QUALITY OF LIFE AND ASSOCIATED FACTORS AMONG PEOPLE WITH MAJOR DEPRESSIVE DISORDER ATTENDING FOLLOW-UP TREATMENT AT JIMMA MEDICAL CENTER, SOUTHWEST ETHIOPIA, 2022

By

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A THESIS TO BE SUBMITTED TO JIMMA UNIVERSITY INSTITUTE OF HEALTH, FACULTY OF MEDICINE DEPARTMENT OF PSYCHIATRY, IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR A MASTER OF SCIENCE IN INTEGRATED CLINICAL AND COMMUNITY MENTAL HEALTH

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JIMMA, ETHIOPIA

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Abstract

Background: Quality of life (QOL) has become an important treatment outcome measure for psychiatric interventions. However, there is little evidence regarding QOL and associated factors among people with major depressive disorder in Ethiopia.

Objective: To assess the QOL and associated factors among people with major depressive disorder attending follow-up treatment at Jimma Medical Center, southwest Ethiopia, 2022.

Methods: An institution-based cross-sectional study was conducted from September 01 to October 30, 2022, at JMC. A systematic random sampling technique was used to recruit a total of 320 participants. WHOQOL– Brief was used to assess patients' QOL. The data were coded and entered into Epi-Data before being exported to SPSS for analysis. Simple and multiple linear regression analyses were done to identify factors associated with QOL. The unstandardized B coefficient with a 95% confidence interval was calculated in the final model to identify independent predictors. The statistical significance was set at a p-value of less than 0.05.

Result: A total of 314 study participants were interviewed with a response rate of 98.1%. The mean QOL score of participants for each domain (mean± SD) was: physical (44.17±11.39), psychological (42.56±10.05), social (42.04±12.65), and environmental (45.18±12.46). Depression severity is significantly associated with all domains of QOL. Low resilience and stigma are associated with poorer QOL scores in all domains except physical health. Also, two or more episodes and a low and medium wealth index are associated with all domains except the psychological domain. The onset of the illness is associated with poorer QOL scores in physical and environmental health domains and the presence of comorbid medical illness is significantly associated with physical and psychological domains. Poor social support is associated with poorer QOL scores in social and environmental domains. medication non-adherence and >10 years duration of illness significantly associated only with the physical health domain.

Conclusion: The mean QOL score of people with MDD in each domain was low. The severity of depression among the participants strongly negatively predicted all domains. The aforementioned factors must be considered during assessing and treating patients with MDD to improve QOL.

Keywords: quality of life, depression, Jimma Medical Center; Ethiopia

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Acronyms and Abbreviation

BSc	Bachelor of Science
CI	Confidence Interval
DSM	Diagnostic and Statistical Manual of mental disorders
GBD	Global Burden of Diseases
HRQOL	Health-Related Quality Of Life
JMC	Jimma Medical Center
MDD	Major Depressive Disorder
MMAS	Morisky Medication Adherence Scale
MSc	Master of Science
OPD	Outpatient Department
OSSS	Oslo Social Support Scale
PDD	Perceived Devaluation and Discrimination
QOL	Quality Of Life
SD	Standard Deviation
SMI	Severe Mental Illness
SPSS	Statistical Package for Social Science
SQOL	Subjective Quality Of Life
WHO	World Health Organization
WHOQOL-BREF	World Health Organization Quality of Life Brief Version

1: INTRODUCTION

1.1 Background

Quality of life (QOL) is defined as “individuals’ perceptions of their position in the context of the culture and value systems they live and in relation to their goals, expectations, standards, and concerns”, and it has four domains such as physical health, psychological, social relationships and environmental(1). The scope of quality of life, therefore, extends beyond traditional symptom reductions and includes patients’ subjective feelings of well-being, satisfaction, functioning, and impairment(2).

Major depressive disorder (MDD) is defined as the presence of five out of nine depressive symptoms that persist for two weeks or longer, are present for most of the day nearly every day, and cause significant distress or impairment(3). These symptoms include dysphoric mood or anhedonia (cardinal symptoms), clinically significant weight gain or loss or appetite disturbance, insomnia or hypersomnia, psychomotor agitation or retardation, fatigue or loss of energy, feelings of worthlessness or excessive guilt, diminished ability to concentrate or think clearly, and recurrent thoughts of death or suicide(4,5). It is a debilitating disease involving clear-cut changes in mood, interests, and pleasure, changes in cognition, and vegetative symptoms(4,6).

Because MDD impairs a person's ability to function at work, at home, and their sense of personal health, it impairs their Quality of life (QOL). QOL is used to assess the overall impact of medical treatments from the patient's perspective(7). Today, QOL is considered a significant factor and prognostic indicator of mental illness, and it is advised that it be incorporated into the clinical assessment and interventions of those with severe mental illness(8,9).

There are epidemiological and clinical studies that indicate people with major depression have a substantially lower subjective quality of life than patients with no depression or healthy participants(9,10). Thus, to fully evaluate the impact of treatment, it is important to assess the physical, social, and psychological status of patients(7). Therefore, since the quality of life of people with major depressive disorder is not studied in this study area, conducting a study in this area is essential.

1.2 Statement of the Problem

Quality of life has become an important outcome criterion for psychiatric interventions. An important treatment objective for chronic illnesses where there is no complete recovery is to improve quality of life(11). According to the World Health Organization (WHO), major depressive disorder (MDD) is a leading mental disorder and a major contributor to the overall global burden of disease(12).

Among all medical conditions, MDD is the second leading contributor to chronic disease burden as measured by 'years lived with disability'(13). Additionally, unipolar depression is currently the leading cause of disability in developed countries(14) and the fourth leading cause of disability worldwide(13). MDD is associated with greater social and physical impairment, poorer quality of life, more days in bed, fewer pain-free days, higher treatment costs, and a lower perception of health status than was the case for other serious illnesses(7).

As the most common mental illness, it has become an important public health problem. Studies found that the number of incident cases of major depressive disorder worldwide increased by 49.86% from 1990 to 2017(15). Moreover, MDD is recognized as a major public health problem with a substantial personal, economic, and social burden on those afflicted and their families(10,16). The prevalence of depression is estimated to be 9.1% in Ethiopia(17).

People with severe mental illness(SMI) in developed countries had approximately a mean score lower in the QOL component and lost three to four times more work days(18). A WHO survey of 60 countries revealed that the mean health score of people with MDD is very low across the globe compared to other individuals with chronic conditions(19). Cross-sectional studies from Brazil and China comparing QOL with patients on hemodialysis and community population survey respectively reveal people with MDD scored lower mean score QOL, in each domain(20,21). Similarly, a study in Argentina indicated people with major depressive disorder show significantly poorer QOL compared to the other populations(22).

It is not different in Africa in which the quality of life is significantly impaired in people with severe mental illness(23). In Ethiopia also Nearly half of the people with MDD scored below the mean score of the WHOQOL-BREF quality of life for all the physical, psychological, social, and environmental domains(24,25).

Poor quality of life in people with MDD is associated with high rates of relapse and a significant negative impact on the ability to perform and/or enjoy occupational and social activities including family(9). Impaired quality of life is a significant problem for people with MDD and is often not addressed through symptom remediation alone(11). There is an increasing agreement that successful treatment should not only target symptom severity but also impairment in functioning and QOL in leading to restoration of health(26). Therefore, Quality of life measures can predict response to treatment(27).

Previous studies recommended including QOL assessment as an important part of treating MDD and examining the factors contributing to poor QOL in MDD to develop interventions(11,28). In addition to these, findings also revealed that good QOL may serve as a protective factor against future depressive episodes(28). Different literature so far revealed that quality of life among people with MDD is associated with factors like severity of the depressive symptom, social support, and negative discriminative attitude from others(24,25). Studies focused on coping strategy also revealed coping strategy as a significant factor affecting QOL (29).

Despite its importance, in developing countries Studies done on quantifying the quality of life among people with MDD are very scarce. Most professionals tend to focus on symptom reduction, which is only a single aspect of treating people with major depressive disorder(25).

Intervention in quality of life among people with MDD is a dual purpose that incorporates improving the quality of life of people with MDD and the enhancement of health care services provided for them. Evidence-based approach toward quality of life and predictors of poor quality of life among people with major depressive disorder is important to design an appropriate intervention plan to reduce morbidity. In the study area, there is no reported research done assessing the quality of life, especially in people with major depressive disorder, Given the urgency and potential benefit of evidence on quality of life in patients with MDD. Hence this study aims to assess the quality of life and its associated factors among people with MDD.

1.3 Significance of the Study

The finding of this study will help healthcare providers to recognize main factors, prioritize intervention areas and implement key interventions, and improve care for continual reduction of morbidity among people with MDD. It also helps them in the early identification of high-risk people with MDD to give maximum efforts to improving their quality of life.

It will contribute to the existing body of knowledge regarding the quality of life in hospitals. It also helps hospital administrators to recognize morbidity in the setting and to work on the improvement of the quality of life of people with major depressive disorder and reduction of morbidity.

It will help the hospital, zonal, and regional health officials in planning health strategies, and interventions for improving the quality of life of people with MDD. It will provide input to advanced studies which are used by decision-makers and program implementers for monitoring and evaluating activities since the improvement in quality of life is a good prognostic indicator of mental illness.

Moreover, the result of this study will also provide input for a non-governmental organization working in a quality-of-life area and for the researcher to conduct future research on the related subject matter.

2: LITERATURE REVIEW

2.1 Quality of life in people with major depressive disorder

In a cross-sectional study from Brazil using WHOQOL BREF showed subjective QOL of patients with major depression is significantly lower with a QOL domain score of physical 41.7 psychological 41.5 social 43.1 and environmental 44.4(20). However, a similar cross-sectional study in Brazil using WHOQOL BREF revealed a lower mean score physical=41.88±13, psychological=38.87±13.65, social=41.79±20.19 and environmental=43.18±14.49 domains(30). Additionally, in a cross-sectional study conducted in Argentina on 48 newly diagnosed people with MDD with the WHOQOL-100, QOL is significantly poorer in depressed persons than in either healthy persons or individuals with other frequent chronic pathologies (22).

In another cross-sectional study from the USA on 319 people with MDD using the quality of Life, Enjoyment, and Satisfaction Questionnaire—Short Form (Q-LES Q), QOL is significantly impaired in MDD with a mean Q-LES-Q score of 39.8 % (SD = 16.9)(31). But a cross-sectional study from the UK attested good QOL scores in physical 54.57±20.62, psychological 45.93±25.99, social 61.91±20.80 and Environmental 61±17.02 domains(32). Besides, another cross-sectional study done in Germany with the same assessment tool found QOL scores in physical 55.5±19.9, psychological 50.2±16.5, social 59.4±21.2, and environmental domains 67.1±14.6(33)

Similarly, a cross-sectional study done in China among people with MDD using WHOQOL BREF revealed the overall score was low (54.12) and the four QOL domains showed 39.77±11.59, 34.45±13.55, 36.92±15.87 and 37.50±15.20 for physical, psychological, social, and environmental domain of QOL respectively(21).

A cross-sectional study in south India using the short-form Health Survey (SF-36) questionnaire indicated the mean quality of life scores were 44.97 ± 9.41 and 36.17 ± 11.78 for Physical and mental health respectively(11). A cross-sectional analysis among the patients with severe mental illness attending public tertiary care hospitals of Quetta, Pakistan by using the Urdu version of European Quality of Life (EQ-5D). The majority (n=444, 78.4%) of the respondents were diagnosed with depression as a major severe mental disorder. EQ-5D mean score is 0.26±0.3 and VAS mean is 50.36±21.61 in which the health-related quality of life of patients with severe mental illness was poor (34).

An institution-based cross-sectional study conducted in Ethiopia showed that the mean score QOL for each domain was, physical 43.5±11.9, psychological 41.2±11.9, social 40.7±10.6, and environmental 41.3±9.6 (25). A similar study conducted in the same setting also showed that the quality of life of people with depression was 41.3 ± 7.5, 42.8 ± 8.2, 38.9 ± 8.9, and 41.8 ± 6.5 for physical, psychological, social, and environmental domains, respectively (24).

2.2 Factors associated with quality of life among patients with major depressive disorder

2.2.1 *Sociodemographic-related factors*

A study on 2307 participants to examine the effect of depression on QOL domains identified lower HRQOL was associated with being less educated, unemployed, divorced, or separated (35). However, another cross-sectional study conducted in Czech Republic identified no difference in marital status and educational status of the individual while unemployment was perceived to be a significant factor in decreasing the QoL of patients with depression(36).

Another Study from Germany points out that being female and older age was connected with higher QoL(33). Similarly, a study from Jordan also showed older age and poor income were associated with lower scores on QOL(37). On the other hand, a cross-sectional study from USA contradicts the results from Germany and Jordan in which it argues that there is no gender difference and older individuals have lower QOL(31).

Studies conducted in Brazil have also shown socioeconomic status was positively correlated with the social relationships and environmental domains of quality of life(38). In addition, an institutional-based cross-sectional study conducted in Ethiopia revealed that being single and rural residence were factors negatively correlated with at least one domain of QOL(25). A similar study carried out in the same area attested that the age of respondents and living arrangements were statistically significant predictors of health-related quality of life of people with MDD(24).

2.2.2 *Clinical-related factors*

A systematic review of studies done in 26 years on QOL of patients with MDD showed the severity of depression is a major contributor to a further reduction in QOL when depression is comorbid with other psychiatric and medical disorders(28). Similarly, a cross-sectional study in Brazil identified that psychiatric comorbidity and the presence of psychotic symptoms were found to be independent predictors of QOL (30). However cross-sectional study from USA on 319 MDD patients using the quality of Life, Enjoyment, and Satisfaction Questionnaire—Short Form (Q-LES Q) claims recurrence of depression and psychiatric comorbidity were not associated with QOL (31). Another study conducted in Brazil using the WHOQOL-100 also

showed that depressive symptoms were negatively correlated with all the domains of quality of life (38). A similar cross-sectional study conducted in Taiwan identified the key determinant for all QOL domains is found to be the intensity of the depressive symptoms(39).

In a systematic review of QOL of Nigerian psychiatric patients, Poor quality of life was reported to be associated with comorbid medical problems, the presence of anxiety and depressive symptoms, and non-adherence to medications(23). According to a cross-sectional study carried out in Ethiopia stated that age of onset of depression, and duration of illness were statistically significant predictors of health-related quality of life of people with depression in all or at least one domain of quality of life (24). Another study in the same setting also revealed that the severity of depressive symptoms, numbers of episodes in a year, and duration of treatment were predictors which were negatively correlated with QOL (25).

2.2.3 *Psychosocial-related factors*

A cross-sectional study on patients with MDD four weeks after discharge in Germany using WHOQOL-BREF found that self-esteem and social support characteristics contribute substantially to the psychological and social domains of subjective QOL in depressed patients (33). Another cross-sectional study in Netherlands revealed that stigmatization did show a negative association with quality of life (40). In addition, a cross-sectional study conducted in Czech Republic showed that patients with higher levels of self-stigma have a lower quality of life(41). Another cross-sectional study in Czech Republic identified a more frequent use of positive coping strategies has a positive association with the QoL of people with MDD(29).

