaa'e ta'ee gaaffii deebisuu hin barbadne deebsuudhaaf hin dirqamtu. Yoo gaafficha kessatti himaachuun sijibbisiise yeroo kamittiyyuu addaan dhaabuu nidandeessa. Itti fufuudhaaf fedhii qabdaa?

1. Yoo eeyee ta'e itti fufi
2. Yoo lakkii (hin barbaaduu) ta'ee gaafatamaa itti aanuutti darbi

Galatoomaa

Utaa I. Gaafiwwan hawaasummaa ilaallatan

No.	Gaaffii	deebii	Dabalataa
101	Saala	1. dhiira 2. durara	
102	umurii(waggaadhaan)	_____	
103	Sadarkaa barumsaa	a. kan hin baratin b. dubbisuu fi barreessu kan danda'uu c. mana barumasa **(1-8,9-12,kooleejjii)**	
104	Hojjii	a. kan hojii hin qabne b. barataa c. hadha mana d. dafqan bulaa e. hojjetaa mootummaa f. hojjataa ngo g. daldalaa h. sorammaa i. Qonnaan bulaa j. Kan birraa (ibsii yokkaa tarreessa)	
105	Haala fuudhaa fi heeruma keesaanii	a. Kan hin fuudhin/ hin heerumin b. Kan fuudhee/heerumtee c. Kan addaan bahee/tee d. Kan abbaan manaa/haati manaa irraa du'e/te	
106	Bakka jireenyaa	a. Baadiyyaa b. Magaalaa	
107	**Qomoo**	1.0romoo 2.Amharaa 3.Guragee 4.Dawaroo 5.kafaa 6. kan biroo (taressii) ……..	
108	Amantii dhukkubsataa	1. Ortoodooksii 2. Musiliima 3. Prootestaantii/peenxee 4. Kaatoolikii 5. Kan biraa	
109	Yeroo meeqa bakka waaqeffannaaykn mana Amantii deemta?	1. Yeroo hundaa 2. Torbaanitti yeroo 2-3 3.torbanitti yeroo tokko 4.torban tokkoon alatti 5.Tasumaa	

110	Galiin keessan ji'a giddu galeessan hagam ta'a?(qarshiidhaan)yookaan qonnaadhaan jiraattu yoo ta'e,omisha omishtan gosaa fibaay'ina isaa ibsaa. Fakkenyaaf:buna,xaafii,boqqolloo,baaqelaa,Barbaree(mixmixa) kuntaalaan,caatii(hidhaan)	Ji'aan---------- waggaan ----------	
111	Eenyuu wajjin jiraatta?	1. Qophaa koo 2. Maatii koo wajjin 3. Fira koo wajjin 4. Kan mana hin qabne 5. Kan biraa yoo ta;eef ibsi__	
112	Dhukuba qaama fi kan sammuu (Galmee dhukubsataa irraa ilaalli)	Dhukuba qaama Dhukuba sammuu _____	
	Gaffileen 3 armaan gadii waa'ee qunnamtii hawaasummaa sii gaafatu.Gaaffilleen waa'ee mudannoo qunnamtii hawaasummaati.Maaloo		
113	Yeroo rakkoon si qunnamu namoota sitti dhihaatan meeqaf mari'achifta?	1. Hinjiru 2. 2.1 or 2 3. 3-5 4. 6 yookin sanaaol	
114	Hoji ati hojjattuf namoonni hammam sitti dhimmamu (tokko filadhu) ?	5.Baay'e dhimmamu fi fedhi goodhatu 4.xinnoo dhimmamu fi fedhi goodhatu 3.hinqulqulleffanne/Mamsiisaa dha 2.Bicuu dhimmaman ykn fedhi goodhachuu 1. Hin dhimmaman ykn fedhi hin goodhatan	
115	Yeroon si qunnama gargaarsa olla argachuun hammam sitti salphata? (tokko filadhu)	5. Baay'ee salphaa 4.Salphaa 3. ni ta'a 2. rakkisaa 1.baayyee rakkisaa	
116	Maattii keessan keessa dhukuba samuu qabu jiraa?	1. Eeyee 2. lakkii	
117	Naannoo bakka jireenya keessan tajaajilla dhukuba samuuttif ni jiraa?	1. Eeyee 2. lakkii	
118	Tajaajillaa dhukubba samu akka hospital kana kessa jiru buyta?	1. Eeyee 2. lakkii	
119	Oddeefanoo wa'ee dhukuba samuu wannii bektuu jira?	1. Eeyee 2. lakkii	
120	Oddeefanoo wa'ee dhukuba samuu eessarra irraa dhagetan?(gaaffii 119f eeyee jedheef)	1. hiriyarraa 2.abbootti amanttii rra 3. toorra mass midiarraa (raadiiyooni, televisiona) 4. Kan biraa yoo ta;eef ibsi_____	
121	Sababin dhukuba samuu maal sitti fakkaata?	**1.** jinnii ykn bad sprit **2.** haala jireenyaa rakkisaa **3.** dhaalaan 4. Kan biroo…..	

