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COLLEGE OF MEDICINE AND HEALTH SCINCE

DEPARTMENT OF NURSING

MAGNITUDE OF DEPRESSION AND ASSOCIATED FACTOR AMONG PATIENT WITH HIV VISITING HALABA KULITO GENERAL HOSPITAL ART CLINIC HALABA ZONE, SOUTHERN ETHIOPIA, JUNE 2021 G.C

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A RESEARCH PEPER TO BE SUBMITTED TO WOLKITE UNIVERSITY COLLEGE OF MEDICINE AND HEALTH SCIENCE DEARTMENT OF NURSING FOR THE PARTIAL FULLFILLMENT OF THE REQUIREMENT FOR THE BACHELOR OF SCIENCE DEGREE IN NURSING.

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ABSTRACT/ SUMMERY

BACKGROUND:
Depression is one of the common mental health disorders and predicted to be the second cause of the global health burden by the year 2030[1]. Depression is more prevalent in HIV/AIDS patients than the general population. The presence of depression in people living with HIV/AIDS could lead to non-adherence to antiretroviral medications [2]. It also leads to further co morbid and opportunistic illness and then lowering the patient's quality of life [3]. Therefore, the aim of this study was to assess the prevalence of depression and associated factors among HIV/AIDS patients on ART at Halaba Kulito Hospital.

OBJECTIVE: the main objective of this study was to assess the prevalence of depression and associated factors among patient with HIV visiting Halaba Kulito General Hospital Halaba Zone Southern, Ethiopia, June 2021G.C.

METHODA

A hospital based cross-sectional study was conducted among 263 HIV positive adult patients on antiretroviral treatment on June 2021 .The study participants was selected by using Consecutive sampling technique among patients who visited the antiretroviral (ART) clinic on the study period and standardized Patients Health Questionnaire (PHQ-9) was used to measuredepression. Factors like Stigma, social support and medication adherence will be assessed by using 12-item stigma scale, Oslo 3-item social support and the Simplified Medication Adherence Questionnaire. Descriptive statistics like percentage, median with inter quartile range (IQR) was computed and presented in the form of text and table. Binary logistic regression model was fitted to identify factors associated with depression. An adjusted odds ratio (AOR) with a 95% confidence interval (CI) was used to identify factors associated with depression.

RESULT

The magnitude of depression in our study is 89% with the response rate of 92.02. Females were more likely (AOR=12.915,95%CI 1.473-113,263) to develop depression compared to males, those with poor and Intermediate(fair) social support were more likely to develop depression (AOR=9.382,95%CI 1.355-64.950 ; AOR=13.714,95%CI 1.426-131.910) than strong social support respectively, those patient who internalize stigma were more likely to develop depression (AOR=12.986 95%CI 2.220-75.954)han patient who doesn't internalize stigma.

CONCLUSON AND RECOMMENDATION

Depression is higher among people living with HIV/AIDS. Socio demographic factor like sex, and psychosocial factor like poor social support and internalizing stigma were show significance association with depression. Since prevalence of depression is high, routine screening of patient for depression and early treatment should be done.

KEY WORDS: Depression, HIV/AIDS, Halaba Kulito General Hospital

BUDGET SUMMERY**:** The research was done with a total cost of 4341.70 Ethiopian birr

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ACKNOWLEDGEMENT

First of all, Praise to GOD, who makes all things to be done at their appropriate time. Then we would like to thank Wolkite University College of Medicine and health science department of nursing for giving us the chance of doing this research proposal. We would like to forward our deep hearted gratitude to our advisors, Derebachew Hilemariam (Asst.professor) and Omega Tolessa (ICCMH) for their Constructive advices and valuable comments starting from the selection of the research topic to preparation of the proposal. At last but not to the least we would like to acknowledge all those who are on behalf of us for their professional comment and constructive idea which is important throughout our work.

ACRONYM/ABBREVATION

AIDS: Acquired Immunodeficiency syndrome

AOR: Adjusted Odds Ratio

ART: Anti-Retroviral Therapy

CI: Confidence Interval

HIV:Human Immunodeficiency Virus

HAART: Highly active antiretroviral therapy

HKGH: Halaba Kulito General Hospital

IQR; Interquartile range

OSS-3; Oslo- item Social Support

PHQ9: Patient Health Questionnaire 9

PLWHIV; People live with Human Immunodeficiency

PLWHA; People live with HIV/AIDS

SNNPR; South Nation Nationalities and People Region

SPSS: Statistical Package for Social Science

WHO: World Health Organization

CHAPTER ONE

INTRODUCTION

1.1BACKGROUND OF THE STUDY

HIV is a lenti virus (a subgroup of retrovirus) that causes HIV infection and over time acquired immunodeficiency syndrome (AIDS),which is a chronic life-threatening illness and, like other similar chronic and stigmatizing illnesses, can be stressful to manage[8].Depression is among the most common mental disorder affecting individuals with human immunodeficiency virus (HIV) infection [4].The clinical manifestation of depression are loss of interest (pleasure), decreased energy, feeling of guilt, low self-worth, disturbed sleep or appetite or poor concentration. Depression is different from usual mood fluctuations and short-lived emotional responses to changes in everyday life. It can cause the affected person to suffer greatly and function poorly at work, school, and in the family. At its worst, depression can lead to suicide.[5] A depression is the most common and disabling mental illness globally [6]. The level of depression is related to the severity of symptoms of HIV infection, and the presence of HIV/AIDS increases the risk of mental disorders [7].Depression and HIV/AIDS are estimated to be the world's two leading causes of disability by 2030[1]. Depression among PLWHA influences not only the health status of PLWHA but also has a negative effect on ART adherence [2].Depression affects the ability to comply with HIV/AIDS treatment, as well as quality of life and lifespan. Depression also has destructive effects on the self-care behaviors necessary for management of HIV [8]. Studies showed that factors such as unemployment, age, CD4 count, sex, educational status, drug side effect, family/social support, stigma, stage of HIV, living companion, marital status, monthly income and opportunistic infection were predisposed HIV/AIDS patients to depression [10–15]

1.2 STATMENT OF PROBLEM

Depression is the most psychiatric disorder among HIV positive individuals especially anxiety disorder is frequently seen as co morbidity in people with HIV [9]. Neuropsychiatric disorders such as depression, anxiety, and somatoform disorder account for 9.8% of the global burden of disease [16].The world health organization (WHO) estimates depression to be the leading cause of disability adjusted life years, contributing about 12% of all disabilities. Worldwide 38 million people are currently living with HIV[17] .Prevalence of depression in PLWHIV ranges from 7.2% to 71.9% and 2 times higher in PLWHIV than people without HIV/AIDS [18].The study conducted in Myanmar shows that the prevalence of depression among PLWHIV was 30% [19]. The Lifetime prevalence of depression among PLWHIIV in the United State of America was 20-40%, up to two times higher than the general population [20]. The study in Delhi, India shows that the under ART was 58.75% .As the majority of the world's PLWHIV are living in SSA, the prevalence of depression among PLWHIV is also high[21]. Even if depression may fasten the progression of HIV/AIDS and result for the development of ART resistance, diagnosis and treatment of depression among PLWHA has not been a priority in Africa. The prevalence of depression among PLWHIV in Yaoundé, Cameroon was 63% [22]. Other study at Nigeria shows that the prevalence of depression of 39.1%,and it was 5 times more common among PLWHA than the general populations [23]. In Ethiopia studies show that the prevalence of depression among HIV/AIDS Patents Attending ART Clinic was 38.94% at Debrebirhan Referral Hospital, North Showa, Amhara Region, Ethiopia [24], 44.4% at Zewditu Memorial Hospital, Addis Ababa ,Ethiopia[25],45.8% at Harare Town, Eastern Ethiopia [26] and 31% at JimmaUniversity Medical Center, Jimma, Southwest Ethiopia [27].

CHAPTER TWO

2.1 LITERATURE REVIEW

2.1.1 Magnitude of depression

There are many studies done on the prevalence of depression and Associated factors among HIV patients Worldwide.