An institutional-based cross-sectional study conducted in Ethiopia attested that perceived stigma and social support level were statistically significant predictors of health-related quality of life of people with depression in all or at least one domain of quality of life (24). Another study in the same setting also revealed that social support was a predictor which was negatively correlated with QOL (25).

2.2.4 *Substance use-related factors*

In a longitudinal study in Toronto, Canada investigating the relationship between substance abuse and QOL using Alcohol Used Identification Test and Drug Abuse Screening and Quality

of Life Interview (QOLI) among patients with SMI(N=133). The prevalence of substance abuse was 55.0% and substance abuse at baseline was associated with lower QOL(42).

2.3 Conceptual framework

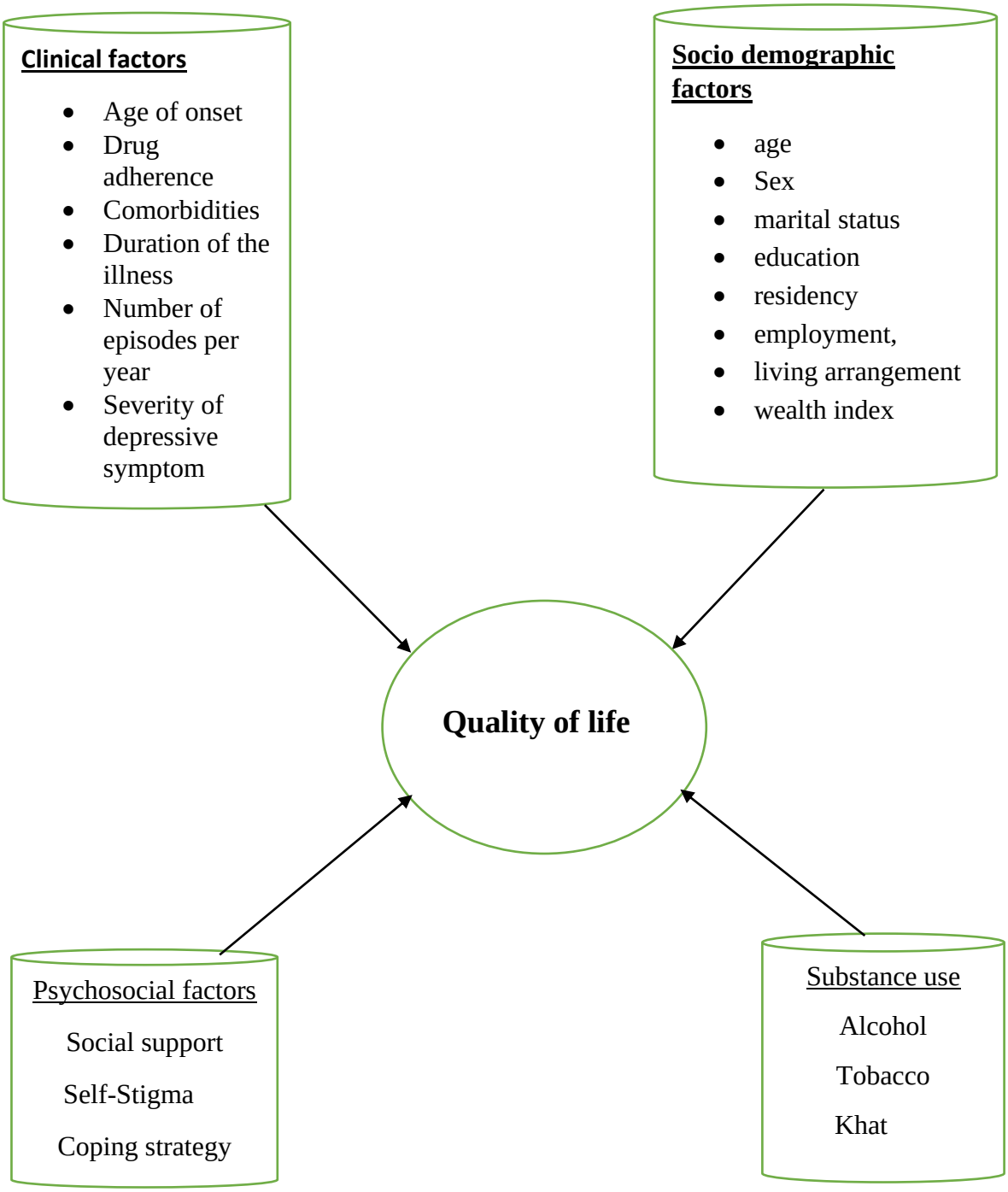

Figure 1: Conceptual framework for factors associated with quality of life among people with major depressive disorder is adapted from different literature, 2022

3: OBJECTIVES

3.1 General objective

- To assess the quality of life and associated factors among people with major depressive disorder attending follow-up treatment at Jimma medical center, southwest Ethiopia, 2022

3.2 Specific objectives

- To assess the quality of life among people with major depressive disorder attending follow-up treatment at Jimma medical center, southwest Ethiopia, 2022
- To identify factors associated with quality of life among people with major depressive disorder attending follow-up treatment at Jimma medical center, southwest Ethiopia, 2022

4: METHODS AND MATERIALS

4.1 Study Area and period

The study was conducted at Jimma Medical Center (JMC) from September 1 to October 30, 2022. JMC is found in Jimma town 352 KM from Addis Ababa, the capital city of Ethiopia, in the Southwestern part of the country. There are two public hospitals in the town: Jimma Medical Center and Shenen Gibe General hospital. Jimma Medical Center is the only tertiary and comprehensive specialized teaching hospital in the southwestern part of the country and currently provides different services for approximately 18 million people. The psychiatric clinic gives service to the residents of Jimma town and the surrounding nearby areas as well. It was established in 1988, and it serves more than 10,000 patients annually. Six months report showed that per two months on average 715 people with MDD had follow-up visits to the outpatient department. Schizophrenia, major depressive disorder, bipolar and related disorders, other psychotic disorders, and anxiety were the most commonly diagnosed disorders.

4.2 Study Design

An institutional-based cross-sectional study design was employed.

4.3 Population

4.3.1 *Source Population*

All people with MDD attending follow-up treatment at JMC psychiatric clinic.

4.3.2 *Study Population*

All randomly selected people with MDD attending follow-up treatment at the JMC Psychiatric clinic

4.4 Eligibility Criteria

4.4.1 *Inclusion criteria*

All people with MDD attending follow-up treatment at JMC psychiatric clinic.

4.4.2 *Exclusion criteria*

Acutely ill individuals who were not able to respond to the questionnaire due to their illness during data collection.

4.5 Sample Size and sampling technique

4.5.1 *Sample size determination*

The minimum number of samples required for the study is calculated by using single a population mean formula, using the following assumptions

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

Where, n = minimum sample size

$Z_{\alpha/2}$= Z value at ($\infty = 0.05$) = 1.96

D = Margin of error (1)

$\boldsymbol{\delta}^2$ = standard deviation of the mean quality of life score, SD from a previous published study in Ethiopia is 8.7 (24).

$$n = \frac{(\frac{z\alpha}{2})^2 \delta^2}{d^2} \quad , \quad = \frac{(1.96)^2 * 8.7^2}{(1)^2}$$

n = 291

Then adding 10% (291 x 0.10 = 29.1) of non-respondents the total sample size for this study was 291+29.1=320.1≈320

Table 1: sample size calculation based on the values from previous study to determine sample for study on quality of life and associated factors among people with MDD at Jimma Medical Center psychiatry clinic, Southwest Ethiopia, 2022

variable		Standard deviation (SD)	Critical value at 95% CI	Margin of error(d)	Sample size (n)
Quality of life domains Ethiopia (24)	Physical	7.5	1.96	1	216
	Psychological	8.2	1.96	1	258
	Social	8.7	1.96	1	291
	Environmental	6.5	1.96	1	162

4.5.2 *Sampling technique*

A systematic random sampling technique was used to recruit a total of 320 samples of people with MDD from the outpatient department of the hospital. A study subject was identified based

on the information obtained from the client card. Every 2nd patent was selected and interviewed (i.e. kth value K=N/n, 715/320=2.23≈2). The first study participant was selected using the lottery method.

4.6 Data collection instrument and procedures

4.6.1 *Data collection instrument*

The questionnaire had ten parts. **PART-I** was about socio-demographic characteristics using structured questionnaires including age, sex, religion, ethnicity, educational status, marital status, Occupation/employment status, and residence.

PART II A 16-item EDHS wealth Index Questionnaire (Equity Tool) was used to collect data regarding participants' wealth status(43).

PART III was about quality of life using the World Health Organization Quality of Life – Brief (WHOQOL-BRFE) questionnaire which is found to be a high-quality patient-centered generic tool suited to individual assessment in clinics and for research(32). It is also a validated tool in Ethiopia with Cronbach's alpha value of above 0.7 for the domains of HRQOL except for the social domain which is 0.58(44). The WHOQOL-BREF includes 26 items measuring the following domains: physical health, psychological health, social relationships, and environment. Domain scores are scaled in a positive direction (i.e. higher scores correspond to a better quality of life). QOL raw scores will transform into a range between 0-100. A score closer to a hundred will have a good quality of life (45). In this study, the internal consistency (Cronbach alpha) of WHOQOL-BREF, was 0.92

PART IV: Clinical-related Questionnaires: Clinical Diagnosis was taken from chart review. A questionnaire was designed to collect, the number of episodes per year, age of onset of the illness, duration of illness, and medical comorbidities.

PART V: Questions associated with Morisky Medication Adherence Scales (MMAS-4)

The MMAS is a generic self-reported, medication-taking behavior scale consisting of four items with a scoring scheme of "Yes" = 0 and "No" = 1. The items are summed to give a range of scores from 0 to 4(46). In the current study, the internal consistency (Cronbach alpha) of MMAS-4 was 0.85.

PART VI: Patient Health Questionnaire (PHQ-9)

The PHQ-9 is the depression module, which scores each of the 9 DSM-V criteria as "0" (not at all) to "3" (nearly every day). It assesses the severity of depressive symptoms over the previous 2 weeks on a scale from 0 (absence of depression) to 27 (severe depression)(47). In the current study, the internal consistency (Cronbach alpha) of PHQ-9, was 0.92

PART VII was about resilient coping by using a brief resilient and coping scale. The scale focuses on the tendency to effectively use coping strategies inflexible, committed ways to actively solve problems despite stressful circumstances. it is a five-point scale response, ranging from 1=does not describe me at all to 5=describes me very well and Total sum scores range from 4 to 20(48). In this study, the internal consistency (Cronbach alpha) was 0.87.

PART VIII: Oslo social support scale (Oslo -3)

This is a 3-item brief assessment of social support scored in a range from 3- 14, with 3 categories of interpretation with the values; poor, moderate, and strong. It has been widely used by different studies and has good psychometric properties(49). In this study, the internal consistency (Cronbach alpha) of OSSS was 0.93.

PART IX: Perceived stigma

perceived devaluation-discrimination (PDD) scale is the most widely used tool to assess perceived stigma among people with severe mental illness. It is a 12-item tool that measures the extent to which an individual believes that most people will devaluate and discriminate someone with severe mental illness. It is a 4- point Likert scale with scores ranging from One to Four (1=strongly disagree, 2=disagree, 3=agree and 4= strongly disagree). PDD has been widely used across the world and has good psychometric properties(50).

4.6.2 Data collection procedures

Data collection was done through face-to-face interviews by using a structured questionnaire which was adapted from previous literature. Four BSc psychiatry professionals at two available OPD were interviewed persons with major depressive disorder receiving treatment at the JMC psychiatric clinic. To gather additional data on clinically relevant variables like age of onset of the illness, duration of the illness, medical comorbidities, and to confirm the diagnosis of MDD

patient's card was reviewed. The principal investigator was engaged in the supervision together with one mental health specialist (MSc in ICCMH).

4.7 Study variables

4.7.1 *Dependent variable*

Quality of life

4.7.2 *Independent variables*

Socio-demographic variables- age, sex, religion, ethnicity, residence, marital status, education level, occupation, living arrangement, and wealth index.

Clinical-related Variables- onset of illness, duration of illness, number of episodes per year, severity of depressive symptom, medication adherence, comorbidities.

Substance-related variables- Alcohol, Khat, cigarette (ever use, current use)

Psychosocial factors- social support, self-stigma, coping strategy

4.8 Operational definitions

Quality of life: was measured by using 26 items WHOQOL-BRIEF. Scores range from 0-100 with the highest QOL closer to 100 and the lowest QOL closer to 0(45).

Medication Non-adherent: a patient on psychotropic medication scored <4 on MMAS(46).

Severity of depressive symptoms: Based on the sum of scores from PHQ 9, scores ranges from 0-27 with the highest score closer to 27 indicating severe depression and closer to 0 indicating less severe depression.

Wealth index: is defined as the composite measure of the living standard of a household. It was calculated by 16 questions on household ownership of selected assets such as ownership of sanitation facilities, water access, television, radio etc. the composite factors were generated by PCA (principal component analysis) and the summed composite score was classified into three quantiles resulting poor, medium and rich in the first, second and third quantiles wealth index classes respectively(51).

Resilience coping: based on a brief resilient and coping scale, scores of 4–13 indicate low resilient coping, 14–16 indicate medium resilient coping and 17–20 indicate high resilient coping(48).

Current substance user: used any psychoactive substances in the past 3 months

Lifetime substance user: ever used any psychoactive substances

Social support: using the OSSS scale categorized into poor ”3-8”, moderate “9-11”, and strong “12-14”(49).

perceived-Stigma: based on the perceived devaluation-discrimination scale, a score closer to 48 indicate high perceived stigma where as a score closer to 12 indicates low perceived stigma.

Comorbid medical illness: A proven or diagnosed medical illness in addition to major depressive illness. It was proven by reviewing the patient’s chart and asking the patient.

4.9 Data analysis

Data were entered, cleaned, and coded, using Epi Data version 3.1 and then the data was exported to SPSS 25.0 for analysis. Exploratory data analysis was carried out to check the levels of missing values and the presence of outliers. Frequencies and percentages were computed for description. Linear regression assumptions such as normality, linearity, multicollinearity, and other important assumptions were checked. The multi-collinearity of independent variables was checked by looking at the Variance inflation factor (VIF) and tolerance, and a VIF value of <10 or tolerance value of >0.1 was used as a cutoff point for indicating no collinearity. Simple and multiple linear regression analysis were used to identify independent factors of quality of life in the participants. An unstandardized B Coefficient with a 95% confidence interval was used. The statistical significance was accepted at a p-value < 0.05.