HELP-SEEKING BEHAVIOUR FOR DEPRESSIVE DISORDERS AMONG ADULT **CADIOVASCULAR PATIENTS**

122	Umrii kee kessa, arradda kan kanatti anan kessa haagam fuudhatan ? A. Omishaa tamboo (cigarettes, chewing tobacco, cigars, etc.) B. dhugatti alcoholi (Biiraa, Wayinii, Diraaftii, Araqee, Daadhii, Farsoo, Kanneen biraa yoo ta'e ibssi-----) C. Arradda nama dadamaqasuu (chatii) D. Cannabisi (marijuana, pot, grass, hash, etc.) E. Kan biroo – taressii: kan funfatamuu (nitrous), Sedatives yookaa koricha hiribaa (Valium)		
123	Ji'oot 3 darban kessa, yeroo meeqa aradda fudhate kan arman dura taressiteeraa *(kan duura, kan lammataa fi kan kan fakatan)*? A. Omishaa tamboo (cigarettes, chewing tobacco, cigars, etc.) 1. Siruumaa 2. Yeroo tokkoo yookaa lammaaf 3. Ji'an 4. torbanin 5 Guyaaguyyaan ykn siruma guyaguyyaan B. dhugatti alcoholi (Biiraa, Wayinii, Diraaftii, Araqee) 1. Siruumaa 2. Yeroo tokkoo yookaa lammaaf 3. Ji'an 4. torbanin 5 Guyaaguyyaan ykn siruma guyaguyyaan C. Arradda nama dadamaqasuu (chatii) 1.siruumaa 2. Yeroo tokkoo yookaa lammaaf 3. Ji'an 4. torbanin 5 Guyaaguyyaan ykn siruma guyaguyyaan D. Cannabisi (marijuana, pot, grass, hash, etc.) 1.siruumaa 2. Yeroo tokkoo yookaa lammaaf 3. Ji'an 4. torbanin 5 Guyaaguyyaan ykn siruma guyaguyyaan E. Kan biroo – taressii: kan funfatamuu (nitrous), Sedatives yookaa koricha hiribaa (Valium) 1. Siruumaa 2. Yeroo tokkoo yookaa lammaaf 3. Ji'an 4. torbanin 5 Guyaaguyyaan ykn siruma guyaguyyaan		
124	Asiin duura of midhuuf yaalte beekta?	1..eeyee 2. lakkii	
125	Assin duura of midhuuf yaadee turtee?	1..eeyee 2. lakkii	
126	Wanni sodatuu hawwasa rra jira kan gargarssa depression barbaduf kan si itisuu ..	1 akkas yoo tahe nuuf himi…….2.lakkii	

Kutaa II. Gaaffiilee sadarkaa dhukkuba gaddaa sakata'an

PHQ-9

hubachissa : Darbe darbee **/2-6 guuyyoota/** Yeroo baayyeef **/7-11 guuyyoota/** guuyaa guuyyaan **/12-14 guuyyoota/**