Meta-analytic pooling studyof depression among the general PLWHA in China reported by 50 included studies ,whose prevalence ranged from 18.3 to 86.9%, yield crude summary prevalence of 50.8% (8023/14,824 individuals,95% CI: 46.0–55.5%).[10]

A hospital-based cross-sectional study which was carriedamong158 HIV/AIDS patients in Pakistan shows the overall prevalence of 51 (32.2%). This study reveals that30 (18.9%) participants had moderate depression, 30 (18.9%) participants had moderate depression, 9(5.69%) moderately severe depression, and 12 (7.59%) severe depression. [11]

Another cross-sectional analytic study which was conducted among 362 HIV/AIDS patients from three centers in Khartoum, Sudan depict depression in 332 (63.1%) of patients .The finding of this study shows that 68 (19.3%) of the patient had mild depression, 114 (32.4%) were moderately depressed, and 40 (11.4%) of the patient had severe depression. [12]

A systematic review and meta-analysis study which was done on twenty-one studies that assessed depressive symptoms and the related factors in Ethiopian who are on ART in the case of a low-income country reveals 35.8% (95% CI 28.29, 43.25) of depression.[13]

The study conducted at Dessie referral Hospital ART clinic, South Wollo, Ethiopia showed that The prevalence of depression was found to be 20% with Regarding to the severity of depressions, 51.9%, 39.2%, 7.6% and 1.3% had mild, moderate, moderately sever and severe depression, respectively. In this study, a total of 395 HIV/AIDS patients were included with the response rate of 93.5%. [14]

Institutional based cross-sectional study done on a total of 328 participants at Gurage zone selected government Hospitals, southwest SNNPR, Ethiopia, In 2018 shows prevalence of depression 37.5%.[15]

2.2 Factor associated with depression

A hospital-based cross-sectional study which was carriedamong158 HIV/AIDS patientsin PakistanrevealsthatSex, age, educational status, employment status, residence, religion, availability of social support,fear of stigma and discrimination, having worked abroad, CD4 cell count, family history of depression, and substance abuse which were fulfilled the criterion of $p \leq 0.20$ significance level on bivariate logistic regression analysis were considered for multivariate logistic regression analysis. After adjustment for all confounders of this study , rural residence, fear of stigma and discrimination, having worked abroad, and history of substance abuse were significantly associated with depression ($p<0.05$).

The finding of this study shows that, theodds of developing depression among 61 (38.6%) HIV infected patients living in rural areas were 5.60 times higher than from that of 97 (61.4%) HIV-infected patients living in urban areas (AOR 5.60, 95% CI 2.20–14.15).this study explains that the discrepancy for this finding was because of unavailability of high-quality medical servicesand lower socioeconomic classes of the Individuals residing in rural areas affect their psychological state. The odds of developing depression were high among 99(62.7 %)HIV-infected patients with a history of fear of stigma and discrimination in the community compared to 59(37.3%)HIV-infected patientswithout a history of fear of stigma and discrimination in the community (AOR 3.505, mk95% CI 1.364–9.008). This study noted that having HIV, which is a persistent long-term illness, is likely to increase levels of stigma, disgrace, and discrimination in society, and thus HIV-infected patients may prefer to live alone to avoid social stigma that leads to increased depressive symptoms. The odds of developing depression were also high among HIV-infected patients with a history of working abroad than those without history of working abroad (AOR 3.017, 95% CI 1.134–8.031). This may be due to the fact that HIV-infected patients living outside their motherland feel more lonely because of lack of family and social support, which are very important in an illness like HIV/AIDS.

The odds of developing depression among HIV-infected patients with a history of substance abuse were 4.14 times those of HIVinfected patients without history of substance abuse (AOR 4.147, 95% CI 1.673–10.28).This may be because HIV-infected patients take up substance to deal with distress and stigma related to HIV. Substance abuse in turn leads to depression and worsens the condition.

The results of thisstudy revealed that there was a statistically significant association between HIVmedication nonadherence and depression on bivariate analysis. Depression was found to be significantly associated with ageand employment status. As employment helps in income production and leads to social sustainability, economic growth, and a sense of self-worth in a person.[11]

The meta-analysis study had done in Ethiopia imply the high occurrence of depression symptoms among HIV AIDS patients and the variety of contributing factors. Of all included studies, reported data regarding the associated factors for depression in HIV positive individuals, qualitatively, perceived HIV stigma, opportunistic infection, adverse drug reaction, poor social support, co-morbid chronic illness, being female, being on stageIV-AIDS, living alone, being unemployed, low income, negative life events, and non disclosure of HIV status were among the factors found to have an association with the development of depression in HIV patients. However, the most commonly reported factors by the included studies were presence of perceived HIV stigma, poor social support, poor medication adherence, opportunistic infection and advanced stage of AIDS. The pooled adjusted odds ratio (AOR) of perceived HIV stigma among the indicated studies was 3.75 (95% CI 2.34, 5.16).This implied that HIV positive individuals who have HIV related perceived stigma were 3.8 times more likely to develop depression than those who have not perceived HIV stigma .This study also find that Six studies also reported poor social support as an associated factor for depression in HIV patients and the pooled AOR was found to be 6.22 (95% CI 2.96, 9.47) which means that individuals with poor social support were 6.2 times at increased risk of developing than with good social support. Moreover, the average odds ratio of poor medication adherence, presence of opportunistic infection, and advanced stages of AIDS were 3.03 (95% CI 1.00, 5.05), 5.5 (95% CI 1.97, 10.03), and 5.43 (95% CI 1.60, 9.28)respectively.Therefore HIV positive individuals with poor medication adherence, who have an opportunistic infection and who are in advanced stages of AIDS were 3, 5.5, and 5.4 times at a higher rate of developing depression as compared to those with good medication adherence, who have no opportunistic infection and in early stages of AIDS respectively.[13]

An institution based cross-sectional studyconducted at Dessie referral Hospital ART clinic, South Wollo, Ethiopia showed that Perceived stigma, widowed marital status, being symptomatic, fair and poor adherence, recent opportunistic infection, low CD4 count and non-disclosed HIV status were associated with depression. This finding suggests that depression is a huge problem on HIV patients. In the multivariable logistic regression analysis done in this study, age group of 25–34 year, widowed marital status, perceived stigma, CD4 count≤200 cells/mm3, symptomatic patients (WHO stage II and above), non-disclosed HIV status, recent opportunistic infections and fair and poor drug adherence were significantly associated with depression. As a result, those participants who were widowed and age group of 25–34 year, the odds of depression was 7.05 (AOR=7.05, 95% CI 2.32, 21.38) and 6.58 (AOR=6.58, 95% CI 1.11, 38.95) times higher compared single ones and those of older than 55 year, respectively. This study showed that the odd of depression was higher among younger age group patients compared to elders. This could be due to the fact that HIV/AIDS is stigmatizing disease that affects psychosocial wellbeing of patients.Widowed marital status was associated with increased occurrence of depression compared to those married. Death of marital partner and loved one associated with pathological grief and bereavement leads to sadness and loneliness that could increase depression. Similarly, symptomatic patients and those with CD4 count≤200, the odds of depression was 2.51 [AOR=2.51, 95% CI (1.38, 4.56)] and 5.94 [AOR=5.94, 95% CI (2.68, 13.62)] times higher compared to those who were clinically stable and had higher CD4 count, respectively. Immunocompromised condition reflected by low CD4 count and those who are symptomatic were associated depression occurrence compared to those clinically stable and had high CD4 count. In addition, this study also showed that recent opportunistic infections were associated with increased occurrence of depression. Opportunistic infections often associated with hospitalization and diminished functional status which could affect patient's psychosocial and economic conditions. Likewise, patients who experienced stigma and didn't disclosed their HIV status, the odds of depression was2.28 [AOR=2.28, 95% CI (1.12, 4.94)] and 5.38 [AOR=5.38, 95% CI (1.083, 26.73)]times higher compared to their counter parts. Perceived stigma go along with low self-image, social isolation and ultimately steered to develop psychological distress and depression. Recent opportunistic infections also associated with 5.18 times higher odds of depression compared to those who had no such history[AOR=5.18, 95% CI (1.12, 24.55)].

In addition, this study also showed that recent opportunistic infections were associated with increased occurrence of depression. Opportunistic infections often associated with hospitalization and diminished functional status which could affect patient's psychosocial and economic conditions. Furthermore, those who had fair and poor drug adherence, the odds of depression was six times higher compared to those good adherence [AOR=5.96, 95% CI (1.74, 20.52)].[14] Moreover, patient who were not strictly adherent to their antiretroviral medication were more depressed than those in good adherence. Poor adherence may cause instable clinical condition and loosen patient-physician relationship, ultimately leads to diminished concentration and feelings of worthlessness and disrupt self management activities. However, due the cross-sectional nature of the study poor adherence might be the result of depression which is the limitation of the study and difficult to establish cause-effect relationship.

Institutional based cross-sectional studydone among PLWHA who were attending at Gurage zone selected government Hospitals, shows that Sex, monthly income, internalized stigma, social support, duration of HAART and HAART interruption were significantly associated with depression among HIV/AIDS patients. In multiple logistic regression analysis, the covariates: sex, monthly income, internalized stigma, social support, duration of HAART and HAART interruption were statistically significant at 5% level of significant and were found to be the associated factors of depression among HIV/AIDS patients in this study .In this study females were statically significance with depression. Females were 2 times more likely to develop depression than males . The reason why females were more depressed than males might be due to biological (females have strong genetic predisposition and more subjected to fluctuating hormone), psychological (more ruminative and more invested in relationship) and sociocultural (more stressful) variation.