4.10 Data quality management

Data quality was assured by careful modification of the adapted questionnaires, recruitment of data collectors, and supervisors who have previous experience. The questionnaire was originally developed in English and was translated into the local language, Amharic and Afan Oromo and back translated to English to check the accuracy. Training was given to data collectors and

supervisors on data collection tools and data collection procedures for one day. A pretest on the study questionnaire was conducted on 5 % (16) of the calculated sample size at shenen gibe hospital and possible amendments were taken to the tool based on the finding. In addition to this, Data collectors were supervised closely by the supervisor and principal investigator daily throughout the data collection period to ensure the quality of the data and completeness. Codes were given on the chart of the patient to prevent re interviewing. After completion of the data, the completeness and consistency of each questionnaire were checked by the principal investigator and the supervisor daily.

4.11 Ethical consideration

Ethical clearance for the study was found from the Institutional Review Board (IRB) of Jimma University Institute of Health (JUIH) with Ref.No JUIH/IRB/69/22. A permission letter was received from the medical director of the Jimma Medical Center. Participants in the study were asked for their written, informed consent. Participation was entirely optional. The right of participants to leave the study at any time was respected. Participants' freedom to respond to some questions while remaining silent to others was respected. Participants were informed that there is no expectation of additional treatment or any associated benefits and risks for them participating in the study. To ensure confidentiality, the name and other identifiers of patients, physicians, and other health care professionals who examined the patient was not recorded in the data abstraction format, and all the collected data was handled confidentially and computer data was kept by password security.

4.12 Dissemination plan

The result of the study will be presented and submitted to Jimma University, faculty of medicine department of psychiatry as partial fulfillment of Masters of integrated clinical and community mental health. It is also planned to communicate the finding with JMC and respective health departments with documentation. The findings of this study will also be presented at annual meetings, seminars, professional conferences, and training sessions for health professionals. Efforts will be made to publish the paper in an internationally reputable journal.

5: RESULT

5.1 Socio-demographic characteristics

Out of 320 study participants, 314 participants agreed to participate, with a 98.1% response rate. The mean age of respondents was 32.64 years with SD ±9.32 years. The majority of the participants were male, from rural areas, and married 166 (52.9%), 165 (52.5%), and 159 (50.6%), respectively. Most of the participants 90 (28.7%) were educated up to diploma and above. Regarding their occupation 75 (23.9%) of the participants were unemployed. The majority of the participants 219 (69.7%) were living with their families. Regarding the wealth index most of the participants, 133(42.4%) were in the poor wealth index. The total variance explained by two components was 73.6% with a kaiser-Meyer-Olkin (KMO) sampling adequacy value of 0.83(Table 2).

Table 2: Socio-demographic characteristics of people with MDD having follow-up at JMC, Ethiopia, 2022. (n=314)

Variable	Categories	Frequency(n=314)	Percentage
Sex	Male	166	52.9
	Female	148	47.1
Ethnicity	Oromo	221	70.4
	Amhara	77	24.5
	Gurage	16	5.1
	Other *	7	2.2
Religion	Muslim	199	63.4
	Orthodox	61	19.4
	Protestant	39	12.4
	Catholic	15	4.8
Residence	Urban	149	47.5
	Rural	165	52.5
Marital status	Single	123	39.2
	Married	159	50.6
	Divorced	20	6.4
	widowed	12	3.8
Educational status	Illiterate	56	17.8
	Elementary	79	25.2
	High school	89	28.3
	Diploma & above	90	28.7
Occupational status	Gov't employee	62	19.7
	Private employee	46	14.6
	Farmer	28	8.9
	Merchant	33	10.5

	Housewife	36	11.5
	Unemployed	75	23.9
	Daily laborer	4	1.3
	Student	30	9.6
Living arrangement	With family	219	69.7
	alone	95	30.3
Wealth index	Poor	133	42.4
	Medium	78	24.8
	Rich	103	32.8

Other Tigre, walayta*

5.2 Clinical and substance-related characteristics of respondents

The mean age of onset of illness of people with MDD was 26.6 years with SD±8 years. Most of the participants 119(37.9%) were not experience relapse. About 70(22.3%) of the participants had an additional diagnosed comorbid medical illness. The mean severity of depression using PHQ9 was 8.63±7.1. Nearly two third of respondents were non-adherent to psychotropic medications and most of the participants 77(24.5%) were current khat users. (Table 3).

Table 3: Distribution of clinical and substance related characteristics of respondents to quality of life at JMC, Jimma, Ethiopia, 2022 (n=314)

Variables	Categories	Frequency(n=314)	Percentage
Age of onset(M±SD)		26.6±8	
Duration of the illness	Less than 5 years	167	53.2
	5-10 years	82	26.1
	Greater than 10 years	65	20.7
Number of episodes per year	No relapse	119	37.9
	Once	77	24.5
	Twice	58	18.5
	More than two	60	19.1
Comorbid medical diagnosis	Yes	70	22.3
	No	244	77.7
Depression severity		8.63±7.1	
Medication adherence	Adherent	110	35
	Non- adherent	204	65
Lifetime substance use	Yes	193	61.5
	No	121	38.5
Current substance use	No	188	59.9
	Alcohol	38	12.1
	Tobacco	11	3.5
	Khat	77	24.5

5.3 Psychosocial characteristics of the respondent

Regarding psychosocial characteristics of respondents, the majority of them have moderate social support (n=116, 36.9%) and (n=137, 43.6%) were low resilient coper. The mean perceived stigma score of participants using PDD was 26.84±4.25 (Table 4).

Table 4: Distribution of psychosocial characteristics of respondents among patients with major depressive disorder at JMC, Jimma, Ethiopia, 2022 (n=314)

Variables	Categories	Frequency (n=314)	Percentage
Social support	Poor	107	34.1
	Moderate	116	36.9
	Strong	91	29
Perceived stigma			26.84±4.25
Coping strategy	Low resilient	137	43.6
	Medium resilient	77	24.5
	High resilient	100	31.8

5.4 WHOQOL-BREF SCORE OF PEOPLE WITH MDD

The mean score quality of life in each domain was below 45, as measured in a range from 0-100 using WHOQOL-BREF. The lowest QOL domain of people with MDD in this study was the social relation domain (42.04±12.65) followed by psychological domain (42.56±10.05) (Table 5).

Table 5: Distribution of quality-of-life domains among patients with major depressive disorder at JMC, Jimma, Ethiopia, 2022. (n=314)

Domains	Mean± SD QOL	95% CI	Range	
			Minimum	Maximum
Physical health	44.17±11.39	42.90-45.43	21.43	71.43
Psychological	42.56±10.05	41.44-43.67	20.83	62.50
Social relationship	42.04±12.65	40.63-43.44	16.67	66.67
Environmental	45.18±12.46	43.79-46.57	18.75	71.88

5.5 Factors associated with QOL on people with major depressive disorder

A simple linear analysis of each QOL domains was carried out in relation to a number of variables that could conceivably be expected to influence QOL. All explanatory variables significant at a P value less than 0.25 levels in the simple linear analysis were considered in multiple linear regression.

Taking a look at the data in the simple linear analysis the following listed variables were found to be significant in each domain of QOL.

Marital status, living arrangement, onset of illness, duration of illness, number of episodes per year, comorbid medical diagnosis, medication non-adherence, coping strategy, depression severity, social support, stigma, and wealth index were significantly associated with the physical domain of QOL.

In the psychological domain of QOL marital status, occupation, living arrangement, onset of illness, duration of illness, number of episodes per year, comorbid medical diagnosis, medication non-adherence, coping strategy, depression severity, social support, stigma, and wealth index were significantly associated variables.

Educational status, occupation, living arrangement, residency, onset of illness, duration of illness, number of episodes per year, comorbid medical diagnosis, medication non-adherence, coping strategy, depression severity, social support, stigma, current substance use, and wealth index were significantly associated with social relationship domain of QOL.

Regarding the environmental domain of QOL educational status, living arrangement, residency, onset of illness, duration of illness, number of episodes per year, comorbid medical diagnosis, medication non-adherence, coping strategy, depression severity, social support, stigma, current substance use, and wealth index were significantly associated variables. (Table 6)

Table 6: Simple Linear Regressions for Quality of Life of people with major depressive disorder attending follow-up treatment at Jimma medical center, 2022(n=314).

variables		Physical		Psychological		Social		Environmental	
		Unstandardized β coefficient with 95% CI	P-value	Unstandardized β coefficient with 95% CI	P-value	Unstandardized β coefficient with 95% CI	P-value	Unstandardized β coefficient with 95% CI	P-value
Age		0.041(-0.095,0.177)	0.556	0.085(-0.035,0.205)	**0.164***	0.051(-0.101,0.202)	0.511	-0.026(-0.175,0.122)	0.727
Sex	Male	Ref		Ref		Ref		Ref	
	Female	0.584(-1.952,3.121)	0.651	-0.830(-3.068,1.409)	0.466	-0.064(-2.882,2.755)	0.965	-0.914(-3.689,1.862)	0.518
Marital status	Single	-1.882(-4.576,0.812)	**0.170***	-2.213(-4.581,0.154)	**0.067***	-0.598(-3.600,2.404)	0.695	1.214(-1.740,4.167)	0.419
	Married	Ref		Ref		Ref		Ref	
	Divorced	-2.380(-7.702,2.943)	0.380	-4.127(-8.804,0.550)	**0.083***	-1.567(-7.498,4.364)	0.604	-1.647(-7.482,4.188)	0.579
	Widowed	-0.118(-6.834,6.598)	0.972	-0.655(-6.557,5.246)	0.827	-0.734(-8.218,6.750)	0.847	1.061(-6.302,8.424)	0.777
Educational status	Illiterate	-0.901(-4.732,2.929)	0.644	1.399(-1.972,4.770)	0.415	-0.906(-5.154,3.342)	0.675	-2.068(-6.231,2.094)	0.329
	Elementary	-0.582(-4.052,2.888)	0.742	0.485(-2.568,3.539)	0.755	-2.153(-6.001,1.695)	0.272	-2.925(-6.695,0.846)	**0.128***
	High school	-0.182(-3.547,3.183)	0.915	-1.114(-4.075,1.846)	0.460	-0.455(-4.186,3.277)	0.811	-0.868(-2.787,4.524)	0.641
	Diploma and above	Ref		Ref		Ref		Ref	
Occupation	Gov't employee	Ref		Ref		Ref		Ref	
	Private employee	0.175(-4.208,4.559)	0.937	0.172(-3.662,4.006)	0.930	1.958(-2.864,6.780)	0.425	-0.565(-5.372,4.241)	0.817
	Farmer	-1.206(-6.334,3.923)	0.644	2.592(-1.894,7.078)	0.256	-3.322(-8.964,2.320)	**0.248***	-2.560(-8.184,3.064)	0.371
	Merchant	-0.761(-5.615,4.093)	0.758	-1.529(-5.775,2.716)	0.479	-2.456(-7.795,2.883)	0.366	-0.493(-5.816,4.829)	0.855

	Housewife	1.827(-2.893,6.547)	0.447	-0119(-4.248,4.009)	0.955	2.763(-2.429,7.955)	0.296	-3.019(-8.194,2.157)	0.252
	Daily laborer	-4.522(-16.142,7.098)	0.444	-0.235(-10.399,9.929)	0.964	5.309(-7.474,18.092)	0.414	-6.578(-19.320,6.165)	0.311
	No job	-2.081(-5.948,1.785)	0.290	-2.832(-6.214,0.549)	**0.100***	-2.830(-7.083,1.424)	**0.191***	-1.213(-5.453,3.027)	0.574
	Student	-0.296(-5.305,4.714)	0.908	2.195(-2.187,6.577)	0.325	-0.108(-5.618,5.403)	0.969	-1.630(-7.123,3.864)	0.560
Living arrangement	With family	Ref		Ref		Ref		Ref	
	Alone	-3.978(-6.699, -1.256)	**0.004***	-2.910(-5.322, -0.497)	**0.018***	-2.922(-5.968,0.123)	**0.060***	-5.403(-8.361, -2.446)	**<0.001***
Wealth index	Poor	-12.803(-15.351, -10.256)	**<0.001***	-7.991(-10.421, -5.562)	**<0.001***	-12.292(-15.257, -9.326)	**<0.001***	-19.461(-21.823, -17.099)	**<0.001***
	Medium	-3.473(-6.386, -0.559)	**0.020***	-1.848(-4.627,0.930)	**0.191***	-4.578(-7.970, -1.187)	**0.008***	-7.704(-10.405, -5.002)	**<0.001***
	Rich	Ref		Ref		Ref		Ref	
Residency	Urban	Ref		Ref		Ref		Ref	
	Rural	0.072(-2.465, 2.608)	0.956	0.681(-1.557, 2.919)	0.550	-3.337(-6.130, -0.544)	**0.019***	-3.619(-6.366, -0.872)	**0.010***
Age of onset		0.523(0.376, 0.670)	**<0.001***	0.299(0.163, 0.434)	**<0.001***	0.321(0.149, 0.493)	**<0.001***	0.337(0.168, 0.506)	**<0.001***
Duration of illness	<5 year	Ref		Ref		Ref		Ref	
	5-10 year	-5.745(-8.554, -2.935)	**<0.001***	-3.301(-5.908, -0.693)	**0.013***	-3.153(-6.439,0.134)	**0.060***	-4.381(-7.581, -1.180)	**0.007***
	>10 year	-10.609(-13.654, -7.563)	**<0.001***	-5.522(-8.349, -2.696)	**<0.001***	-7.004(-10.567, -3.441)	**<0.001***	-8.161(-11.630, -4.691)	**<0.001***
Number of episodes per year	No relapse	Ref		Ref		Ref		Ref	
	Once	-5.050(-8.011, -2.089)	**0.001***	-4.479(-7.168, -1.790)	**0.001***	-3.839(-7.212, -0.465)	**0.026***	-5.164(-8.424, -1.903)	**0.002***
	Twice	-10.323(-13.565, -7.080)	**<0.001***	-6.906(-9.851, -3.962)	**<0.001***	-10.060(-13.754, -6.366)	**<0.001***	-11.854(-15.424, -8.284)	**<0.001***