	Torbe 2 darbe keessa, yeroo meqa rakkolee gadi anan kessa issin mudate ?		
1	Fedhi tiqa yokka gammachu wantota tokko tokko godhun.....	eeyee	1
		Lakkii	0
	Debbin kessan eye yoo ta'ee torbee 2 darbee kessa yeroo meqa issiniti dhagahame ture?	Darbe darbee	1
		Yeroo baayyeef	2
		guuyaa guuyyaan	3
2	Gadi-antumma issiniti dhagahama,, gadda, or abdi kutu	eeyee	1
		Lakkii	0
	Debbin kessan eye yoo ta'ee torbee 2 darbee kessa yeroo meeqa isiniti dhagahame ture?	Darbe darbee	1
		Yeroo baayyeef	2

HELP-SEEKING BEHAVIOUR FOR DEPRESSIVE DISORDERS AMONG ADULT **CADIOVASCULAR PATIENTS**

		guuyaa guuyyaan	3
3	Hirribni si qabu didu yookin hirribaa dadammaquu yookin haala baratame caalaa rafuu.....	eeyee	1
		Lakkii	0
	Debbin kessan eye yoo ta'ee torbee 2 darbee kessa yeroo meeqa isiniti dhagahame ture?	Darbe darbee	1
		Yeroo baayyeef	2
		guuyaa guuyyaan	3
3.1	torbee 2 darbee kessa rakko haala baratame caalaa rafuu jira?	eeyee	1
		Lakkii	0
	Debbin kessan eye yoo ta'ee torbee 2 darbee kessa yeroo meeqa isiniti dhagahame ture?	Darbe darbee	1
		Yeroo baayyeef	2
		guuyaa guuyyaan	3
4	Dadhabi isiniti dhagahamma yokka human xiqa kabu	eeyee	1
		Lakkii	0
	Debbin kessan eye yoo ta'ee torbee 2 darbee kessa yeroo meeqa isiniti dhagahame ture?	Darbe darbee	1
		Yeroo baayyeef	2
		guuyaa guuyyaan	3
5	fedhi nyata tiqqa Qabachu yokka baa' e nyaachu	eeyee	1
		Lakkii	0
	Torbee 2 darbee kessa yeroo meqaa hira' ate?	Darbe darbee	1
		Yeroo baayyeef	2
		guuyaa guuyyaan	3
5.1	torbee 2 darbee kessa fedhin nyaata kessan yeroo birra irra gudatee	eeyee	1
		Lakkii	0
	Debbin kessan eye yoo ta'ee torbee 2 darbee kessa yeroo meqaa yeroo meqa (hamam) gudatee	Darbe darbee	1
		Yeroo baayyeef	2
		guuyaa guuyyaan	3
6	Of jibbuu yokka gatti hinqabu jechuu yokka ofis tahe matti gaddisise jechuu	eeyee	1
		Lakkii	0
	Debbin kessan eye yoo ta'ee torbee 2 darbee kessa yeroo meqaa (hamam) isiniti dhagahamee	Darbe darbee	1
		Yeroo baayyeef	2
		guuyaa guuyyaan	3
7	Rakko yadda Walliti qabu wantota adda addan, fakenyaaf dubisu yokka television ilaalu…….....	eeyee	1
		Lakkii	0
	Debbin kessan eye yoo ta'ee torbee 2 darbee kessa yeroo meqaaf (hamam) rakkon isin mudatee?	Darbe darbee	1
		Yeroo baayyeef	2
		guuyaa guuyyaan	3