Those with income less than 500 birr were 4 times, income between 501-1000 birr were 3.61 times, income between 1001-1500 birr were 3.25 and income between 1501-2000 birr were 2.90 times more likely to suffer from depression than those with income≥2000 birr. The possible explanation for this might be PLWHA who have low income cannot easily full fill their needs, have difficult to get balanced diet and to cover health expense. In addition to their disease status, financial hardship leading to psychological distress and frustration, so they might easily develop depression. Duration of ART was highly significant with depression. Those patients who had duration of ART ≤6 months were3 times more likely to develop depression than patients who had duration of ART >6 months The reason might be PLWHA who started ART might be worry to adapt ART and face different adverse effects with in the first 6 months and this might be leads to depression. ART interruption was highly significant with depression. Patients who had not taken their ART properly were 3 times more likely to develop depression than patients who interrupt their ART. The possible explanation might be as PLWHA interrupt the ART, there might be increment of diseases progression, probability of occurrence of opportunistic infections and burden. Internalized stigma was highly and positively significant with depression. Patients who were internally stigmatized were 4 times more likely to develop depression than patients who were not internally stigmatized. This might be occurred as PLWHA were internally stigmatized, they fear and frustrate about gossip from others and decrease their social network. Social support was highly significant with depression. Those patients who had low social support were 4 times more likely to develop depression than patients who had high social support. This might be occurred due to social support were significantly influenced the mental health status of the respondents. When PLWHA got high social support, the probability of developing depression was less likely because they might be more confidential, free from psychosocial distress, resulting in a better quality of life.[15]

1.3 SIGNIFICANCE OF STUDY

If depression is diagnosed early, it is an avoidable and a separate illness that can be treated, even when PLWHA are under ART [28]. Majority of PLWHIV were under diagnosed and untreated for depression. More than half of PLWHIV that suffer from depression have not diagnosed properly as well as not treated [29]. The study in Korea shows that the prevalence of depression among PLWHIV was 21% and it was associated with poor adherence. Among these only 4% of the depressive patients were referred to psychiatric evaluation and treatment [30]. It indicated that there is low level of recognition and management of depression among PLWHIV.

This study aimed to assess the magnitude and associated factors of depression among HIV patients. Although the magnitude of depression among HIV / AIDS patients is high, few studies have been carried out in Ethiopia with no research carried out at the Halaba Kulito General Hospital.

This study was carried out to fill this research gap that could provide evidence for the successful prevention and treatment of depression in people living with HIV in the future. Findings from this study could help clinicians for appropriate patient management. In addition, it could be also useful as entry point for the integration of mental health care services with antiretroviral treatment.

CONCEPTUAL FFRAME WORK

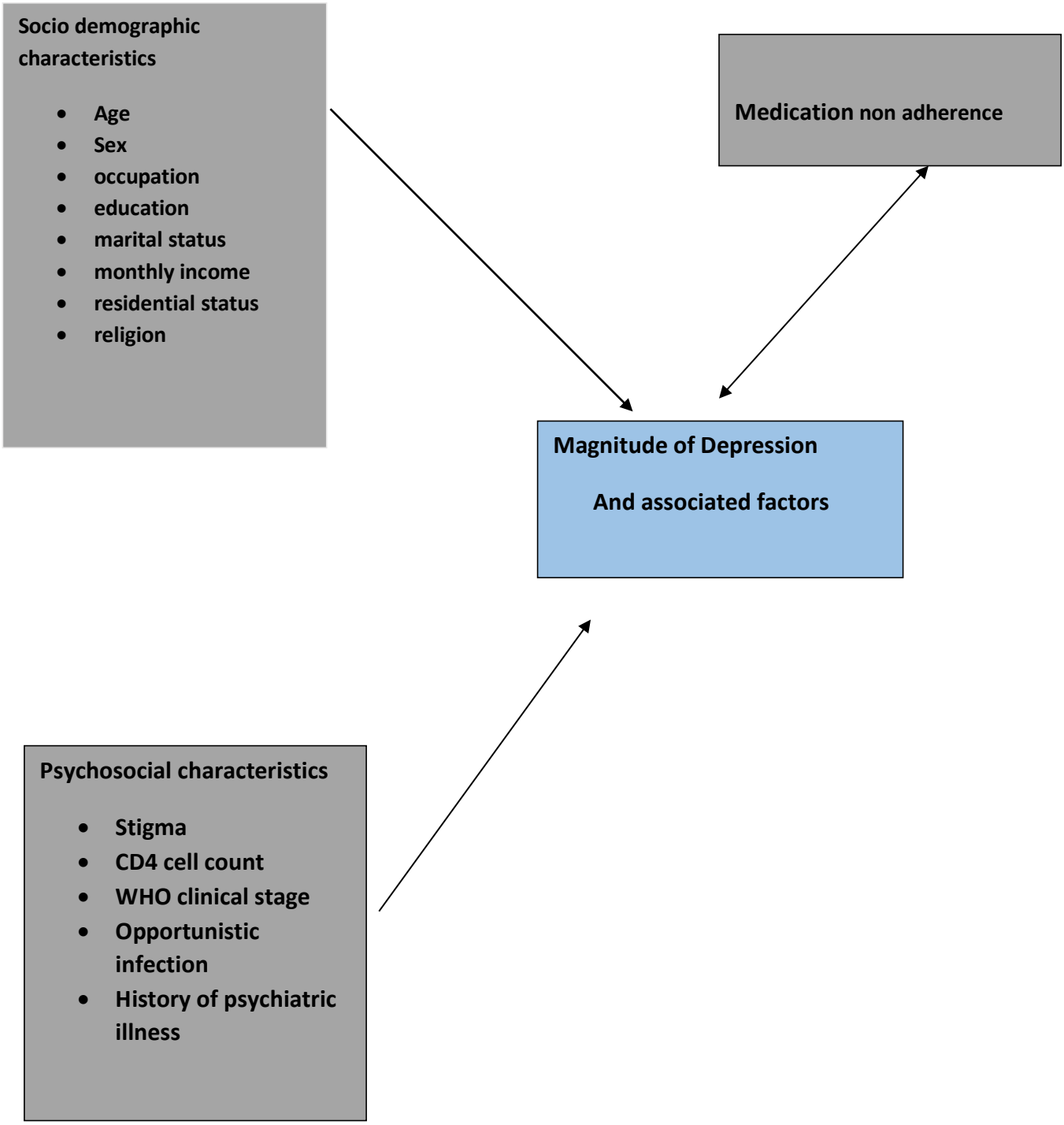

Fig 1 conceptual framework

CHAPTER THREE

OBJECTIVE

3.1 GENERAL OBJECTIVE

- To assess the magnitude of depression and associated factors among patient with HIV visiting Halaba Kulito General Hospital ART clinic Halaba, Southern Ethiopia, June 2021.

3.2 SPECIFIC OBJECTIVE

- To assess magnitude of depression among patient with HIV visiting Halaba Kulito General Hospital ART clinic Halaba, Southern Ethiopia, June 2021.
- To assess factors associated with depression among patient with HIV visiting Halaba Kulito General Hospital ART clinic Halaba, Southern Ethiopia, June 2021.

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CHAPTER FOUR:

METHODS AND MATERIALS

4.1 study area and period

This study was conducted in Halaba Kulito town. Halaba Kulito town, the administrative center of Halaba Zone, is found in Halaba zone, Southern Nations Nationalities and Peoples Region (SNNPR), Ethiopia. The town is located 245 km south from Addis Ababa, the capital of Ethiopia, and 90 km from Hawassa, the capital city of SNNPR. Estimated total population residing in the town is 39,507 people (49% (19,358) males and 51% (20,149) females). There is one health center and one General hospital in the town. The hospital provides service for more than 100,000 people in the catchment area. It has one emergency, three outpatient departments, antiretroviral treatment care, maternal and child health care, ophthalmology and dentistry departments and four wards; gynecology and obstetrics, pediatrics, medical and surgical wards. The study was conducted on June 2021

4.2 Study design

Hospital-based cross-sectional study was conduct at Halaba Kulito General hospital.

4.3 Population

4.3.1. Source population

All HIV-positive Patients who were attending antiretroviral therapy clinics in Halaba Kulito General Hospital were the source population.

4.3.2. Study population

All HIV-positive patients who were attending antiretroviral therapy clinics in Halaba Kulito General Hospital during the study period and who had at least one previous visit at antiretroviral therapy clinics was become an eligible for the study.

4.3.3. Study Unit: the unit of the study was HIV-positive individual.

4.4 Inclusion and exclusion criteria

Inclusion criteria:

- ART patients whose ages are 18 years and above
- Patient who have more than one ARTvisit

Exclusion criteria:

- All ART patients who are critically ill

4.5 Sample size determination

Sample size was determined using a single population proportion formula. A 20%(0.20) proportion of HIV/AIDS patients who had depression was taken from similar study done in Dessie Referral Hospital [8], with 95% level of confidence and 5% margin of error and assuming 10% non-respondent rate.