	>two	-12.348(-15.554, -9.143)	**<0.001***	-10.043(-12.954, -7.132)	**<0.001***	-11.990(-15.642, -8.338)	**<0.001***	-12.482(-16.012, -8.953)	**<0.001***
Comorbid medical ill	Yes	-14.158(-16.761, -11.556)	**<0.001***	-13.477(-15.705, -11.249)	**<0.001***	-10.743(-13.904, -7.581)	**<0.001***	-10.519(-13.637, -7.401)	**<0.001***
	No	Ref		Ref		Ref		Ref	
Medication adherence	Adherent	Ref		Ref		Ref		Ref	
	Non-adherent	-4.483(-7.091, -1.876)	**0.001***	-2.480(-4.807, -0.152)	**0.037***	-2.810(-5.742,0.123)	**0.060***	-2.517(-5.409,0.376)	**0.088***
Resiliency	Low	-9.114(-11.889, -6.338)	**<0.001***	-11.373(-13.631, -9.115)	**<0.001***	-10.078(-13.139, -7.017)	**<0.001***	-10.751(-13.713, -7.789)	**<0.001***
	Medium	-4.666(-7.866, -1.466)	**0.004***	-3.666(-6.268, -1.063)	**0.006***	-2.303(-5.831,1.225)	**0.200***	-1.661(-5.076,1.754)	0.339
	High	Ref		Ref		Ref		Ref	
Depression severity		-1.044(-1.178, -0.909)	**<0.001***	-0.871(-0.994, -0.747)	**<0.001***	-0.936(-1.104, -0.769)	**<0.001***	-0.925(-1.090, -0.760)	**<0.001***
Social support	Poor	-4.194(-7.354, -1.035)	**0.009***	-7.230(-9.886, -4.574)	**<0.001***	-10.539(-13.870, -7.207)	**<0.001***	-10.685(-13.984, -7.386)	**<0.001***
	Moderate	-0.240(-3.342,2.863)	0.879	0.152(-2.457,2.760)	0.909	-2.411(-5.683,0.861)	**0.148***	-5.227(-8.467, -1.988)	**0.002***
	Strong	Ref		Ref		Ref		Ref	
Stigma		-1.163(-1.432, -0.895)	**<0.001***	-1.580(-1.776, -1.383)	**<0.001***	-1.456(-1.745, -1.167)	**<0.001***	-1.395(-1.682, -1.108)	**<0.001***
Current substance use	No	Ref		Ref		Ref		Ref	
	Tobacco	-2.473(-9.446,4.499)	0.486	-3.157(-9.302,2.988)	0.313	-9.260(-16.923, -1.598)	**0.018***	-7.689(-15.236, -0.141)	**0.046***
	Alcohol	-0.884(-4.882,3.114)	0.664	-2.031(-5.554,1.493)	0.258	-2.562(-6.955,1.832)	0.252	-2.037(-6.364,2.291)	0.355
	Khat	-1.314(-4.355,1.728)	0.396	-0.073(-2.753,2.607)	0.957	-2.767(-6.109,0.575)	**0.104***	-3.711(-7.003, -0.419)	**0.027***

** Candidate variable for multiple linear regression analysis at p-value<0.25.*

Multiple linear regression was calculated to predict physical domain based on the variables which were significantly associated with physical health in the simple linear regression. The multiple regression model with all seven predictors produced; R^2 = 0.658, Adj R^2=0.643 (P. value ≤ .001) which explains 64 % of the variation in the physical domain.

As the patient's illness onset increase in a year result in a 0.296[β=0.296, CI (0.194, 0.398)] unit increase in QOL. Patients with a duration of illness greater than 10 years showed a 3.279[β=-3.279, CI (-5.287, -1.271)] units decrease in their physical health of QOL compared with those who had less than 5 years duration. Those participants who have more than two episodes per year reduced their QOL by 2.682 [β=-2.682, CI (-4.838, -0.526)] units compared with those who have no relapse per year. Patients with comorbid medical illness showed a 4.766[β=-4.766, CI (-6.982, -2.549)] unit less mean QOL score in the physical domain compared with patients without medical illness. Patients' non-adherent to medication showed a 3.105[β=-3.105, CI (-4.729, -1.480)] units decrease in their physical health of QOL compared with their counterparts. A unit increase in depression severity reduced their physical health by 0.554 [β=-0.554, CI (-0.689, -0.418)] units. Participants who were poor and medium in wealth index showed a 7.355 [β=-7.355, CI (-9.297, -5.413)] and 3.106 [β=-3.106, CI (-5.211, -1.001)] unit decrease respectively in physical health domain.

Multiple linear regression was calculated to predict psychological health based on the variables which were significantly associated with psychological health in the simple linear regression. The multiple regression model with all four predictors produced R^2 = 0.68, Adj R^2=0.675 (P. value ≤ .001) which explains 67% of the variation in the psychological domain.

Patients who had a medical illness other than major depressive disorder reduced their psychological health by 5.375[β=-5.375, CI (-7.183, -3.568)] units. As depression severity increase by one unit, the psychological health of participants decreases in a 0.342[β=-0.342, CI (-0.454, -0.231)] units. Those participants who have low resilient coping showed a 4.94[β=-4.94, CI (-6.306, -3.574)] units lower QOL score than those who have high resilient coping. A unit increase in stigma reduced their psychological health by 0.956 [β=-0.956, CI (-1.129, -0.783)] units.

A multiple linear regression was calculated to predict the social relationship domain based on the variables which are significantly associated with social relationship domain in the simple linear regression. The multiple regression model with all six predictors produced R^2 =0.463, Adj

R^2=0.447 (P. value ≤ .001). which explains almost 45% of the variation in the social relationship domain.

Regarding the social domain, a unit increase in depression severity results in a 0.421[β=-0.421, CI (-0.601, -0.241)] unit decrease in the social relations of patients. Study participant who didn't get good social support reduced their social relationship domain by 3.72(β=-3.72, CI (-6.105, -1.334)] units. Patients with two and more than two episodes per year reduced their QOL by 3.581[β=-3.581, CI (-6.481, -0.681)] and 3.814[β=-3.814, CI (-6.746, -0.882)] units respectively compared with those with no relapse in a year. Patients with low resilient coping showed a 3.191[β=-3.191, CI (-5.495, -0.887)] units lower QOL score than those who have high resilient coping. A unit increase in stigma reduced their social relation domain by 0.609 [β=-0.609, CI (-0.889, -0.319)] units. Participants who were poor and medium in wealth index showed a 5.356 [β=-5.356, CI (-8.059, -2.653)] and 3.149 [β=-3.149, CI (-6.020, -0.279)] unit decrease respectively in the social relationship domain.

Multiple linear regression was calculated to predict environmental health based on the variables which were significantly associated with environmental health in the simple linear regression. The multiple regression model with all seven predictors produced R^2 = 0.658, Adj R^2=0.643 (P. value ≤ .001). which explains 64% of the variation in the environmental domain.

As the onset of illness increases in a year result in, a 0.162[β=0.162, CI (0.05, 0.273)] unit increase in the environmental domain of QOL, holding other variables constant. Study participants who have poor social support lower their environmental domain of QOL by 3.112[β=-3.112, CI (-5376, -0.848)] units compared with those who have good social support. Patients with low resilient coping reduced their QOL by 3.165(β=-3.165, CI (-5.02, -1.309)] units compared with those with high resilient coping. Patients with two and more than two episodes per year reduced their QOL by 2.536[β=-2.536, CI (-4.926, -0.145)] and 2.858[β=-2.858, CI (-5.207, -0.508)] units respectively compared with those with no relapse in a year. a unit increase in depression severity results in a 0.332[β=-0.332, CI (-0.477, -0.187)] unit decrease in the environmental domain of patients. A unit increase in stigma results in a 0.337 [β=-0.337, CI (-0.568, -0.106)] unit decrease in the environmental domain of patients. Participants who were poor and medium in wealth index showed a 13.670 [β=-13.670, CI (-15.843, -11.497)] and 6.640 [β=-6.640, CI (-8.945, -4.334)] unit decrease respectively in the environmental health domain. (Table7)

Factors associated with the physical domain were early onset, more than two depressive episodes, comorbid medical illness, medication non-adherence, >10 years duration of illness, depression severity, and poor and medium wealth index. Depression severity, resilience, comorbid medical illness, and stigma were associated with the psychological domain. Depression severity, low social support, two or more episodes, low resilience, stigma, and a low and medium wealth index were all associated with the social domain. The environmental domain was significantly associated with early onset, poor social support, low resilience, two and more episode, severity of depression, stigma, and a low and medium wealth index.

Table 7: Multiple Linear Regression model for factors associated with quality of life of people with major depressive disorder attending follow-up at Jimma medical center, 2022(n=314)

variables		Physical	Psychological	Social	Environmental
		Unstandardized β coefficient with 95% CI	Unstandardized β coefficient with 95% CI	Unstandardized β coefficient with 95% CI	Unstandardized β coefficient with 95% CI
Age of onset		**0.296(0.194, 0.398) *** **	#	#	**0.162(0.05, 0.273) ** **
Duration of illness	<5 year	Ref	Ref	Ref	Ref
	5-10 year	#	#	#	#
	>10 year	**-3.279(-5.287, -1.271) ** **	#	#	#
Number of episodes per year	No relapse	Ref	Ref	Ref	Ref
	Once	#	#	#	#
	Twice	#	#	**-3.581(-6.481, -0.681) * **	**-2.536(-4.926, -0.145) * **
	>two	**-2.682(-4.838, -0.526) * **	#	**-3.814(-6.746, -0.882) * **	**-2.858(-5.207, -0.508) * **
Comorbid medical ill	Yes	**-4.766(-6.982, -2.549) *** **	**-5.375(-7.183, -3.568) *** **	#	#
	No	Ref	Ref	Ref	Ref
Medication adherence	Adherent	Ref	Ref	Ref	Ref
	Non adherent	**-3.105(-4.729, -1.480) *** **	#	#	#
Resiliency	Low	#	**-4.94(-6.306, -3.574) *** **	**-3.191(-5.495, -0.887) ** **	**-3.165(-5.02, -1.309) ** **
	Medium	#	#	#	##
	High	Ref	Ref	Ref	Ref
Depression severity		**-0.554(-0.689, -0.418) *** **	**-0.342(-0.454, -0.231) *** **	**-0.421(-0.601, -0.241) *** **	**-0.332(-0.477, -0.187) *** **
Social support	Poor	#	#	**-3.72(-6.105, -1.334) ** **	**-3.112(-5376, -0.848) ** **
	Moderate	##	##	#	#
	Strong	Ref	Ref	Ref	Ref
Stigma		#	**-0.956(-1.129, -0.783) *** **	**-0.609(-0.889, -0.319) *** **	**-0.337(-0.568, -0.106) ** **
Wealth index	Poor	**-7.355(-9.297, -5.413) *** **	#	**-5.356(-8.059, -2.653) *** **	**-13.670(-15.843, -11.497) *** **
	Medium	**-3.106(-5.211, -1.001) ** **	#	**-3.149(-6.020, -0.279) * **	**-6.640(-8.945, -4.334) *** **
	Rich	Ref	Ref	Ref	Ref

**p<0.05, ** p<0.01, *** p<0.001 Ref: reference # not significantly associated ## Variable not included in the regression models*

6. DISCUSSION

The mean score quality of life of people with major depressive disorder in each domain was low. The mean score QOL was 44.17 with 95%CI (42.9, 45.43) for physical, 42.56 with 95%CI (41.44, 43.67) for psychological, 42.04 with 95%CI (40.63, 43.44) for social, and 45.18 with 95%CI (43.8, 46.57) for environmental. The results are supported by the conclusions of previous studies done in different settings and countries. A study done in Brazil reported 41.7, 41.5, 43.1, and 44.4 mean scores of the physical, psychological, social, and environmental domains respectively (20). The mean QOL score measured by WHOQOL-BREF was in line with the result of this study except for the physical domain. Another study in Ethiopia had also similar findings in physical 43.5±11.9 psychological 41.2±11.9 social 40.7±10.6 and environmental 41.3±9.6 (25). In contrast to this finding, the studies from China and Brazil using WHOQOL-BREF reported a lower mean score in each domain (physical=39.77±11.59, psychological, =34.45±13.55, social=36.92±15.87 and environmental=37.50±15.20) and (physical=41.88±13, psychological=38.87±13.65, social=41.79±20.19 and environmental=43.18±14.49) domains respectively (21,30). This could be due to the study included first-visit patients with active depressive symptoms and small sample size(n=140). The mean scores of the current study are lower than the QOL scores in the study conducted in Germany: physical (55.5±19.9), psychological (50.2±16.5), social (59.4±21.2), and environmental domains (67.1±14.6), and the UK physical 54.57±20.62, psychological= 45.93±25.99, social= 61.91±20.80 and Environmental= 61±17.02 domains) which used the same approach to assess QOL(32,33). The possible reasons for the difference could be attributed to the availabilities of different treatment options and the characteristics of participants like the current study participant have a longer duration of illness while the participant of earlier studies has a shorter duration of the illness.

In the present study, it was found that there was a significant association between the severity of depression and all domains of QOL. The result of studies done in Ethiopia(25), Nigeria(23), Taiwan (39), Jordan (37), and USA (28,31) support the finding of the current study. This finding is also in line with the result of the study done in Brazil in which Depression severity was negatively correlated with all the domains of quality of life (38). This might be explained by the fact that patients with severe depression who failed to achieve complete symptomatic remission

often continued to have a psychosocial impairment, poor medication adherence, and were more likely to relapse into full depression which in turn may decrease QOL (52,53).

In this study, when the wealth index of people with major depressive disorder decreased from richer to poorer their perception of social, environmental, and physical health of QOL also decreased. The study from Jordan supports the finding that poor income was associated with lower scores on the quality of life (37). This finding is also comparable with a previous study in Brazil that socioeconomic status was associated with social relationships and environmental domains of QOL (38). A possible reason for this might be Patients who have unmet financial needs and struggle to meet their basic necessities may find it difficult to perceive their lives as satisfied which might decrease their quality of life(54).

In the current study, patients who have two and more episodes per year had a markedly diminished perception of their social, environmental, and physical health of QOL. The result is congruent with the study from Ethiopia (25). This could be explained by the fact that patients with relapse increase the risk of another relapse, prolonged course, poor physical functioning, and poor medication adherence which might decrease their quality of life(55,56).

In this study, Patients who are having additional medical conditions (compared with those with no additional problems), had significantly lower QOL scores in the physical and psychological domains. The result is supported by the study done in Nigeria (23), and USA (28). This might be attributed to the fact that the additive effect of MDD with comorbid medical illness leads the patient to a low remission rate and poor functioning which might contribute to the decreased QOL(57).

In this study, participants who have poor social support had a decreased social and environmental health of QOL. Another study done in Ethiopia supports the notion that poor social support is a significant predictor of a lower mean score QOL (24,25). The finding is consistent with studies reported from Taiwan (39), and Germany (33). The possible explanation for this could be the patient's lack of social support decreasing the resources available for coping with social stress and contributing to poor mental health outcomes which might decrease their QOL(58).

In the current study, Patients who were stigmatized because of their illness were negatively associated with all domains of QOL, except physical health. The finding is congruent with

studies from Ethiopia (24), Jordan (37), and Netherlands (40). The Consistent findings from Czech Republic also showed that self-stigma negatively correlated with all the domains of QoL (41). This might be possibly explained by people who agree on the stigma of mental illness suffering lowered self-esteem and self-efficacy which corresponds with less satisfaction in the important part of life which might decrease their QOL(41).

In this study, Patients who have low resilient coping were lower QOL scores in all domains, except physical health. The finding is comparable with studies from Czech Republic in which negative coping strategies were negatively associated with QoL (29). The possible reason for this might be low coping self-efficacy is associated with passive coping, avoidance, lower treatment adherence, substance use, and other maladaptive coping strategies that may serve to increase the course of depression which might reduce their QOL (59).