8.1	Sochi yokka dubachuu suta gedhu kan namonni birra hubatan?	eeyee	1
		Lakkii	0
	Debbin kessan eye yoo ta'ee torbee 2 darbee kessa yeroo meqaaf (hamam) rakkon isin mudatee?	Darbe darbee	1
		Yeroo baayyeef	2
		guuyaa guuyyaan	3
8.2	kan namonni birra hubatan tasgabahu dadhabun bakka tokko dhabachu yokka ta'u dadhabuu yeroo birra irra adda ta'ee	eeyee	1
		Lakkii	0
	Debbin kessan eye yoo ta'ee torbee 2 darbee kessa yeroo meqaaf (hamam) rakkon isin mudatee?	Darbe darbee	1
		Yeroo baayyeef	2
		guuyaa guuyyaan	3
9	karra kamiyuu ta'ee Yadda kan osoo dutan garri akka tahe yokka Off midhuu?	eeyee	1
		Lakkii	0
	Debbin kessan eye yoo ta'ee torbee 2 darbee kessa yeroo meqaaf Isinitti dhagahamee turee	dararbe darbeef	1
		Yerroo bayyeef	2
		guuyaa guuyyaan	3

10. Rakkollee eramanif deebin kessan eyee yoo tahe kan itti anu gafadhaa.Rakko kanan kan ka'ee hajji hojachuuf halafttina mana bahuuf yokka namootta wajjin walli galtani jirrachuuf hagam takka isin rakkisee?

1. Siruuma hin rakkanee 2. Haga murta'eef rakadhee ture
3. Baayyee rakkadhe turee 4. Sirri malee baayyee rakkadhe turee

Kutaa III. Gaaffilee dhibee gaddisisaa dhukkubsatoota onnee keessatti yeroo darbee fi amma dhibee gaddisisaaf gargaarsa barbaaduu qoratan

Hubachiisa: Gaaffileen armaan gadii namoota 5 fi Sanaa ol kutaa II kessaa debiisaniif qofa. Namoonni 4 fi Sanaa gadii debisan qorannoo xumuraniiruu hirmaachu keessaniif galatoomaa.

Kanaa gaditti kan tarreeffaman namoota yeroo si gaddisisun si mudate akka si gorsan yookin si gargaaran barbaaddu dha.Torbaan lamaan darban keessa yeroo si gaddisuun si mudate namoota gargaarsa yookin gorsa irra barbaadde filadhu.

	Madda gargaarsa	**Enyuuraa Gargaarsa barbadu**
301	Hiriyyaa dhihoo (Jaalalle durbaa, Jaallee dhiraa ,Dhirsa ,Niti)	
302	Hiriyyaa (Firummaa hin qabnee)	
303	Maatii	
304	Firaa kan biraa/ miseenssa maatii	
305	Ogessa Fayyaa sammuu (fakkenyaaf Ogeessa dhibee sammuu, ogeessa xiinsammu, Hojjataa hawaasummaa, Ogeessa gorsa kennu)	
306	Ogeessa fayyaa, Ogeessa fayyaa waligalaa, nama gargaarsa fayyaa kennu kamiyyu.	
307	Ministeraa yookin abbooti amantti (e.g. Priest, Rabbi, Chaplain)	
308	Ogeessa fayyaa aadaa (Xabala, ,Caatii kan qama'an ,Kitaaba kan dubbisan	
309	Namoota biraa kan kanaan oli hin eramne tarreessi……	
310	Rakkoo kamifuu Gargarssa hin arganee nama kammiyurra	
311	Kan ammaatiin dura namoota armaan olitti eraman dhimma dhuunfatif tahe dhukkubbif deemtee dubbiftee beekta.Gaaffi 310 f deebiin ke lakki yoo ta'e fixxe jirta gaafi gaafachu dhaabi garuu deebiin kee eyyee yoo ta'e itti fufi.	1. eeyee 2. lakkii
312	Maddoota akkami akka ilaalte ni beekta?Yoo beektee nuuf tarress	
313	Maddota armaan oli yeroo meeqaaf do'atte jirta?	Do'annaa_____
314	Do'achun kee hammam sii gargaare jira?	1.Na hin gargaarre 2. Na gargrareemjira

Declaration

I, undersigned, declare that this thesis is my original work, has not been presented for a degree in this or other university and that all sources of materials used for this have been acknowledged.

Name _____

Signature _____

Date of submission _____

This thesis has been submitted with my approval as university advisor:

Name of advisor signature

Alemayehu Negash (MD, PhD, ASS. professor,

Consultant Pychiatrist) ----------