The required sample was calculated using the following formula:

The minimum sample size required, for a very large population (N>10,000) is:

$n = Z^2 p(1-p) / w^2$ Where, n= required minimum sample size Z= z-score value corresponding to 95% level of confidence=1.96 p= estimated population proportion=0.20 w= allowable margins of error=0.05

$$n = Z^2 p(1-p) / w^2$$

$$n= (1.96)^2(0.20)(1-0.20)/(0.05)^2$$

$$n =(3.84)(0.20)(0.80)/0.0025$$

$$n=245.76$$

But since the target population is less than 10 000 or n/N> 10% it is essential to use population correction formula. N=263

nf = final sample size after correction ni = initial sample size before correction.

nf= n/1+n/N

nf =245/1+245/263

nf=126

Adding a 10% non-response rate, 126×10/100=12.6

nf = 126+12.6=138 ,the required sample size is 138

4.6 Sampling Technique/Sampling procedure

Consecutive sampling technique was used to select study participants who full-fill the inclusion criteria from registered HIV patient. From 263 registered patients 138 study subjects were selected. All eligible adults visiting the ART clinic during the study period were consecutively invited to participate in the study.

4.7 Data collection procedure

Data was collected using pretested, standardized and interviewer-administered questionnaire which would address the objective of this study. Before initiation of the data collection process questionnaire was prepared in English by reviewing different literatures then translated to local language Amharic then back translated to English language for its consistency by two different individuals who speak both English and Amharic to keep its consistencies. No names or identifiers are included on the questionnaire. The questionnaire had four parts.

The first part consist sociodemographic characteristics (age, occupation, sex, education, marital status, monthly income, residential status, and religion), and the second part consist clinical and psychosocial characteristics of HIV-infected patients (CD4 cell count(cells/mm3),viral load, WHO clinical stage, opportunistic infection, and history of psychiatric illness).

The third part contain a internalized stigma scale which consisted of 12 items rated on a 5-point response format ranging from “strongly disagree” (1) to “strongly agree” (5) based on the extent

to which a respondent felt about him/herself since being diagnosed with HIV. The fourth part of the questionnaire assess the social support of the study participant by using Oslo three items social support scale (OSS-3), which provides a brief measure of social support andfunctioning and it is considered to be one of the best predictors of mental health. The Fifth part of the questionnaire consists the modified four item version of the Simplified Medication Adherence Questionnaire (SMAQ), which used to quantify medication non adherence. The Sixth part of the questionnaire was the Patient Health Questionnaire (PHQ9), used to assess the presence of depression among HIV-infected patients. Data was collected by three fourth years nursing students who were take training for one day about data collection procedure. Every day, filled questionnaire was checked completeness, accuracy, and consistency to increase data quality.

4.8 Data processing and analysis

Data was checked for completeness and cleaned before it was entered to a computer. Completed data was entered into and exported to statistical package for social science (SPSS) version 25 for data management and analysis. Descriptive statistics like percentage, median (IQR) and mean was used to summarize sociodemographic and clinical characteristics and was presented in the form of text, table and graphs. Binary logistic regression model was used to identify factors associated with depression on HIV/AIDS patients. Crude and adjusted odds ratio with 95% CI were computed to see the presence and strength of association between independent variables and depression. Variables having a p-value of 0.05 and less in the multivariable logistic model were considered as significantly associated with depression. Model fitness was checked by using Hosmer and Lemeshow goodness of fit test.

4.9Variable of the study

4.9.1 Independent variable

- ✓ Age
- ✓ Sex
- ✓ Religion
- ✓ Ethnicity
- ✓ Level of education
- ✓ Marital status
- ✓ Occupation
- ✓ Monthly income
- ✓ Residence
- ✓ Cd4 count
- ✓ Viral load
- ✓ WHO clinical stage
- ✓ Opportunistic infection
- ✓ Medication adherence
- ✓ Stigma
- ✓ Social support

4.9.2. Dependent variable

- ✓ Depression

4.10Operationaldefinitions

Depression:

In our study Depression was measures by using PHQ9. PHQ9 uses a Likert-like scale consisting of nine questions about signs and symptoms that categorized into four response options ranging from 0 (not at all) to 3 (nearly every day), with a total score ranging from 0 to 27 points. A total score ≤4 was considered as normal, 5–9 mild depression, 10–14 moderate depression, 15–19 moderately severe depression, and 20–27 severe depression.[31]

Stigma

In this study we were use the 12-item stigma scale which rated on a 5-point response format ranging from “strongly disagree” (1) to “strongly agree” (5). Based on the extent to which a respondent felt about him/herself since being diagnosed with HIVtotal score (possible range = 12-60) obtained by summing responses to all items. From the mean the higher scores indicating internally stigmatized and lower scores indicating not internally stigmatized.[32]

Medication Non adherence

The Simplified Medication Adherence Questionnaire (SMAQ) was used to quantify medication nonadherence. The scoring plan of the four-item SMAQ was yes = 1 and no = 0. To present a range of scores of 0–4, scores on the SMAQ was summed. For the purposes of data analysis, total scores was dichotomized, with scores 1–4 representing nonadherence to medication and a score of 0 adherence to medication[33]..

Opportunisticinfections (OIs) :are infections that occur more often or are more severe in people with weakened immune systems than in people with healthy immune systems.[34]

Social support:

Oslo three items social support scale (OSS-3) provides a brief measure of social support andfunctioning and it is considered to be one of the best predictors of mental health. It coversdifferent fields of social support by measuring the number of people the respondent feelsclose to, the interest and concern shown by others, and the ease of obtaining practicalhelp from others. In order to score OSS-3, total scores are calculated by adding up the raw scores for each item. The sum of the raw scores has a range from 3-14. A score ranging between 3 and 8 is classified as poor support, a score between 9 and 11 as intermediate support, and a score between 12 and14 as strong support.[35]

4.11Data quality control techniques

To ensure data quality during data collection, coding, entry and analysis, pretested, standardizedstructured questionnaire was used. Every day, filled questionnaire was checked completeness, accuracy, and consistency to increase data quality The questionnaire was pretested to identify potential problem of the questionnaire ,un anticipated interpretation and cultural objection to any questions in 5%(7 participant) at Halaba Kulito General Hospital . based on the pre tested result the quationnier was additionally ad justed contextually and terminologically. training was given to the data collectors. To prevent any confusion and to have a common understanding about the study,training was given to the data collectors. Supervision of data collectors by principal investigator were include observation of how the data collectors collected the data, And also to ensure the validity of the information gathered the investigator were supervised the data collector randomly.The filled questionnaire was checked for completeness by data collector to increase data quality. Consequently, any problem encountered was discussed among the team and solve immediately to increase data quality.

4.12 Ethical consideration

The letter of permission was taken from Wolkite university department of nursing and given to Halaba Kulito General Hospital and respective ward to get permission. The respondents was informed about the objective and purpose of the study and verbal and written consent was taken from each respondents. Also they were informed about their right of not participating in the study or withdrawing at any time. Confidentiality of the information was assured and collected anonymously. Patients who have depression would be linked to psychiatry clinic for further treatment and intervention.

4.13Dissemination plan

At the end, the result will be submitted to Wolkite University College of Medicine and health science, department of Nursing and also disseminate for Halaba Kulito General Hospital and Kulito town health bureau by soft copy. Finally the result will presented during presentation of the graduating class of completion of BSc. degree in Nursing.

CHAPTER FIVE

RESULT

5.1 SOCIO DEMOGRAPHIC CHARACTERSTICS

A total of 138 study participant were included in the study. The mean ±SD age of the respondent was 36.80±11.439. Among participants, 89 (64.5%) HIV infected patients were <40, 70(50.7%) were females, 72 (52.2%) were married, 76 (55.1%) were Muslims,87(63.0%) were Halaba, 37(26.8%) were merchants, 88(64.8%) had monthly income >3600, and 108(78.3%) were lives in Urban.