In the current study, Patients with early onset of major depressive disorder had a markedly diminished perception of their physical and environmental health of QOL. This finding, partly, is in line with previous research in Ethiopia (24), and China (60). This could be the fact that patients with early onset of mental illness were likely to have an unfavorable prognosis, higher rates of chronicity, and reduced QOL(60).

In this study, duration of illness (greater than 10 years) and medication non-adherence, were related to a lower physical domain of QOL score. The study from Ethiopia (24), Nigeria (23), and Malaysia (61) support the finding. This could be explained by the fact that non-adherence to treatment causes relapses, symptoms to worsen, and patients' mental health to deteriorate which might decrease their QOL(62).

LIMITATIONS OF THE STUDY

The present study is not without limitations, first, this study did not exclude those who concurrently have other mental disorders, such as anxiety disorder and personality disorder. Moreover, the results are applicable only to clinically stable patients with major depressive disorder living in the community, precluding generalization to those living in residential facilities.

7. CONCLUSION AND RECOMMENDATION

7.1 CONCLUSION

The study revealed that the mean score quality of life of people with major depressive disorder in each domain was low. The severity of depression was negatively predicted in all of the domains. Social support, medication adherence, the onset of the illness, duration of the illness, additional medical diagnosis, number of episodes per year, resiliency, stigma, and wealth index were the predictors of a lower mean score quality of life in all or at least one domain of quality of life. The aforementioned factors must be considered during assessing and treating patients with MDD to improve QOL.

7.2 RECOMMENDATION

To health care provider

- Along with treatment for MDD clinicians better work with other professionals for screening and treating any medical-related problems as well.
- Clinicians would be better to give due emphasis on psycho-education about positive coping strategies and medication adherence.
- Provide close follow-up on patients with more than one relapse
- Assessing depression status on each follow-up by attaching a depression severity follow-up chart

To Jimma medical center and department of psychiatry

- Strengthen multidisciplinary approach by incorporating clinical psychologists for improving the resilience of people with MDD.
- Proving community awareness about mental illness and minimizing stigma towards people with MDD.

For Zonal Health Department, Regional Health Bureau, and Ministry of Health:

- By the health extension program and health development army need to strengthen community awareness to avoid stigmatizing people with MDD.

To Researchers:

- Researchers better to undergo a longitudinal study to know the long-term impact of MDD on quality of life.

8. REFERENCES

1. The WHOQOL Group. Development of the World Health Organization WHOQOL-BREF Quality of Life Assessment. Psychol Med. 1998;28(3):551–8.

2. Quilty LC, Van Ameringen M, Mancini C, Oakman J, Farvolden P. Quality of life and the anxiety disorders. J Anxiety Disord. 2003;17(4):405–26.

3. Benjamin J. Sadock, Virginia A PR. Kaplan & Sadock's Synopsis of Psychiatry: behavioral sciences/clinical psychiatry. 11th ed. Vol.1; 2015. 772–774 p.

4. American Psychiatric Association: Diagnostic and Statistical Manual of Mental Disorders. Fifth Edit. Arlington, VA: American Psychiatric Association; 2013. 160–162 p.

5. Benjamin J. Sadock, Virginia A. Sadock PR. kaplan and Sadock's comprehensive textbook of psychiatry. 10th ed. 2017. 4193–4196 p.

6. Otte C, Gold SM, Penninx BW, Pariante CM, Etkin A, Fava M, et al. Major depressive disorder. Nat Rev Dis Prim. 2016;2(Mdd):1–21.

7. Kennedy SH, Eisfeld BS, Cooke RG. Quality of life : an important dimension in assessing the treatment of depression ? 2001;(February).

8. Evans S, Banerjee S, Leese M, Huxley P. The impact of mental illness on quality of life: A comparison of severe mental illness, common mental disorder and healthy population samples. Qual Life Res. 2007;16(1):17–29.

9. Papakostas GI, Petersen T, Ph D, Mahal Y, Mischoulon D, Ph D, et al. Quality of life assessments in major depressive disorder : a review of the literature. 2004;26:13–7.

10. Hansson L. Quality of life in depression and anxiety. Int Rev Psychiatry. 2002;14:185–9.

11. Lakshmi R. Evaluation of Quality of Life Impairment in Depressive Patients. 2014;4(1):1–3.

12. Whittier AB, Gelaye B, Deyessa N, Bahretibeb Y, Kelkile TS, Berhane Y, et al. Major depressive disorder and suicidal behavior among urban dwelling Ethiopian adult outpatients at a general hospital. J Affect Disord. 2016;197(2016):58–65.

13. Murray CJL, Lopez AD. Alternative projections of mortality and disability by cause 1990-2020: Global Burden of Disease Study. Lancet. 1997;349(9064):1498–504.

14. Murphy JFA. The global burden of disease. Ir Med J. 2013;106(1):42–9.

15. Liu Q, He H, Yang J, Feng X, Zhao F, Lyu J. Changes in the global burden of depression from 1990 to 2017: Findings from the Global Burden of Disease study. J Psychiatr Res. 2020;126:134–40.

16. Sartorius N. The economic and social burden of depression. J Clin Psychiatry. 2001;62(Suppl. 15):8–11.

17. Hailemariam S, Tessema F, Asefa M, Tadesse H, Tenkolu G. The prevalence of depression and associated factors in Ethiopia: findings from the National Health Survey. Int J Ment Health Syst. 2012;6:1–11.

18. Alonso J, Angermeyer MC, Bernert S, Bruffaerts R, Brugha TS, Bryson H, et al. Prevalence of mental disorders in Europe: Results from the European Study of the Epidemiology of Mental Disorders (ESEMeD) project. Acta Psychiatr Scand Suppl. 2004;109(420):21–7.

19. Ustun B, Kowal P, Birit R, Officer A, Kowal P, Moussavi S, et al. Depression , chronic diseases , and decrements in health : results from the World Health Surveys Related papers. Lancet. 2007;370:851–8.

20. Berlim MT, Mattevi BS, Duarte APG, Thomé FS, Barros EJG, Fleck MP. Quality of life and depressive symptoms in patients with major depression and end-stage renal disease: A matched-pair study. J Psychosom Res. 2006;61(5):731–4.

21. Zeng Q, Xu Y, Wang WC. Quality of life in outpatients with depression in China. J Affect Disord. 2013;150(2):513–21.

22. Bonicatto SC, Dew MA, Zaratiegui R, Lorenzo L, Pecina P. Adult outpatients with depression: Worse quality of life than in other chronic medical diseases in Argentina. Soc Sci Med. 2001;52(6):911–9.

23. Aloba O, Fatoye O, Mapayi B, Akinsulore S. A review of quality of life studies in

Nigerian patients with psychiatric disorders. 2013;333–7.

24. Shumye S, Belayneh Z, Mengistu N. Health related quality of life and its correlates among people with depression attending outpatient department in Ethiopia: A cross sectional study. Health Qual Life Outcomes. 2019;17(1):1–9.

25. Angaw DA, Sciences M, Abady GG, Ayalew GD. Quality Of Life and Associated Factors among Patients with Major Depression on Follow Up At Amanuel Mental Specialized Hospital , Addis Ababa ,. 2019;

26. Zimmerman M, Mattia JI, Ph D, Posternak MA. Are Subjects in Pharmacological Treatment Trials of Depression Representative of Patients in Routine Clinical Practice ? 2002;469–73.

27. Pyne JM, Bullock D, Kaplan RM, Smith TL, Gillin JC, Golshan S, et al. Health-related quality-of-life measure enhances acute treatment response prediction in depressed inpatients. J Clin Psychiatry. 2001;62(4):261–8.

28. Ishak WW, Greenberg JM, Balayan K, Kapitanski N, Jeffrey J, Fathy H, et al. Quality of Life : The Ultimate Outcome Measure of Interventions in Major Depressive Disorder. 2011;229–39.

29. Holubova M, Prasko J, Ociskova M, Grambal A, Slepecky M, Marackova M, et al. Quality of life and coping strategies of outpatients with a depressive disorder in maintenance therapy – A cross-sectional study. Neuropsychiatr Dis Treat. 2018;14:73–82.

30. Berlim MT, McGirr A, Fleck MP. Can sociodemographic and clinical variables predict the quality of life of outpatients with major depression? Psychiatry Res. 2008;160(3):364–71.

31. William W, Balayan K, Bresee C, Matt J, Fakhry H, Christensen S, et al. A descriptive analysis of quality of life using patient-reported measures in major depressive disorder in a naturalistic outpatient setting. 2013;22(3):585–96.

32. Skevington SM, Mccrate FM. Expecting a good quality of life in health: Assessing people with diverse diseases and conditions using the WHOQOL-BREF. Heal Expect. 2012;15(1):49–62.

33. T CK, Buerger C. Determinants of subjective quality of life in depressed patients : The role of self-esteem , response styles , and social support. 2005;86:205–13.

34. Ul Haq N, Ahmed N, Rasool G, Illyas M NA. Assessment oF Health related Quality of life (HRQoL) of Patients with severe mental illness Attending tertiary Care Public Hospitals of Quetta, Pakistan. value Heal. 2016;9:843.

35. Trivedi MH, Wisniewski SR, Nierenberg AA, Gaynes BN, Warden D, Morris MBADW, et al. Health-related quality of life in depression: a STAR* D report. Ann Clin Psychiatry. 2010;22(1):43–55.

36. Holubova M, Prasko J, Matousek S, Latalova K, Marackova M, Vrbova K, et al. Comparison of self-stigma and quality of life in patients with depressive disorders and schizophrenia spectrum disorders - A cross-sectional study. Neuropsychiatr Dis Treat. 2016;12:3021–30.

37. Rayan A, Mahroum MH. The Correlates of Quality Of Life among Jordanian Patients with Major Depressive Disorder. 2016;4(2):28–33.

38. Sica N, Fleck MP. Evaluation of quality of life in adults with chronic health conditions : the role of depressive symptoms. 2010;32.

39. Chung L, Pan AW, Hsiung PC. Quality of life for patients with major depression in Taiwan:A model-based study of predictive factors. Psychiatry Res. 2009;168(2):153–62.

40. Depla MFIA, de Graaf R, van Weeghel J, Heeren TJ. The role of stigma in the quality of life of older adults with severe mental illness. Int J Geriatr Psychiatry. 2005;20(2):146–53.

41. Holubova M, Prasko J, Ociskova M, Marackova M. Self-stigma and quality of life in patients with depressive disorder : a cross-sectional study. 2016;2677–87.

42. Urbanoski KA, Cairney J, Adlaf E, Rush B. Substance abuse and quality of life among severely mentally ill consumers. Soc Psychiatry Psychiatr Epidemiol. 2007;42(10):810–8.

43. Central Statistical Agency/CSA/Ethiopia and ICF. Ethiopia Demographic and Health Survey. 2018;1–2.

44. Reba K, Birhane BW, Gutema H. Validity and Reliability of the Amharic Version of the

World Health Organization ’ s Quality of Life Questionnaire (WHOQOL- BREF) in Patients with Diagnosed Type 2 Diabetes in Felege Hiwot Referral Hospital , Ethiopia. 2019;2019.

45. The WHOQOL Group. Introduction , administration , scoring and generic version of the assessment field trial version December 1996 programme on mental health World Health Organization. 1996;(December):4–18.

46. Tan X, Patel I, Chang J. Tan X, Patel I, Chang J, et al. Review of the four item Morisky Medication Adherence Scale (MMAS-4) and eight item Morisky Medication Adherence Scale (MMAS-8). Inov Pharm. 2014;5(3):1–8.

47. Kroenke K, Spitzer RL, Williams JBW. The PHQ-9 Validity of a Brief Depression Severity Measure. 46202:606–13.

48. Mekonnen. T, Asmare. B MN. Factors Associated with Psychological Distress and Brief Resilient Coping Level During the COVID-19 Pandemic Among Health-Care Professionals in Dessie , Ethiopia. 2020;1213–21.

49. Abiola T, Udofia O, Zakari M. Psychometric Properties of the 3-Item Oslo Social Support Scale among Clinical Students of Bayero University Kano , Nigeria. 2013;

50. Martínez-zambrano F, Pizzimenti M, Barbeito S, Vila-badia R, Comellas G, Escandell MJ, et al. Spanish version of the Link ’ s Perceived Devaluation and Discrimination scale. 2016;28(2):201–6.

51. Boke MM, Yesuf A, Gutema BT. Prevalence of Undernutrition and Associated Factors among Lactating Mothers of Angecha District , Kembata Tembaro Zone , Southern Ethiopia. 2021;2021.

52. James D, Tobia G, Vilhauer J, Fakhry H, Pi S, Hanson E, et al. Quality of life in major depressive disorder before / after multiple steps of treatment and. 2015;51–60.

53. Forman-Hoffman VL, Nelson BW, Ranta K, Nazander A, Hilgert O, de Quevedo J. Significant reduction in depressive symptoms among patients with moderately-severe to severe depressive symptoms after participation in a therapist-supported, evidence-based mobile health program delivered via a smartphone app. Internet Interv. 2021;25(May).

54. Asadi-lari M, Tamburini M, Gray D. Patients ' needs , satisfaction , and health related quality of life : Towards a comprehensive model. 2004;15:1–15.

55. Prieto-vila M, Estupiñá FJ, Cano-vindel A. Risk Factors Associated with Relapse in Major Depressive Disorder in Primary Care Patients : A Systematic Review. 2021;33(1):44–52.

56. Thanita. h, Daochompu. N et al. The impact of residual symptoms on relapse and quality of life among Thai depressive patients. 2016;3175–81.

57. Waguih B, Ishak W, Steiner AJ, Klimowicz A, Kauzor K, Dang J, et al. Major Depression Comorbid with Medical Conditions : Analysis of Quality of Life , Functioning , and Depressive Symptom Severity. 48(1).

58. Ibrahim N, Che N, Ma D, Ahmad M. Relationships between social support and depression , and quality of life of the elderly in a rural community in Malaysia. 2013;5:59–66.

59. Laird KT, Krause B, Funes C, Lavretsky H. Psychobiological factors of resilience and depression in late life. Transl Psychiatry. 2019;

60. Chan SW, Hsiung P, Thompson DR, Chen S, Hwu H. Health-Related Quality of Life of Chinese People With Schizophrenia in Hong Kong and Taipei : A Cross-Sectional Analysis. 2007;261–9.

61. Munikanan T, Midin M, Iryani T, Daud M, Rahim RA, Kadir A, et al. Association of social support and quality of life among peo- ple with schizophrenia receiving community psychiatric service: A cross-sectional study,. Compr Psychiatry. 2017;

62. Semahegn A, Torpey K, Manu A, Assefa N, Tesfaye G, Ankomah A. Psychotropic medication non-adherence and its associated factors among patients with major psychiatric disorders : a systematic review and meta-analysis. 2020;1–18.