AGE OF RESPONDENT

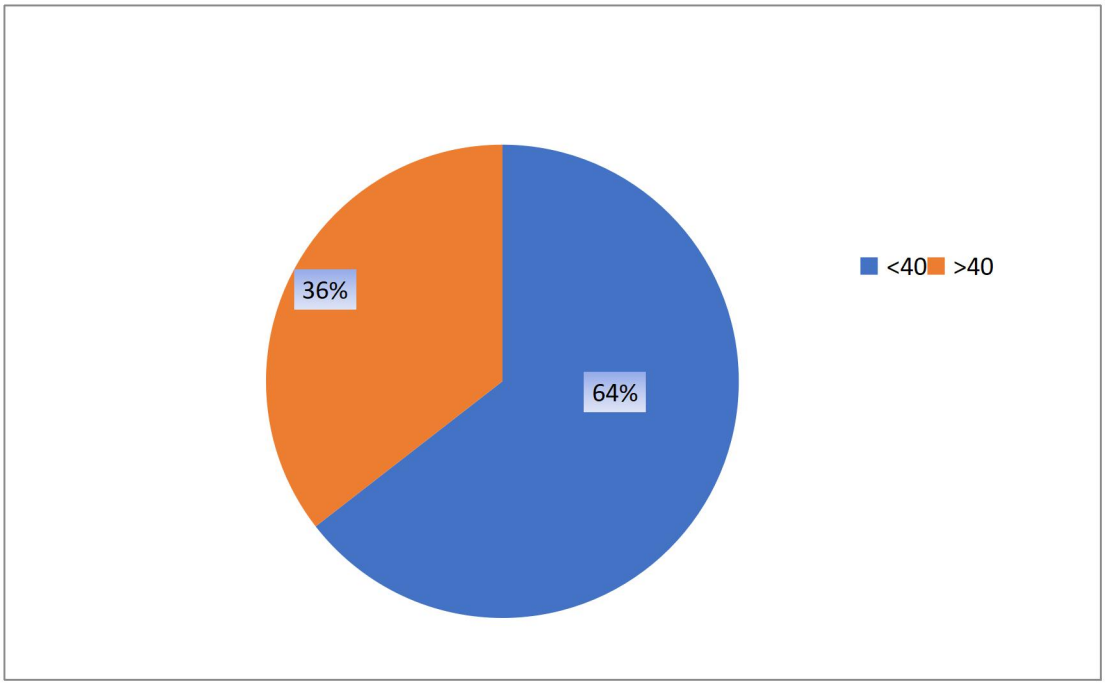

FIG.1 Age of respondent visiting Halaba Kulito General Hospital ART clinic Halaba, Southern Ethiopia, June 2021.

Table 1 Socio demographic characteristics of HIV infected patients visiting Halaba Kulito General Hospital ART clinic Halaba Zone, Southern Ethiopia, June 2021.

Variables		Frequency	Percent
Age	<40	89	64.5
	>40	49	35.5
Sex	Male	68	49.3
	Female	70	50.7
Marital status	Married	72	52.2
	Single	36	26.1
	Divorced	16	11.6
	Widowed	14	10.1
Religion	Muslim	76	27.5
	Orthodox	38	10.1
	Protestant	14	55.2
	Catholic	2	1.4
	Adventist	8	5.8
Ethnicity	Halaba	87	63.0
	Oromo	11	8.0
	Gurage	21	8.7
	Amhara	12	15.2
	Other	7	5.1
Occupation	Government employed	24	17.4
	Merchant	37	26.8
	Farmer	28	20.3
	Daily labourer	19	13.8
	Student	13	9.4
	Other	17	12.3
Education	No formal education	31	25.5
	Primary education	56	40.6
	Secondary education	13	9.4
	Preparatory education	5	3.6
	Diploma and above	33	23.9
Monthly income	<3600	50	36.2
	>3600	88	64.8
Residence	Urban	108	78.3
	Rural	30	21.7

5.2 PREVALENCE OF DEPRESSION

Depressive symptoms were measure using PHQ9. Based on the cutoff point >4,the over all prevalence of depression was 123(89%). Regarding severity of depression, 101(73.2%) participant had mild depression(PHQ9 score 5-9), and 22(15.9%) had moderate depression **(**PHQ9 10-14.)

5.3 CLINICAL AND PSYCHO SOCIAL CHARACTERISTICs

Among the 138 participant 70 (50.7%) had cd4 count 200-500 (cells/mm³), 108(78.3%50) had undetectable viral load, 52(37.7%) had stage II HIV,14(10.1%) had opportunistic infection,15(10.9%) had history of mental illness, 60(43.5%) had internalize stigma, and 102 (73.9%) had poor social support. The result of this study revealed that 53(38.4%) study participant were non adherent to medication and 85(61.6%) adherent

Table 2Clinical and Psychosocial characteristics of study participant visiting Halaba Kulito General Hospital ART clinic Halaba Zone, Southern Ethiopia, June 2021

Variable		Frequency	Percent
Cd4 count	<200	57	41.3
	200-500	70	50.7
	>500	11	8.0
Undetectable viral load	Yes	108	78.3
	No	30	21.7
WHO clinical stage	Stage I	78	56.5
	Stage II	52	37.7
	Stage III	8	5.8
Opportunistic infection	Yes	14	10.1
	No	124	89.9

Mental illness	Yes	15	10.9
	No	123	89.1
Stigma	Not internally stigmatized	78	56.5
	Internally stigmatized	60	43.5
Social support	Poor social support	102	73.9
	Intermediate social support	27	19.6
	Strong social support	9	6.5
Medication adherence	Medication adherence	85	61.6
	Medication non adherence	53	38.4

5.4 FACTOR ASSOCIATED WITH DEPRESSION

On bivariate logistic analysis sex ,availability of social support and internalizing stigma that fulfilled the criterion of p value less than or equals to 0.020 significance level ,and considered for multivariate logistic regression analysis. After adjustment of all confounder internalizing stigma availability of social support and being female were significantly associated with depressions ($p \leq 0.05$). The odds of developing depression among HIV infected patients with the history of internalizing stigma 12 times higher when compared to those without internalizing stigma in the community (AOR=12.986 95%CI 2.220-75.954). The odds of developing depression were 13 times higher among HIV infected patient who had poor social support and 9 times higher among HIV infected patient who had Fair (intermediate) social support than strong(good) social support respectively (AOR=13.714,95%CI 1.426-131.910 ; AOR=9.382,95%CI 1.355-64.950). The odds of developing depression among Female HIV infected patient is higher when compared to Male (AOR=12.915,95%CI 1,473-113,263)

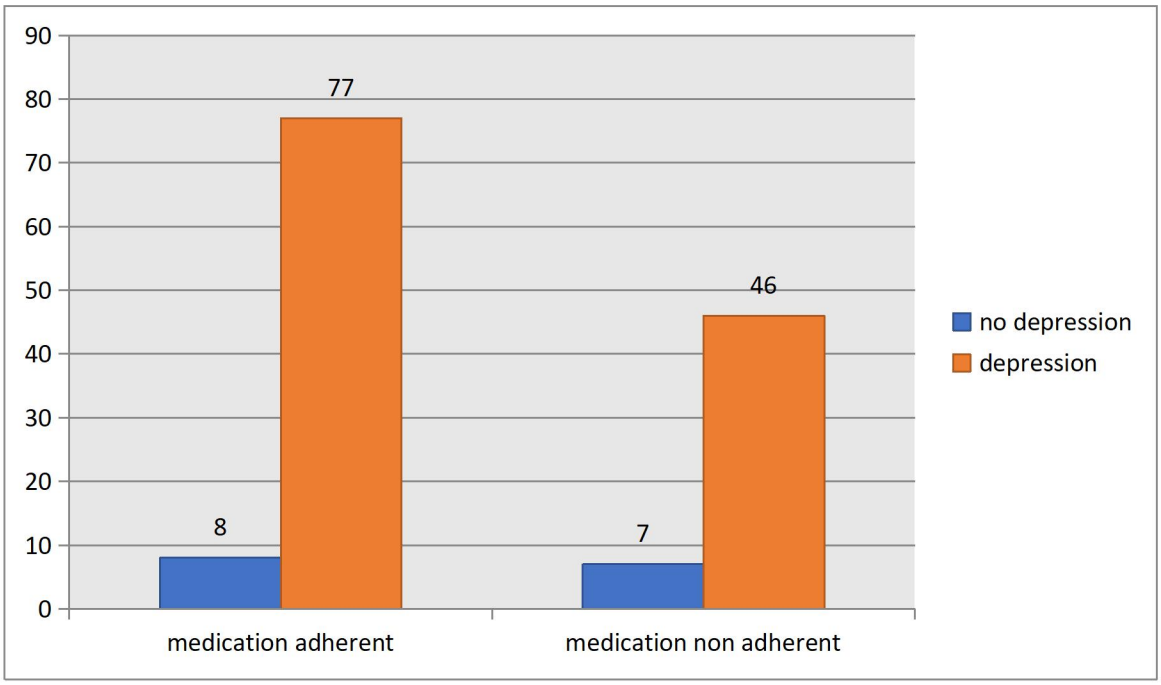

Fig. 2 comparison of depression with medication adherence status of study participant visiting Halaba Kulito General Hospital ART clinic Halaba, Southern Ethiopia, June 2021.

Table 3 Factor associated with depression among patent with HIV visiting Halaba Kulito General Hospital ART clinic Halaba, Southern Ethiopia, June 2021.

Variables		Depression		COR(95% CI)	p-value	AOR(95% CI)	p-value
		No	Yes				
Age	<40	11(73.3%)	78(63.4%)	I			
	>40	4(26.7%)	45(36.6%)	0.630 (0.190,2.096)	0.452		
Sex	Male	1(6.7%)	67(54.5)	I	**0.007**	I	0.021
	Female	14(93.3%	56(45.5%)	16.750(2.136 ,131.362)		12.915(1,47 3,113,263	
Marital status	Married	11(73.8%)	61(49.6%)	I	0.573		
	Single	2(13.3%)	34(27.6%)	1.214(0.102, 14.498)			
	Divorced	2(13.3%)	14(11.4%)	0.500(0.041, 6.166			
	Widowed	0(0%)	14(11.4%)	0.436(0.051, 3.689)			
Religion	Muslim	10(66.7%	66(53.7%)	I	0.769		
	Orthodox	3(0.0%)	35(28.5%)	1.458(0.134, 15.915)			
	Protestant	290(13.3%)	12(9.8%)	0.750(0.058, 9.719)			
	Catholic	0(0%)	2(1.6%)	1.031(0.114, 9.349)			
	Adventist	0(0%)	8(6.5%)	0.250(0.010, 5.985			
Ethnicity	Halaba	10(66.7%)	77(62.6%)	I			
	Oromo	3(20.0%)	8(6.5%)	1.375(0.150,			

				12.637)	0.544		
	Gurage	2(13.3%)	19(15.4%)	0.381(0.032, 4.550)			
	Amhara	0(0%)	12(9.8%)	1.714(0.092, 31.924)			
	Other	0(0%)	7(5.7%)	1.357(0.106, 17.417)			
Occupation	Government employed	3(20.0%)	21(17.1%)	I	0.407		
	Merchants	2(13.3%)	35(28.5%)	1.500(0.264, 8.523)			
	Farmer	1(6.7%)	27(22.0%	3.750(0.565, 24.910)			
	Daily labourer	4(26.7%	15(12.2%)	5.786(0.550, 60.875)			
	Student	2(13.3%)	11(8.9%)	0.804(0.152, 4.246)			
	Other	3(20.0%)	14(11.4%)	1.179(0.167, 8.331)			
Education	No formal education	3(20.0%)	28 (22.8%)	1.667(0.363, 7.652	0.769		
	Primary school	5(33.3%)	51(41.5%)	2.277(0.565, 9.171)			
	Secondary school	2(13.3%)	11(8.9%)	0.982(0.165, 5.835)			
	Preparatory school	0(0%)	5(4.1%)	0.893(0.085, 9.348)			
	Diploma and above	5(33.3%)	28(22.8%)	I			
Monthly income	<3600	6 (40.0%)	44(35.8%)	0.835(0.279, 2.502	0.835		
	>3600	9(60.0%)	79(64.2%)	I			

Resident	Urban	12(80.0%))	96(78%)	I			
	Rural	3(20.0%)	27(22.0%)	0.889(0.234, 3.379)	0.863		
Cd4 count	<200	11(6.7%)	10(8.1%)	1.290(0.145, 11.455)	0.968		
	200-500	3(40.8%)	51(41.5%)	1.097(0.357, 3.366			
	>500	8(53.3%)	62(50.4%)	I			
Undetectable viral load	Yes	12(80.0%0	96(78%)	I			
	No	3(20.0%)	27(22.0%)	0.889(0.234, 3.379)			
WHO clinical stage	Stage I	9(60.0%)	69(56.1%)	I	0.931		
	Stage II	5(33.3%)	47(38.2)	1.095(0.120, 9.958)			
	Stage III	1(6.7%)	7(5.7%)	1.343(0.136, 13.350)			
Opportunistic infection	No	2(13.3%)	12(9.8%)	I	0.666		
	Yes	13(86.7%)	111(90.2%)	0.703(0.141, 34,92)			
Mental illness	No	1 (6.7 %)	14(11.4%)	I			
	Yes	14(93.3%)	109(88.6%)	1.798(0.219, 14.735			
Stigma	Not Internally stigmatized	8(53.3%)	94(76.4%)	I	**0.003**	I	
	Internally stigmatized	2(13.3%)	25(20.3%)	10.511(2.270 ,48.661)		12.986(2.22 0,75.954)	

Social support	Poor social support	5(33.3%)	4(3.3%)	14.687(3.278 ,65.818)	**0.001**	13.714(1.42 6,131.910)	0.023
	Intermediate social support	2(7.4%)	25(92.6%)	15.625(2.223 ,109.839)		9.382(1.355, 64.950)	
	Strong social support	5(55.6%)	4(44.5%)	I		\\\\ I	
Medication adherence	Non Adherent	8(53.3%)	77(62.6%)	1.465(0.498, 4.305)			
	adherent	7(46.7%)	46(37.4%)	I			

CHAPTER SIX

DISCUSSION

This hospital based cross-sectional study was carried out to evaluate prevalence and associated factor of depression among HIV infected patients at HKGH using PHQQ 9.the over all prevalence of depression among HIV infected patients was 89%. Studies conducted at China, sudan and South Africa, have prevalence of 71.9%, 63.1% and 53.8% respectively[37,12,38]. On the other hand, studies conducted in Pakistan, Brazil and Dessie(Southern Ethiopia), reported lower prevalence, i.e.32.2%,29.4% and 20% respectively[11,36,14]. Possible causes for this discrepancy may be variation in study design, socio cultural factor, sample size and difference in depression diagnostic tools.

In our study participants who were internalize stigma develop depressive symptoms more frequently than those without. This finding is similar to the result of studies conducted in South Africa and Pakistan. This may be resulted from HIV infected patients may experience stigma and discrimination because of having persistent and life long illness in society ,and thus may prefer to live alone to avoid social stigma that leads to increase depressive symptoms. The result of present study revealed that there was statistically significance association between being female and depression on bivariate logistic analysis. This finding is in line with a study conducted in Gurage Zone, Southern Ethiopia[15]. The reasons for this may be due to the fact that females have a strong predisposition and more subjected to fluctuating hormone; or they are more ruminative and more invested in relationship. The odds of developing depression were higher among those patient who had poor social support. This finding is consistent with the study conducted in Gurage Zone, Southern Ethiopia [15]. Social support were significantly influence the mental health status of the respondent. When PLWHA had good social support they will have high probability of developing self-confidence and they become free from psychosocial distress

LIMITATION OF STUDY

- As the study is institutional based, participant may not represent the general population hence it may be difficult to generalize this finding to the general population
- Since appointment strategy is in practice it was difficult to get patient
- We did not done validation study for perceived stigma scale and Oslo3-item social support scale

STRENGTH OF THE STUDY

- To the best of our knowledge, this is the first study conducted in Halaba Kulito Town to highlight the presence of depression among IV infected patient using PHQ9 and describe the various associated factor with depression

CHPTER SEVEN

CONCLUSION

From the finding of this study it emerged that depression is very high among patient on ART attending Halaba Kulito General Hospital. Socio demographic characteristic like sex, and psychosocial characteristic like internalizing stigma and poor social support were variables which shows significance association with depression among HIV positive patient

RECOMMENDAIONS

- Since prevalence of depression high among ART patients routine screening of patient for depression should be done
- Health education should be given at facility level to reduce stigma

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Annex I: Questionnaire in English Version

Wolkite University College of Medicine and Healthy Science Department of Nursing. I am…….. a student of graduating year nursing student conducting a research on 'Magnitude of Depression and Associated Factors among Patient with HIV visiting Halaba Kulito General Hospital ART Clinic, Halaba zoneEthiopia,2021.The purpose of this study is to assess the magnitude depression and associated factors among HIV infected patient. And this questionnaire is designed to collect data on the above issue among HIV patients. Participating in this study has no special benefit or identified risk. The information you was give is extremely valuable for us and to the scientific arena. Therefore, you are cordially asked to participate in this study.

Are you volunteer to participate? Yes No ----------

PART I : Socio-demographic Characteristics (please, encircle your answer)

No	Question	Answers/ choices
1	Age	
2	Sex	1) male 2) female
3	Marital status	1) married 2) single 3) divorced 4) widowed 5) other(,specify)----------
4	Religion	1) orthodox 2) Muslim 3) protestant 4)catholic 5) other(specify)----------
5	Ethnicity	1) Halaba 2) Amhara 3) Oromo 4) Tigre 5) Gurage 5) other(specify)----------
6	Occupation	1) Student 2) Merchant 3) farmer 4)government employee 5)daily labourer 6) other(specify)----------
7	Educational status	1) No formal education 2) reading and writing only 3) educated(speccify)----------
8	Monthly Income	
9	Residence	1) Rural 2) urban

PART II clinical characteristics

1. CD4 count _____
2. Current viral load _____
3. WHO clinical stage _____
4. Any form of opportunistic infection? A. yes B. No
5. If you answer ‘ yes’ to question no‘4’ specify:_____
6. Do you have history of mental illness? A. yes B. No
7. If you answer ‘ yes’ to question no ‘6’ specify:_____
8. If you answer ‘yes’ to question no ‘6’, do you take medication? A.Yes B.No State_____

PART III .12-item short version of the HIV Stigma Scale .Please put “ ✔ “ mark for your answer

	Questions	Answers/Choices				
No.	The 12-item short version of the HIV Stigma Scale questions	strongly disagree	disagree	Neither agree nor disagree	agree	strongly agree
1	People I care about stopped calling after learning I have HIV.					
2	I have lost friends by telling them I have HIV.					
3	Some people avoid touching me once they know I have HIV					
4	I work hard to keep my HIV a secret .					
5	Telling someone I have HIV is risky .					