ANNEXES

Annex I: Informed consent form (English version)

A. Information sheet

Dear respondent,

My name _____, and I am working as a data collector for a study by Amanuel Yosef for partial fulfillment of requirement for the degree of master of science in integrated clinical and community mental health from Jimma university, department of psychiatry. I am going to give you information and invite you to participate in this study. Before you decide whether you participate you can talk to anyone you feel comfortable with there may be some words that you do not understand, please ask me to stop as we go through the information and I will take the time to explain. Your participation in this study is entirely volunteer. It is your choice whether to participate or not.

Name of the principal investigator: Amanuel Yosef

Name of the organization: Jimma University

Title of the research project: Quality of life and associated factors among people with major depressive disorder attending follow-up treatment at Jimma Medical Center, southwest Ethiopia 2022

Main purpose of the project: For partial fulfillment of Masters of Science in Integrated Clinical and Community Mental Health

Procedure: We invite you to participate in this project with your willingness. If you are willing to participate in this project, you need to understand and sign the agreement form. Then, you will be interviewed by the data collectors.

Risk/Discomfort: There is no risk in participating in this research project. We hope you will participate in the study for the sake of the benefit of the research result.

Benefits: If you participate in this research project, there may not be a direct benefit to you, but your participation likely helps us to meet the research objective

Incentives: You will not be provided any incentives or payment to take part in this project.

Confidentiality: The information collected for this research project will be kept confidential and information about you that will be collected by this study will be stored in a file, without your name, but code number assigned to it. It will not be revealed to anyone except the principal investigator and it will be kept locked.

Right to refuse or withdraw: You have the full right to refuse from participating in this research. You can choose not to respond to some or all questions if you do not want to give your response. You have also full right to withdraw from this study at any time you wish without losing any of your rights.

Person to contact: If you have any question, you can contact any of the following individuals and you may ask any time you want.

Amanuel: Phone number: +251 935561541, Amanuel Yosef

+251 920488557, Hailemariam Hailesilassiie

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B. Informed consent

I hereby confirm that I understand the contents of this document and the nature of the research project, and I consent to participating voluntarily in the research project. I understand that I am at autonomy to withdraw from the project at any time.

Signature of participant Date

_____ _____

Name and signature of data collector_____ Date_____

Name and signature of supervisor_____ Date_____

C. Informed consent (assent) from care givers (for participants aged less than 18)

Are you voluntary if your son / daughter /brother/sister/_____ participates in this study? Yes No

I /we/have understood the contents and objective of this research project. I/we/ also understood that this study brings no harm to my/our/ brother/sister/son/daughter/ _____ if he/she participates in it. Therefore I/we, as a caregiver/family/ of the participant, confirm that he/she participates with my/our willingness and full consent.

Signature of care giver/s_____ date_____

_____ date_____

Name and signature of data collector_____ date_____

Name and signature of supervisor _____ date_____

Annex II: Questionnaires (English version)

Code No._____

Instruction: The following questions are about quality of life and associated factors among patients with depression having follow-up at JMC, Jimma, Ethiopia, 2022

The questionnaire has ten parts. It will take about 30 minutes to complete the interview. Your willingness to complete all the questionnaires has great importance for successfulness of the project. Thank you very much for your patience!!!

PART I: Socio-demographic information

Instruction: The following questionnaires assess socio-demographic characteristics of the respondent.

Code	Item	Response options
101	Age	Age in yrs._____
102	Sex	1. Male 2. Female
103	Religion	1. Muslim 3. Orthodox 2. Protestant 4. Catholic 5. Other (specify)_____
104	Ethnicity	1. Oromo 3. Dawro 2. Amhara 4. Gurage 5. Others(specify)_____
105	Marital status	1. Single 3. Divorced 2. Married 4. Widowed/widower 5. Separated
106	Education status	1. Illiterate 3. High school 2. Elementary 4. Diploma and above
107	Occupation	1. Government employee 4. Merchant 7. No job 2. Private employee 5. House wife 3. Farmer 6. Daily laborer 8. Others specify_____
108	With whom you are living now?	1. With family 3. Relatives 2. Alone 4. Other specify _____

PART II: EDHS Wealth Index Questionaries

Code	Question	Response options
201	Where do you live	1. Urban 2. Rural
202	Does your household have an electricity?	1. Yes 2. No
203	Does your household have a radio?	1. Yes 2. No
204	Does your household have a television?	1. Yes 2. No
205	Does your household have a refrigerator?	1. Yes 2. No
206	Does your household have an electric mitad?	1. Yes 2. No
207	Does your household have a table?	1. Yes 2. No
208	Does your household have a chair	1. Yes 2. No
209	Does your household have a bed with cotton/sponge/spring mattress?	1. Yes 2. No
210	Does any member of your household have a bank account?	1. Yes 2. No
211	What is the main source of drinking water for members of your household?	1. Piped to yard 2. Others(specify)_____
212	What kind of toilet facility do members of your household usually use?	1. Pit latrine without slab/ open pit 2. No facility/bush/field 3. Others(specify)
213	What type of fuel does your household mainly use for cooking?	1. Electricity 2. Wood 3. Others(specify)_____
214	What is the main material of the floor in your household	1. Earth/sand 2. Others(specify)_____
215	What is the material of exterior walls in your household?	1. Bamboo with mud 2. Others(specify)_____
216	What is the material of the roof in your household	1. Metal/corrugated iron 2. Others(specify)_____

PART III: WHOQOL-BREF

Instruction: This assessment asks how you feel about your quality of life, health, or other areas of your life.

Code	**Item code**	**Item**	**Very poor**	**poor**	**Neither poor nor good**	**good**	**Very good**
301	(G1)	How would you rate your quality of life?	1	2	3	4	5
			Very dissatisfied	**Dissatisfied**	**Neither satisfied nor dissatisfied**	**satisfied**	**Very satisfied**
302	(G4)	How satisfied are you with your health?	1	2	3	4	5
The following questions ask about **how much** you have experienced certain things in the last two weeks.							
			Not at all	**A little**	**A moderate amount**	**Very much**	**An extreme amount**
303	(F1.4)	To what extent do you feel that physical pain prevents you from doing what you need to do?	1	2	3	4	5
304	(F11.3)	How much do you need any medical treatment to function in your daily life?	1	2	3	4	5
305	(F4.1)	How much do you enjoy life?	1	2	3	4	5
306	(F24.2)	To what extent do you feel your life to be meaningful?	1	2	3	4	5
			Not at all	**A little**	**A moderate amount**	**Very much**	**extremely**
307	(F5.3)	How well are you able to concentrate?	1	2	3	4	5

308	(F16.1)	How safe do you feel in your daily life?	1	2	3	4	5
309	(F22.1)	How healthy is your physical environment?	1	2	3	4	5
The following questions ask about **how completely** you experience or were able to do certain things in the last two weeks.							
			Not at all	**A little**	**Moderately**	**Mostly**	**Completely**
310	(F2.1)	Do you have enough energy for everyday life?	1	2	3	4	5
311	(F7.1)	Are you able to accept your bodily appearance?	1	2	3	4	5
312	(F18.1)	Have you enough money to meet your needs?	1	2	3	4	5
313	(F20.1)	How available to you is the information that you need in your day-to-day life?	1	2	3	4	5
314	(F21.1)	To what extent do you have the opportunity for leisure activities?	1	2	3	4	5
			Very poor	**poor**	**Neither poor nor good**	**good**	**Very good**
315	(F9.1)	How well are you able to get around?					
The following questions ask you to say **how good or satisfied** you have felt about various aspects of your life over the last two weeks.							
			Very dissatisfied	**Dissatisfied**	**Neither satisfied nor dissatisfied**	**Satisfied**	**Very satisfied**
316	(F3.3)	How satisfied are you with your sleep?	1	2	3	4	5
317	(F10.3)	How satisfied are you with	1	2	3	4	5

		your ability to perform your daily living activities?					
318	(F12.4)	How satisfied are you with your capacity for work?	1	2	3	4	5
319	(F6.3)	How satisfied are you with yourself?	1	2	3	4	5
320	(F13.3)	How satisfied are you with your personal relationships?	1	2	3	4	5
321	(F15.3)	How satisfied are you with your sex life?	1	2	3	4	5
322	(F14.4)	How satisfied are you with the support you get from your friends?	1	2	3	4	5
323	(F17.3)	How satisfied are you with the conditions of your living place?	1	2	3	4	5
324	(F19.3)	How satisfied are you with your access to health services?	1	2	3	4	5
325	(F23.3)	How satisfied are you with your transport?	1	2	3	4	5
The following question refers to **how often** you have felt or experienced certain things in the last two weeks.							
			Never	**Seldom**	**Quite often**	**Very often**	**Always**
326	(F8.1)	How often do you have negative feelings such as blue mood, despair, anxiety, depression?	1	2	3	4	5

PART IV: Clinical Characteristics of the respondents

Instruction: The following questionnaires assess the clinical characteristics of the respondents. It will be filled from both document review and interviewing.

Code	Question	Response options
401	Age of onset	_____year
402	Duration of illness	_____days _____months _____years
403	Duration of treatment	_____days _____months _____years
404	Number of episodes per year	_____
405	Diagnosed comorbid illness	1.yes 2. no
406	If yes to Q 305 What type of comorbid illness	Specify_____

PART V: Questions associated with Morisky Medication Adherence Scales (MMAS-4)

Code		Yes	No
501	Do you ever forget to take your psychotropic medicine?		
502	Are you careless at times about taking your psychotropic medicine?		
503	Sometimes if you feel worse when you take the medicine, do you stop taking your psychotropic medicine?		
504	When you feel better do you sometimes stop taking your psychotropic medicine?		
Total			

PART VI: PATIENT HEALTH QUESTIONNAIRE (PHQ-9)

Instruction: The following questionnaires assess over the last 2 weeks; how often have you been bothered by any of the following problems

Code	Item	Not at all	Several days	More than half the days	Nearly every day
601	Little interest or pleasure in doing things	0	1	2	3
602	Feeling down, depressed, or hopeless	0	1	2	3
603	Trouble falling or staying asleep, or sleeping too much	0	1	2	3
604	Feeling tired or having little energy	0	1	2	3
605	Poor appetite or overeating	0	1	2	3
606	Feeling bad about yourself or that you are a failure or have let yourself or your family down	0	1	2	3
607	Trouble concentrating on things, such as reading the newspaper or watching television	0	1	2	3
608	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
609	Thoughts that you would be better off dead, or of hurting yourself	0	1	2	3

PART VII: Brief resilient coping scale

Instructions: Consider how well the following statements describe your behavior and actions.

Code		Does not describe me at all	Does not describe me	Neutral	Describes me	Describes me very well
701	I look for creative ways to alter difficult situations.	1	2	3	4	5
702	Regardless of what happens to me, I believe I can control my reaction to it.	1	2	3	4	5
703	I believe I can grow in positive ways by dealing with difficult situations.	1	2	3	4	5
704	I actively look for ways to replace the losses I encounter in life.	1	2	3	4	5

PART VIII: Oslo Social Support Questionnaires (Oslo-3)

Instruction: The following 3 questions ask about how you experience your social relationships. The inquiry is about your immediate personal experience.

Code	Questions	Response options
801	How many people are you so close to that you can count on them if you have great personal problems?	1. None 2. 1-2 3. 3-5 4. 5 and above
802	How much interest and concern do people show in what you do?	1. Very little 2. Little 3. Uncertain 4. Some 5. A lot

803	How easy is it to get practical help from neighbors if you should need it?	1. Very difficult 2. Difficult 3. Possible 4. Easy 5. Very easy

PART IX: Perceived Devaluation and Discrimination Scale (PDD)

Instruction: Below is questions regarding our perception about what others think in relation to people with severe mental illness. Please carefully circle the score that fits your idea.

Code	Item	Strongly disagree	Disagree	Agree	Strongly agree
901	Most people would be close friend with a person who once had severe mental illness	1	2	3	4
902	Most people believe that a person who has severe mental illness is just as intelligent as anyone else	1	2	3	4
903	Most people believe that a person who has been treated for mental illness is just as trustworthy as anyone else	1	2	3	4
904	Most people would accept a person who has had severe mental illness as a teacher in a school	1	2	3	4
905	Most people believe that receiving treatment for severe mental illness is a sign of personal failure	1	2	3	4
906	Most people will not hire a person who has been hospitalized for severe mental illness to take care of their children, even if he or she had been well for some time	1	2	3	4

907	Most people think less of a person who has been treated for severe mental illness	1	2	3	4
908	Most employers will hire a qualified person even if he or she has been treated for severe mental illness	1	2	3	4
909	Most employers would prefer to hire someone who does not have a history of severe mental illness	1	2	3	4
910	Most people I know would treat a person who has been treated for severe mental illness the same way the treat everyone else	1	2	3	4
911	Most young women would be reluctant to date a man who has been treated for severe mental illness	1	2	3	4
912	Most people think that a person who has been treated for severe mental illness is dangerous and unpredictable.	1	2	3	4

PART X: SUBSTANCE USE ASSESSMENTS

Code	Questions	Response options
1001	In your life, have you ever used Psychoactive substances? (non-medical use only)	1. Yes 2. No
1002	If "yes" to **1001** which psychoactive substance, did you use? (Choose all substances you used)	1. Tobacco products (cigarettes, chewing tobacco, etc.) 2. Alcoholic beverages (beer, wine, Local Areke, tela, etc.) 3. Khat 4. Cannabis/hashish/marijuana 5. Others(specify) _____
1003	In the past three months, have you used any of the above psychoactive substances?	1. Yes 2. No
1004	If "yes" to **1003** which psychoactive substance, did you use? (Choose all substances you used)	1. Tobacco products (cigarettes, chewing tobacco, etc.) 2. Alcoholic beverages (beer, wine, Local Areke, tela, etc.) 3. Khat 4. Cannabis/hashish/marijuana 5. Others(specify) _____

አባሪ ፤ በመረጃ የተደገፈ የስምምነት ቅጽ (የአማርኛ ቅጂ)

ሀ. የመረጃ ወረቀት

ውድ ምላሽ ሰጪ

ስሜ _____፣ ከጅማ ዩኒቨርሲቲ የአእምሮ ህክምና ክፍል የተቀናጀ ማህበረሰብ እና የአእምሮ ጤና ሳይንስ ማስተርስ ዲግሪውን በከፊል ለማሟላት በአማኑኤል ዮሴፍ ጥናት መረጃ ሰብሳቢ ሆኜ እየሰራሁ ነው። መረጃ እሰጥሃለሁ እናም በዚህ ጥናት እንድትሳተፍ እጋብዝሃለሁ። ለመሳተፍ ከመወሰንዎ በፊት ምኞት የሚሰማዎትን ማንኛውንም ሰው ማነጋገር ይችላሉ፣ ምናልባት እርስዎ የማይረዱዋቸው ቃላት ሊኖሩ ይችላሉ, እባክዎን መረጃውን በምንሞላበት ጊዜ እንዳቆም ይጠይቁኝ እና ለማብራራት ጊዜ እወስዳለሁ። በዚህ ጥናት ውስጥ ያለዎት ተሳትፎ ሙሉ በሙሉ በፈቃደኝነት ላይ የተመሰረተ ነው። መሳተፍ ወይም አለመሳተፍ የእርስዎ ምርጫ ነው።

የዋና ተመራማሪ ስም፡- አማኑኤል ዮሴፍ

የተቋሙ ስም፡- ጅማ ዩኒቨርሲቲ

የምርምር ፕሮጀክቱ ርዕስ፡ የህይወት ጥራት እና ተያያዥ ምክንያቶች በጅማ ህክምና ማእከል ክትትል በሚያደርጉ የድባቴ ህመም ያለባቸው ሰዎች ፣ ደቡብምዕራብ ኢትዮጵያ 2022

የፕሮጀክቱ ዋና ዓላማ፡ የተቀናጀ ክሊኒካል እና የማህበረሰብ የአእምሮ ጤና ሳይንስ ማስተርስ በከፊል ለማሟላት

ሂደት፡ በዚህ ፕሮጀክት ላይ በፍላጎትዎ እንዲሳተፉ እንጋብዝዎታለን። በዚህ ፕሮጀክት ላይ ለመሳተፍ ፍቃደኛ ከሆኑ የስምምነት ቅጹን መረዳት እና መፈረም ያስፈልግዎታል። ከዚያ በመረጃ ሰብሳቢዎች ቃለ መጠይቅ ይደረግልዎታል.