6	I am very careful who I tell that I have HIV.					
7	Most people believe a person who has HIV is dirty .					
8	People with HIV are treated like outcasts.					
9	Most people are uncomfortable around someone with HIV.					
10	I feel guilty because I have HIV .					
11	People's attitudes about HIV make me feel worse about myself .					
12	I feel I'm not as good a person as others because I have HIV.					

PART IV question to assess social support (Oslo Social Support Questionnaires (Oslo-3): the following questions ask about how participants experience his/her social relationship.

No	Oslo social support questions	Response
Q-401	How many people are so close to you that you can count on them if you have serious personal problems? (choose one option)	4. More than 5
		3. 3-5
		2. 1 or 2
		1. None
Q-402	How much concern do people show in what you are doing? (choose one option)	5. A lot of concern and interest
		4. Some concern and interest
		3. Uncertain
		2. Little concern and interest
		1. No concern and interest
Q-403	How easy is it to get practical help from family or relatives if you should need it? (choose one option)	5. Very easy
		4. Easy
		3. Possible
		2. Difficult
		1. Very difficult

PART V:The Simplified Medication Adherence Questionnaire(SMAQ).Please encircle your answer

No.	Questions	Answers	
1	Do you ever forget to take your medicine?	**A.**Yes	**B.** NO
2	Are you careless at times about taking your medicine?	**A.**Yes	**B.** No
3	If at times you feel worse, do you stop taking your medicine?	**A.** Yes	**B.**No
	Did you not take any of your medicine	**A.**Yes	**B.**No

4	over the last weekend?					
5	Over the past 3 months, how many days have you not taken any medicine at all?	**A.**≤2 days			**B.>2 days**	
6	Thinking about the last week. How often have you not taken your medicine?	**A.**Never	**B.**1-2 times	**C.**3-5 times	**D.**6-10	**E.>10 times**

PART VI: Patient Health Questionnaire 9 (PHQ -9).Please put " ✓" mark for your answer.

Over the last 2 weeks, how often have you been bothered by any of the following problems?					
	Symptoms	Not at all	Several days	More than half the days	Nearly every day
PHQ1	Little interest or pleasure in doing things	0	1	2	3
PHQ2	Feeling down, depressed, or hopeless	0	1	2	3
PHQ3	Trouble falling or staying asleep, or sleeping too much	0	1	2	3
PHQ4	Feeling tired or having little energy	0	1	2	3
PHQ5	Poor appetite or over eating				
PHQ6	Feeling bad about yourself or that you are a failure or have let yourself or your family down	0	1	2	3
PHQ7	Trouble concentrating on things, such as reading the newspaper or watching television	0	1	2	3
PHQ8	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
PHQ9	Thoughts that you would be better off dead or of hurting yourself in some way	0	1	2	3

ANNEX AMHARIC VERSION QUATINNER

የወልቂጤ ዩኒቨርሲቲ ህክምናና ጤና ሳይንስ ኮሌጅ ነርሲንግ ትምህርት ክፍል

የራስ ማንነት ማስተወዋወቂያ ቅጽ

እኔተማሪ .....የወልቂጤዮንቨርስቲተመራቂተማሪስሆንበኤችአይቪህምተኞች ላይ የሚከሰት ድባቴ እና ተያያዥ ጉዳዮች መጠን ላይ ሰኔ 2013 በሀላባ ቁሊቶ ሆስፒታል ጥናት እያረኩ እገኛለሁ።የጥናቱአላማበኤችአይቪየተያዙህሙማንላይየሚከሰትድባቴእናተያያዥጉዳዮችመጠንለመመር መርነዉ።ይሄ መጠይቅ ከላይ በጠቀስኩት ጉዳይ ላይ መሣተፍ የተለየ ጥቅም ሆነ ጉዳት የለውም የምትሰጠው / ጪዉ መረጃ ለጥናታችን እጅግ በጣም አስፈላጊ እና ጠቃሚ ስለሆነ በመሳተፍ እንዲተባበሩን በትህትና እንጠይቃለን።

ለመሳተፍፍቃደኛኖትሀ) እስማማለሁለ)አልስማማም

ክፍል፩የማህበራዊ ጥናት አይነቶች/እባክዎትመልሱን ይክበቡ/

ተ.ቁ	ጥያቄ	የመልስአማራጮች
1	እድሜ	----------
2	ፆታ	1)ወንድ 2) ሴት
3	የጋብቻሁኔታ	1)ያገባ\ች 2) ነጠላ 3) የተፋታ\ች 4) የሞተበት\የሞተባት 5) ሌላ፣ አብራራ----------
4	ሃይማኖት	1)ኦርቶዶክስ 2) ሙስሊም 3) ፕሮቴስታንት 4)አድቬንቲስት 5) ሌላ፣ አብራራ----------
5	ብሄር	1) ሀላባ 2) አማራ 3) ጉራጌ 4) ኦሮሞ 5) ትግሬ 6) ሌላ ፣ አብራራ----------
6	የስራሁኔታ	1)ተማሪ 2) ነጋዴ 3) ገበሬ 4)የመንግስትሰራተኛ 5)የቀንሰራተኛ 6) ሌላ----------
7	የትምህርትደረጃ	1) መደበኛ ት\ት ያልተማረ 2) ማንበብናመፃፍየሚችል 3) የተማረ፣ ደረጃውይገለፅ----------
8	የወርገቢ	
9	መኖሪያ	10 ገጠር 2) ከተማ

ክፍል፪፡ የ ህ ክ ምና ምር መራ ና አ እ ምሮ አ ዊ ሁ ኔ ታ

1. Cd4 cell ቆ ጠራ .....

2.አ ሁ ና ዊ በ ደ ምዉሰ ጥ ያ ለ ዉየ ቫ ይ ረ ስ መጠን (Viral load).....

3.የ ዓ ለ ም ጤና ድ ር ጅ ት clinical stage.....

4.ማን ኛ ውምዓ ይ ነ ት ከ ኤ ች አ ይ ቪ ጋ ር ተ ያ ይ ዞ የ ሚመጣ ኢ ን ፌ ክ ሽ ን (Opportunistic infection) አ ለ ?

ሀ) አ ዎ ለ) አ ይ

5.ለ ጥ ያ ቄ ቁ ጥ ር ‹4› መል ሶ ‹አ ዎ ›ከ ሆ ነ ይ ግ ለ ጹ .....

6.የ አ እ ምሮ ህ መምታ ሪ ክ አ ለ ዎ ት ? ሀ) አ ዎ ለ)አ ይ

7. ለ ጥ ያ ቄ ቁ ጥ ር ‹6›‹አ ዎ ›የ ሚል መል ስ ከ ሰ ጡይ ግ ለ ጹ .....

8. ለ ጥ ያ ቄ ቁ ጥ ር ‹6›‹አ ዎ ›የ ሚል መል ስ ከ ሰ ጡ ፣ መድ ሃ ኒ ት ይ ወ ስ ዳ ሉ ? ሀ) አ ዎ ለ)አ ይ

ካ ለ ጥ ቀ ስ .....

ክፍል፫ ፡ ከ ኤ ች አ ቪ ፓ ር ተ ያ ይ ዞ ሊ ከ ሰ ት ስ ለ ሚች ል መገ ለ ል መለ ኪ ያ ጥ ያ ቄ ዎ ች ። ለ ጥ ያ ቄ ዎ ቹ ከ ቀ ረ ቡ ት አ ማራ ጮች የ ሚስ ማሞክ ት ን የ እ ር ሶ ን ሀ ሳ ብ የ ሚያ ን ፀ ባ ር ቀ ዉን መል ስ ላ ይ የ “x”ምልክትያ ድ ር ጉ

ተ ራ ቁ.	ከኤ ች አ ቪ ፓ ር ተ ያ ይ ዞ ሊ ከ ሰ ት ስ ለ ሚች ል መገ ለ ል መለ ኪ ያ ጥ ያ ቄ ዎ ች	በፍ ው ም አልስ ማማ ም	አልስ ማማ ም	ገ ለ ል ተ ኛ	እስማ ማለሁ	በጣምእስ ማማለሁ
1	የምቀርባቸውሰ ዎ ች በ ደ ሜ ዉስ ጥኤ ች አ ይ ቪ መኖ ን ካ ወ ቁ በ ታ ላ ቀ ረ ቤ ታ ች ዉቀ ን ሷ ል					
2	የኤችአይቪቫ ይ ረ ስ በ ደ ሜውስ ጥ መኖ ሩ ን በ መና ገ ሬ ያ ጣ ታ ች ዉጓ ደ ኞ ች አ ሉ					