ስጋት፡ በዚህ የምርምር ፕሮጀክት ውስጥ መሳተፍ ምንም አይነት ስጋት የለም። ለምርምር ውጤቱ ጥቅም ሲባል በጥናቱ ላይ እንደሚሳተፉ ተስፋ እናደርጋለን።

ጥቅማ ጥቅሞች፡ በዚህ የምርምር ፕሮጀክት ውስጥ ከተሳተፉ፣ ለእርስዎ ቀጥተኛ ጥቅም ላይኖር ይችላል፣ ነገር ግን የእርስዎ ተሳትፎ የምርምር አላማውን ለማሳካት ሊረዳን ይችላል።

ማበረታቻዎች፡ በዚህ ፕሮጀክት ላይ ለመሳተፍ ምንም አይነት ማበረታቻ ወይም ክፍያ አይሰጥዎትም።

ምስጢራዊነት፡ ለዚህ የምርምር ፕሮጀክት የሚሰበሰበው መረጃ በሚስጥር ይጠበቃል እና በዚህ ጥናት የሚሰበሰቡት መረጃዎች በፋይል ውስጥ ይቀመጣሉ፣ ስምዎ አይኖርም ፣ ግን ኮድ ቁጥር ይመደባል ። ከዋናው ተመርማሪ በስተቀር ለማንም አይገለጽም እና ተዘግቶ ይቆያል።

እምቢ የማለት ወይም የመውጣት መብት፡ በዚህ ጥናት ውስጥ ላለመሳተፍ ሙሉ መብት አለዎት። ምላሽዎን መስጠት ካልፈለጉ ለአንዳንድ ወይም ለሁሉም ጥያቄዎች ምላሽ ላለመስጠት መምረጥ ይችላሉ። እንዲሁም ማንኛውንም መብቶችዎን ሳያጡ በፈለጉት ጊዜ ከዚህ ጥናት የመውጣት ሙሉ መብት አለዎት።

የምታነጋግረው ሰው፡ ማንኛውም አይነት ጥያቄ ካሎት ከሚከተሉት ግለሰቦች አንዱን ማነጋገር ትችላለህ እና በፈለከው ጊዜ መጠየቅ ትችላለህ።

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ለ. በመረጃ የተደገፈ ስምምነት

በዚህ ሰነድ ውስጥ ያለውን ይዘት እና የምርምር ፕሮጀክቱን ባህሪ እንደተረዳሁ አረጋግጣለሁ, እና በምርምር ፕሮጀክቱ ውስጥ በፈቃደኝነት ለመሳተፍ ተስማምቻለሁ. በማንኛውም ጊዜ ከፕሮጀክቱ ለመውጣት በራስ ገዝ መሆኔን ተረድቻለሁ።

የተሳታፊ ፊርማ ቀን

_____ _____

የመረጃ ሰብሳቢው ስም እና ፊርማ_____ ቀን_____

የሱፐርቫይዘሩ ስም እና ፊርማ_____ ቀን_____

መ. የቤተሰብ ስምምነት ቅፅ(እድሚያቸዉ ከ 18 አመት በታች ለሆኑ ተሳታፊዎች)

ልጅዎት/ወንድሞት/እህቶት/_____እንዲሳተፍ ፍቃደኛ ኖት?

አዎ አይ

የጥናቱን ይዘት እና አለማ በደንብ ተረድቻለሁ/ተረድተናል. በተጨማሪም ጥናቱ ተሳታፊዉ/ዋ ጥናቱ ላይ ብሳተፍ /ብትሳተፍ/ ምንም አይነት ጉዳት እንደማያመጣበት/ባት ተረድቻለሁ/ተረደተናል/. ስለዚህ እኔ/እኛ, ቤተሰቡ/ቤተሰቧ እንደመሆኔ/ናችን መጠን, ተሳታፊዉ/ዋ በጥናቱ ላይ እንዲሳተፍ/እንዲትሳተፍ ፍቃደኛ/ፍቃደኞች/ ነኝ/ነን፡፡

የቤተሰብ ፊርማ _____ ቀን_____

የመረጃ ሰብሳቢ ስም እና ፊርማ _____ ቀን _____

የተቆጣጣሪ ስም እና ፊርማ _____ ቀን_____

አባሪ ll፡ መጠይቆች (የአማርኛ ቅጂ)

ኮድ ቁጥር _____

መመሪያ፡ የሚከተሉት ጥያቄዎች የህይወት ጥራት እና ተያያዥ ምክንያቶች በጅማ ህክምና ማእከል ክትትል በሚያደርጉ የድባቴ ህመም ያለባቸው ሰዎች ፣ ደቡብምዕራብ ኢትዮጵያ 2022 ላይ ነው።

መጠይቁ አስር ክፍሎች አሉት። ቃለ መጠይቁን ለማጠናቀቅ 30 ደቂቃ ያህል ይወስዳል። ሁሉንም መጠይቆች ለመሙላት ያለዎት ፍላጎት ለፕሮጀክቱ ስኬት ትልቅ ጠቀሜታ አለው። ለትዕግስትዎ በጣም እናመሰግናለን!!!

ክፍል አንድ: የተሳተፊ ስነ-ህዝብ እና ማህበራዊ ሁኔታ መጠይቆች

መመሪያ፡ የሚከተሉት መጠይቆች የተሳታፊዎች ማህበራዊ ሁኔታን ይመለከታሉ። እባክዎ ትክክለኛዉን መልስ ይሙሉ ወይም ያክብቡ

ኮድ	**ጥያቄዎች**	**የመልስ አማራጮች**
101	ዕድሜ	ዕድሜ በዓመታት_____
102	ፆታ	1. ወንድ 2. ሴት
103	ሃይማኖት	1. ሙስሊም 3. ኦርቶዶክስ 2. ፕሮቴስታንት 4. ካቶሊክ 5. ሌላ (ይግለጹ)_____
104	ብሄር	1. ኦሮሞ 3. ዳውሮ 2. አማራ 4. ጉራጌ 5. ሌሎች(ይግለጹ)_____
105	የጋብቻ ሁኔታ	1. ያላገባ 3. የተፋታ 2. ያገባ 4. ባል የሞተባት/የሞተባት 5. የተለያዩ
106	የትምህርት ሁኔታ	1. ያልተማረ 3. ሁለተኛ ደረጃ ትምህርት ቤት 2. የመጀመሪያ ደረጃ 4. ዲፕሎማ እና ከዚያ በላይ
107	ስራ	1. የመንግስት ሰራተኛ 4. ነጋዴ 7. ስራ የሌለው 2. የግል ሰራተኛ 5. የቤት እመቤት 3. አርሶ አደር 6. የቀን ሰራተኛ 8. ሌሎች ይገልፁ_____
108	አሁን ከማን ጋር ነው የሚኖሩት?	1. ከቤተሰብ ጋር 3. ዘመዶች 2. ብቻውን 4. ሌላ ይግለጹ _____

ክፍል ሁለት፡ የ ቤት ንብረት መጠይቅ (EDHS Wealth Index Questionaires)

ኮድ	ጥያቄ	መልስ
201	የመኖሪያ ቦታዎ የት ነዉ?	1. ከተማ 2. ገጠር
202	የእርስዎ ቤት ዉስት ኤሌክትሪክ ሀይል አለ?	1. አዎ 2. የለም
203	የእርስዎ ቤት ዉስት ራድዮ አለ?	1. አዎ 2. የለም
204	የእርስዎ ቤት ዉስት ቴሌቭዥን አለ?	1. አዎ 2. የለም
205	የእርስዎ ቤት ዉስት ፍሪጅ አለ?	1. አዎ 2. የለም
206	የእርስዎ ቤት ዉስት የኤሌክትሪክ ምጣድ አለ?	1. አዎ 2. የለም
207	የእርስዎ ቤት ዉስት ጠረጴዛ አለ?	1. አዎ 2. የለም
208	የእርስዎ ቤት ዉስት ወንበር አለ?	1. አዎ 2. የለም
209	የእርስዎ ቤት ዉስት የሰፖንጅ ፍራሽ እና ትራስ ያለዉ ላልጋ አለ?	1. አዎ 2. የለም
210	ከቤተሰብዎ አባላት ባንክ አካዉንት ያለዉ አለ?	1. አዎ 2. የለም
211	ቤተሰብዎ የመጠጥ ዉሃ የሚያገኙት ከምንድን ነዉ?	1. ከ ቧንቧ 2. ሌላ(ይጥቀሱ)_____
212	ቤተሰብዎ አዘዉትሮ የሚጠቀሙት ምን አይነት መፀዳጃ ቤት ነዉ?	1. የጉድጓድ መፀዳጃ/ ክፍት ጉድጓድ 2. መፀዳጃ የለም/ ሜዳ ላይ 3. ሌላ(ይጥቀሱ)_____
213	ቤተሰብዎ ምግብ ለማብሰል በምን ይጠቀማሉ?	1. ኤሌክትሪክ ሀይል 2. እንጨት 3. ሌላ(ይጥቀሱ)_____
214	የእርስዎ ቤት ዉስጡ/መሬቱ/ ከምን የተሰራ ነዉ›?	1. አፈር/አሸዋ 2. ሌላ(ይጥቀሱ)_____
215	የእርስዎ ቤት የዉጪዉ ግድግዳ ከምን የተሰራ ነዉ?	1. ከሸመል እና ጭቃ 2. ሌላ(ይጥቀሱ)_____
216	የእርስዎ ቤት ጣራዉ ከምን የተሰራ ነዉ?	1. ብረት/ቆርቆሮ 2. ሌላ(ይጥቀሱ)_____

ክፍል ሶስት፡ የአኗኗር ሁኔታ /ጥራት መጠይቅ

መመሪያ፡ ይህ ግምገማ ስለ እርስዎ የህይወት ጥራት፣ ጤና ወይም ሌሎች የህይወትዎ ዘርፎች ምን እንደሚሰማዎት ይጠይቃል።

ኮድ	**የጥያቄ ኮድ**	**ጥያቄዎች**	**በጣም ዝቅተኛ**	**ዝቅተኛ**	**መካከለኛ**	**ጥሩ**	**በጣም ጥሩ**
301	(ጂ1)	የእርስዎን የህይወት ጥራት ደረጃ እንዴት ይገመግሙታል?	1	2	3	4	5
			በጣም አልረካሁም	**አልረካሁም**	**መካከለኛ**	**ረክቻለሁ**	**በጣም ረክቻለሁ**
302	(ጂ4)	በጤናዎ ምን ያህል ረክተዋል?	1	2	3	4	5
የሚከተሉት ጥያቄዎች ባለፉት ሁለት ሳምንታት ውስጥ አንዳንድ ነገሮችን እንዴት እንዳስተናገዷቸው ይጠይቃሉ							
			በፍጹም	**በትንሹ**	**በመካከለኛ መጠን**	**በጣም**	**እጅግ በጣም**
303	(ኤፍ 1.4)	ምን ያህል አካላዊ ህመም ማድረግ ያለብዎትን ነገር እንዳያደርጉ የሚከለክል ሆኖ ይሰማዎታል?	1	2	3	4	5
304	(ኤፍ11.3)	በዕለት ተዕለት ሕይወትዎ ውስጥ ለመስራት ምን ያህል የሕክምና ሕክምና ይፈልጋሉ?	1	2	3	4	5
305	(ኤፍ 4.1)	ምን ያህል ህይወት ያስደስትዎታል?	1	2	3	4	5
306	(ኤፍ 24.2)	ሕይወትዎ ትርጉም ያለው እንዲሆነ ምን ያህል ይሰማዎታል?	1	2	3	4	5
			በፍጹም	**በትንሹ**	**በመካከለኛ መጠን**	**በጣም**	**እጅግ በጣም**
307	(ኤፍ 5.3)	ምን ያህል በደንብ ማተኮር ይችላሉ?	1	2	3	4	5
308	(ኤፍ 16.1)	በዕለት ተዕለት ሕይወትዎ ውስጥ ምን ያህል ደህንነት ይሰማዎታል?	1	2	3	4	5
309	(ኤፍ 22.1)	አካባቢዎ ምን ያህል ጤናማ ነው?	1	2	3	4	5
የሚከተሉት ጥያቄዎች አንዳንድ ነገሮችን በምን ያህል መጠን እንደሰሯቸው ወይም እንዳስተናገዷቸው የሚጠይቁ ናቸው							

			ምንም	**በትንሹ**	**መካከለኛ**	**በብዛት**	**ሙሉ በሙሉ**
310	(ኤፍ 2.1)	የየእለት ህይወትዎን ለመፈፀም የሚሆን አቅም / ጉልበት አለዎት	1	2	3	4	5
311	(ኤፍ 7.1)	የአካል ገፅታህን ምን ያህል ትቀበለዋለህ	1	2	3	4	5
312	(ኤፍ 18.1)	ፍላጎቶችህን ለማሟላት በቂ ብር አለዎት	1	2	3	4	5
313	(ኤፍ 20.1)	ለየእለት ህይወትህ የሚጠቅም መረጃ ላንተ ምን ያህል ቅርብ ነው	1	2	3	4	5
314	(ኤፍ 21.1)	ምን ያህል ለመዝናናት እድሉ አለዎት	1	2	3	4	5
			በጣም ደካማ	**ደካማ**	**መካከለኛ**	**ጥሩ**	**በጣምጥሩ**
315	(ኤፍ 9.1)	ምን ያህል ከሰዎች ጋር በቀላሉ ይግባባሉ?	1	2	3	4	5
የሚከተሉት ጥያቄዎች ባለፉት ሁለት ሳምንት ውስጥ በተለያዩ የህይወት ገፅታዎች ምን እንደተሰማዎት እና ምን ያህል እንደረኩ ይጠይቃሉ							
			በጣም አልረካም	**አልረካሁም**	**መካከለኛ**	**ረክቻለሁ**	**በጣም ረክቻለሁ**
316	(ኤፍ 3.3)	በእንቅልፍፎ ምን ያህል ረክተዋል	1	2	3	4	5
317	(ኤፍ 10.3)	የዕለት ህይወትዎን በመፈፀም አቅምዎ ምን ያህል ረክተዋል	1	2	3	4	5
318	(ኤፍ 12.4)	ለስራ ባለዎ አቅም ምን ያህል ረክተዋል	1	2	3	4	5
319	(ኤፍ 6.3)	በራስዎ/በሁለንተናዎ ምን ያህል ረክተዋል	1	2	3	4	5
320	(ኤፍ 13.3)	ከሰዎች ጋር ባልዎ ግንኙነት ምን ያህል ረክተዋል	1	2	3	4	5
321	(ኤፍ 15.3)	በወሲብ ህይወትዎ ምን ያህል ረክተዋል	1	2	3	4	5
322	(ኤፍ 14.4)	ከጓደኞች በሚያገኙት ድጋፍ ምን ያህል ረክተዋል	1	2	3	4	5