3	አንዳንድሰ ዎችየ ኤችአ ይቪቫ ይረ ስ በ ደ ሜ ውስ ጥመኖ ሩን ካ ወቁ በ ኋ ላ ያ ላ ቸ ዉ ን የ ት ኛ ውምን ክ ኪ እ ን ደ መጨበ በ ጥ ያ ሉ ት ን አ ቁ መዋ ል					
4	በተቻለኝአ ቅ ምሁ ሉ የ ኤ ች አ ይ ቪ ቫ ይ ረ ስ በ ደ ሜውስ ጥመኖ ሩ ን ሚስ ጥ ር አ ድ ር ጌ አ ቆ ያ ለ ሁ					
5	የኤችአይቪቫ ይ ረ ስ በ ደ ሜውስ ጥመኖ ሩ ን ለ ሰ ዎ ች ማሳ ወቅ ሊ ጎ ዳ ኝ ይ ች ላ ል /አደገኛነዉ					
6	የኤችአይቪቫ ይ ረ ስ በ ደ ሜውስ ጥመኖ ሩ ን ለ ማን መና ገ ር እ ን ዳ ለ ብኝ በ ጥ ን ቃ ቄ እ መር ጣለ					
7	አብዛኛዎቹሰ ዎ ች የ ኤ ች አ ይ ቪ ቫ ይ ረ ስ በ ደ ም ውስ ጥመኖ ር እ ን ደ ቆ ሻ ሻ ተ ግ ባ ር / ብልግና ይ ታ ያ ል					
8	ከኤ ች አ ይ ቪ ቫ ይ ረ ስ ጋ ር የ ሚኖ ሩ ሰ ዎ ች በ ሰ ዎ ች ዘ ን ድ የ ተ ጠ ሉ ና ቸ ዉ					
	አብዛኛውሰ ዉየ ኤ ች አ ይ ቪ ቫ ይ ረ ስ በ ደ ማቸ ዉ					

9	ውስ ጥከ ሚኖ ር ሰ ዎ ች ጋ ር ምቹ /መል ካ ምግ ን ኙ ነ ት እ ን ዲ ኖ ረ ዉአ ይ ፈ ል ግ ም					
10	የኤችአይቪቫ ይ ረ ስ በ ደ ሜውስ ጥ በ መኖ ሩ የ ጥ ፋ ተ ኝ ነ ት ስ ሜት ይ ሰ ማኛ ል					
11	ሰዎችስለኤ ች አ ይ ቪ ያ ላ ቸ ዉ አ መለ ካ ከ ት ስ ለ ራ ሴ መጥ ፎ /ያ ል ተ ገ ባ ስ ሜት አ ሳ ድ ሮ ብ ኛ ል					
12	በደሜውስ ጥየ ኤ ች አ ይ ቪ ቫ ይ ረ ስ በ መኖ ሩ ምክ ን ያ ት እ ን ደ ሌ ሎ ች ሰ ዎ ች መል ካ ም/ጥ ሩ ሰ ው እ ን ዳ ል ሆ ን ኩ ይ ሰ ማኛ ል					

ክፍል፬ **Social support scale (Oslo-3)** የሚከተሉት ሦስትጥያቄዎችከማህበረሰቡናከቤተሰብዎየሚያገኙትንድጋፍናተዛማጅጉዳዮችይዳስሳል፡የግልተ ሞክሮዎትንየተመለከተ ነው። እባኮት እርሶንየሚገልፆትን**አንድ መልስ ብቻ**ይመረጡ

ተ.ቁ	ጥያቄ	1	2	3	4	5
801	በጣምየሚቀረቦትናበከባድየግልችግርጊዜየሚደርሱሎትስንትሰዎችይሆናሉ (አንድአማራጭብቻይጠቀሙ)	የሉም	1 ወይም 2	3-5	ከ 5 በላይ	__
802	በሚያደርጓቸውነገሮችሰዎችምንያህልትኩረትና ፍላጎትያሳያሉ (አንድአማራጭብቻይጠቀሙ)	ምንም	ትንሽ	አላውቅም	መጠነኛ	በጣም ብዙ
803	እርዳታየግድበሚያስፈልግዎጊዜከጎረቤቶቾትያንንእርዳታማግኘትምንያህልቀላልነው (አንድአማራጭብቻይጠቀሙ)።	በጣምአስቸጋሪ	አስቸጋሪ	የሚቻል	ቀላል	በጣም ቀላል

ክፍልፎ ፡ የ ሚከ ተ ሉ ት ጥያ ቄ ዎ ች መድሀ ኒ ቶ ን በ አ ግ ባ ቡ መውሰ ዶ ን ለ መ መዘ ነ የ ቀ ረ ቡ ና ች ዉ ። እ ባ ኮ ት መልሶ ን ይክ በ ቡ

ተ ራ ቁ .	ጥያ ቄ ዎ ች	አማራጮች/ መልስ	
1	መድሀኒትህ/ሽረ ስ ተ ህ /ሽታ ውቃ ለ ህ / ታውቂያለሽ?	**ሀ)አዎ**	**ለ) አይ**
2	መድሀኒትህ/ሽስለመውሰድ ግ ዴ ለ ሽ ነ ት ተ ሰ ምቶ ህ /ሽ ያ ቃ ል ?	**ሀ)አዎ**	**ለ) አይ**

3	መጥፎስ ሜት ሲ ሰ ማህ /ሽ መድ ሀ ኒ ት መውሰ ድ ታ ቆ ማለ ህ /ሽ?	**ሀ)አዎ**				**ለ) አይ**
4	ባለፈዉሳ ምን ታ ት ምን ምመድ ሃ ኒ ት አ ል ወ ሰ ድ ክ ም?	**ሀ)አዎ**				**ለ) አይ**
5	ላለፉትሦ ስ ት ወ ራ ት መድ ሀ ኒ ት ህ ከ ነ ጭራ ሹ ያ ል ወ ሰ ድ ክ ባ ቸ ዉ /ሽባቸዉቀ ና ት ምን ያ ህ ል ና ቸ ዉ ?	ሀ)2ቀናትወ ይ ምያ ነ ሰ				ለ)ከ2ቀናት በ ላ ይ
6	4.ስለአለፈውሳ ምን ት አ ስ ብ ና /ቢናመድ ሀ ኒ ት ህ ን /ሽንለ ምን ያ ህ ል ጊ ዜ አ ል ወ ሰ ድ ክ ም /ሽም?	ሀ)ም ንም	ለ)ከ1-2ጊዜያ ት	ሐ)ከ3-5ጊዜያ ት	መ) ከ 6-10ጊዜያ ት	ሠ)ከ10ጊ ዜ በ ላ ይ

ክፍል፮ ፡ የ ሚከ ተ ሉ ት ጥ ያ ቄ ዎ ች በ ድ ብ ር ት ወ ይ ም በ ድ ብ ታ መ ጠ ቃ ቶ ን ለ መ መ ዘ ን የ ቀ ረ ቡ ና ቸ ዉ ።

አ ባ ኮ ት ን የ ሚስ ማ ሞ ክ ት አ ማ ራ ጭ ን ይ ክ በ ቡ

ባለፈውሁለትሳምንት ከዚህ በታችየተዘረዘሩትችግሮችምንያህልተቸግረዋል					
	ምልክቶች	የለም	አልፎአ ልፎ	አብዛኛውን ቀናቶች	በየቀኑ
PHQ1	በራስተነሳሽነት ስራ ለመስራትከብዶኛል\ፍላጎትየለኝም	0	1	2	3
PHQ2	የበታችነት እና የድብርትስሜትይሰማናል	0	1	2	3
PHQ3	እንቅልፍቶሎአይወስደኝም\ ይቆራረጣል ፣ ብዙእተኛለው	0	1	2	3
PHQ4	ቶሎመድከም እና አቅምማጣትይታይብኛል	0	1	2	3
PHQ5	የምግብፍላጎቴቀንሷል\ የምግብፍላጎቴጨምሯል				
PHQ6	ጠቃሚ ሰው እንዳልሆንኩይሰማኛል	0	1	2	3
PHQ7	በአንድነገር ላይ ማተኮርአቅቶኛልለምሳሌሳነብ፣ ቲቪሳይትኩረቴይከፋፈላል	0	1	2	3

PHQ8	ስናገር ወይም ስንቀሳቀስዝግእንደምል ሌሎች ሰዎችአስተውለዋል፣ ወይም በተቃራኒው በጣም መንቅሥቅሥይታይብኛል	0	1	2	3
PHQ9	መኖርትርጉምየለሽእንደሆነስለሚሰማኝብሞትይሻላልወዪምበሆነመንገ ድራሰንብነዳየሚልሃሳብይምጣብኛል	0	1	2	3