323	(ኤፍ 17.3)	በጤና አገልግሎት ምን ያህል ረክተዋል	1	2	3	4	5
324	(ኤፍ 19.3)	በመኖሪያ ቤትዎ ሁኔታ ምን ያህል ረክተዋል	1	2	3	4	5
325	(ኤፍ 23.3)	በመጓጓዣዎ ምን ያህል ረክተዋል	1	2	3	4	5
የሚከተሉትን ጥያቄዎች ባለፉት ሁለት ሳምንታት እንዴት እንዳስተናገድዎቸው ወይም እንደተሰማችሁ ይጠየቃሉ							
			በጭራሽ	**አልፎ አልፎ**	**ብዙ ጊዜ**	**በጣም ብዙ ጊዜ**	**ሁል ጊዜ**
326	(ኤፍ 8.1)	ምን ያህል ግዜ አሉታዊ ስሜት(ለምሳሌ መከፋት ፣ድብርት፣ ፍርሀት) ይሰማዎታል?	1	2	3	4	5

ክፍል አራት፡ ምላሽ ሰጪዎች ክሊኒካዊ ባህሪያት

***መመሪያ*: የሚከተሉት መጠይቆች ምላሽ ሰጪዎችን ክሊኒካዊ ባህሪያት ይገመግማሉ. ከሁለቱም ሰነዶች ግምገማ እና ቃለ መጠይቅ ይሞላል።**

ኮድ	**ጥያቄዎች**	**የመልስ አማራጮች**
401	ህመሙ በስንት ዓመት ጀመረዎት	_____ዓመታት
402	ከህመሙ ጋር ስንት ዓመት ቆዩ	_____ ቀናት _____ ወራት _____ ዓመታት
403	ህክምናዎን ከጀመሩ ስንት ዓመት ሆነዎት	_____ ቀናት _____ ወራት _____ ዓመታት
404	በዓመት ስንት ጊዜ አገርሽቶበዎታል?	_____
405	በህኪም የተረጋገጠ ተጨማሪ ህመም ዓለበዎት	1.አዎ 2. አይ
406	ለተ.ቁ 405 መልሰዎ አዎ ከሆነ ምን አይነት በሽታ	ይግለጹ_____

ክፍል አምስት፡ ሞሪስኪ" *መድኃኒትን በታዘዘው መሰረት በአግባቡ ስለመውሰድ*" መለኪያ- 4

ኮድ		አዎ	አይ
501	*መድሃኒትዎን ለመውሰድ መቼም አልረሱም?*		
502	*መድሃኒት ለመውሰድ አንዳንድ ጊዜ ግዴለሽ ነዎት?*		
503	አንዳንድ ጊዜ *መድሃኒቱን ሲወስዱ መጥፎ ስሜት ካጋጠመዎት መውሰድዎን ያቆማሉ?*		
504	አንዳንድ ጊዜ የተሻለዎት መስሎዎት *መድሃኒቱን* መውሰድ አቁመዉ ያዉቃሉ?		
አጠቃላይ			

ክፍል ስድስት፡ የታካሚ ጤና ጥያቄ (PHQ-9)

***መመሪያ፡ የሚከተሉት መጠይቆች ያለፉት 2 ሳምንታት ይገመገማሉ።* ከሚከተሉት ችግሮች ውስጥ ምን ያህል ጊዜ አስቸግሮዎታል**

ኮድ	ጥያቄዎች	በጭራሽ አይደለም	ለብዙ ቀናት	ከግማሽ ቀናት በላይ	በየቀኑ ማለት ይቻላል
601	ነገሮችን ለመስራት ፍላጎት ወይም ደስታ ማነስ	0	1	2	3
602	የመንፈስ ጭንቀት፣ የመንፈስ ጭንቀት ወይም የተስፋ መቁረጥ ስሜት	0	1	2	3
603	የመተኛት ወይም ተኝቶ ያለመቆዬት ችግር፣ ወይም ብዙ መተኛት	0	1	2	3
604	የድካም ስሜት ወይም ጉልበት ማነስ	0	1	2	3
605	ደካማ የምግብ ፍላጎት ወይም ከመጠን በላይ መብላት	0	1	2	3
606	ስለራስዎ መጥፎ ስሜት ወይም ውድቀት እንደሆንክ ወይም እራስህን ወይም ቤተሰብህን አስትዋሃል	0	1	2	3
607	እንደ ጋዜጣ ማንበብ ወይም ቴሌቪዥን መመልከት ባሉ ነገሮች ላይ ማተኮር አለመቻል	0	1	2	3
608	ሌሎች ሰዎች ሊገነዘቡት በሚችሉት ቀስ ብሎ መንቀሳቀስ ወይም መናገር። ወይም በተቃራኒው እረፍት የሌለበት ከመሆኑ የተነሳ ከወትሮው በበለጠ ብዙ መንቀሳቀስ።	0	1	2	3
609	ብትሞት ይሻላል ወይም እራስህን ብትጎዳ ይሻልሃል የሚሉ ሃሳቦች	0	1	2	3

ክፍል ሰባት፡ አጭር የመቋቋም ችሎታ መጠይቅ

መመሪያዎች፡ የሚከተሉት መግለጫዎች የእርስዎን ባህሪ እና ድርጊት ምን ያህል እንደሚገልጹ አስቡበት።

code		**በፍፁም አይገልፀኝም**	**አይገልፀኝም**	**ገለልተኛ**	**ይገልፀኛል**	**በደንብ ይገልፀኛል**
701	አስቸጋሪ ሁኔታዎችን ለመለወጥ የፈጠራ መንገዶችን እፈልጋለሁ	1	2	3	4	5
702	በእኔ ላይ ምንም ይሁን ምን, ለነገሩ ያለኝን ምላሽ መቆጣጠር እንደምችል አምናለሁ	1	2	3	4	5
703	አስቸጋሪ ሁኔታዎችን በማስተናገድ በአዎንታዊ መንገድ ማደግ እንደምችል አምናለሁ	1	2	3	4	5
704	በህይወት ውስጥ የሚያጋጥሙኝን ኪሳራዎች ለመተካት መንገዶችን በንቃት እፈልጋለሁ	1	2	3	4	5

ክፍል ክፍል ሰምንት: ኦስሎ የማህበራዊ ድጋፍ መጠይቆች (Oslo-3)

መመሪያ፡ የሚከተሉት ጥያቄዎች ማህበራዊ ግንኙነቶችዎ እንዴት እንደሆነ ይጠይቃሉ ። እባክዎ በግል ልምድዎ ተመስርቶዉ ይሙሉ

ኮድ	**ጥያቄዎች**	**የመልስ አማራጮች**
801	ከባድ የግል ችግር ሲያጋጥምዎ በቁጥር ምን ያህል ሰዎች ከአጠገብዎ ይገኛሉ; (አንድ ብቻ ይምረጡ)	1. ምንም 2. 1 ወይም 2 3. ከ3-5 4. ከ 5 በላይ
802	ሰዎች ስለ እርስዎ ምን ያህል ግድ ይላቸዋል? (አንድ ምርጫ ብቻ ያክብቡ)	1.ምንም 2.በጣም ትንሽ 3.እርግጠኛ አይደለሁም 4.መካከለኛ 5.ብዙ
803	ከ ጎደኞችዎ ወይንም አበረው የጋራ መኝታ ቤት ከሚጋሮአቸው ሰዎች ተጨባጭ እርዳታ ለማማግኘት ያሉዎት እድል ምን ያህል ነው? (አንድ ምርጫ ብቻ ያክብቡ)	1.በጣም ከባድ 2. ከባድ 3. መጠነኛ 4. ቀላል 5. በጣም ቀላል

ክፍል ዘጠኝ፡ የእዕምሮ ህሙማን የመገለል ስሜት መጠይቅ (Perceived Devaluation and Discrimination Scale (PDD))

መመሪያ፡ ከዚህ በታች የተዘረዘሩት ሌሎች ሰዎች ስለ ከባድ የአእምሮ ህመም ያለባቸው ሰዎች ምን ይላሉ ብለን የሚናስባቸዉ ነገሮች ናቸ ፡፡ እባክዎን ሀሳብዎን የሚስማማውን ውጤት በጥንቃቄ ያክብቡ

ኮድ	ሀሳቦች	በጭራሽ አልስማማም	አልስማማም	እስማማለሁ	በጥብቅ እስማማለሁ
901	ብዙ ሰዎች በአንድ ወቅት ከባድ የአእምሮ ህመም ካለው ሰው ጋር የቅርብ ጓደኛ ይሆናሉ	1	2	3	4
902	ብዙ ሰዎች ከባድ የአእምሮ ህመም ያለበት ሰው እንደማንኛውም ብልህ ሰው ነው ብለው ያምናሉ	1	2	3	4
903	ብዙ ሰዎች በአእምሮ ህመም የታከመ ሰው እንደማንኛውም ሰው እምነት የሚጣልበት ነው ብለው ያምናሉ	1	2	3	4
904	ብዙ ሰዎች በ ት / ቤት ውስጥ የሆነ ጊዜ ከባድ የአእምሮ ህመም ያነበረበት ሰው አስተመር ብሆን ይቀበላሉ	1	2	3	4
905	ብዙ ሰዎች ለከባድ የአእምሮ ህመም ሕክምና መዉሰድ የግል ውድቀት ምልክት ነው ብለው ያምናሉ	1	2	3	4
906	ብዙ ሰዎች፣ ልጆቻቸውን ለመንከባከብ፣ ምንም እንኳን ለተወሰነ ጊዜ ጤነኛ ቢሆንም በከባድ የአእምሮ ህመም ምክኒያት ሆስፕታል ተኝቶ የነበረዉን ሰዉ አይቀጥሩም ፡፡	1	2	3	4
907	ብዙ ሰዎች በከባድ የአእምሮ ህመም የታከመውን ሰው ያን ያህል አያስቡም	1	2	3	4
908	ብዙ አሠሪዎች ምንም እንኳን በከባድ የአእምሮ ህመም ቢታከምም ብቃት ያለውን ሰው ይቀጥራሉ	1	2	3	4
909	አብዛኛዎቹ አሠሪዎች በከባድ የአእምሮ ህመም ታሞ የማያቀዉን ሰው መቅጠር ይመርጣሉ	1	2	3	4
910	እኔ የማውቃቸዉ ብዙ ሰዎች በከባድ የአእምሮ ህመም የታከመውን ሰው ከሌሎች በተመሳሳይ መልክ ይንከባከባሉ	1	2	3	4

911	ብዙ ወጣት ሴቶች በከባድ የአእምሮ ህመም የታከመውን ወንድ ለማጨት አይፈልጉም	1	2	3	4
912	ብዙ ሰዎች በከባድ የአእምሮ ህመም የታከመ ሰው አደገኛ እና ሊገመት የማይችል ነው ብለው ያስባሉ።	1	2	3	4

ክፍል አስር፡ የሱስ (አድዛኝ ዕፅ) ስለመጠቀም መጠይቆች

መመሪያ፡ ለሚከተሉት ጥያቄዎች የግል ልምደዎን መሰረት በማድረግ መልስ ይስጡ

ኮድ	**ጥያቄዎች**	**የመልስ አማራጮች**
1001	በህይወት ዘመንዎ ሱስ ወይም አደንዛዥ ዕፆችን ተጠቅመዉ ያዉቃሉ? (ለህክምና የታዘዙትን አይጨምርም)	1. አዎ 2. አይ
1002	ለጥያቄ **1001** መልስዎ አዎ ሆነ የትኛዉን የሱስ አይነት ተጠቅመዉ ያዉቃሉ? (የተጠቀሙትን ሁሉንም ይምረጡ)	1. የትምባሆ ምርቶች (ሲጋራ, የሚታኝክ ትምባሆ,) 2. የአልኮል ምርቶች (ቢራ, ወይን, አረቄ, ጠላ.) 3. ጫት 4. ሀሺሽ /ካናቢስ /ማሪዋና/ 5. ሌላ (ይጥቀሱ)
1003	ባለፉት ሶስት ወራት ዉስት, ከዚህ በላይ የተጠቀሱትን ሱሶች ወይም አደንዛዥ ዕፆችን ተጠቅመዉ ያዉቃሉ?	1. አዎ 2. አይ
1004	ለጥያቄ **1003** መልስዎ አዎ ሆነ የትኛዉን የሱስ አይነት ተጠቅመዉ ያዉቃሉ? (የተጠቀሙትን ሁሉንም ይምረጡ)	1. የትምባሆ ምርቶች (ሲጋራ, የሚታኝክ ትምባሆ,) 2. የአልኮል ምርቶች (ቢራ, ወይን, አረቄ, ጠላ,.) 3. ጫት 4. ሀሺሽ /ካናቢስ /ማሪዋና/ 5. ሌላ (ይጥቀሱ)

Dabalata I: Unka hayyama beekumsa qabu (Afaan Oromoo version)

A. Waraqaa odeeffannoo

Kabajamaa deebii kennituu,

Maqaan koo _____, akkasumas Yuunivarsiitii Jimmaa, kutaa yaala dhibee sammuu irraa digrii master of science in integrated clinical and community mental health irraa ulaagaa gartokkoon guutuuf qorannoo Amanu'eel Yosef gaggeeffame irratti daataa walitti qabaa ta'ee hojjechaa jira. Odeeffannoo isiniif kennuun qorannoo kana irratti akka hirmaattan isin afeeruuf jira. Hirmaachuu fi dhiisuu kee murteessuu kee dura nama sitti tolu kamiyyuu waliin haasa'uu dandeessa jechoonni tokko tokko siif hin galle jiraachuu danda'u, maaloo odeeffannoo keessa yeroo darbinu akkan dhaabu na gaafadhu yeroo fudhadhee ibsa. Qo'annoo kana irratti hirmaannaan keessan guutummaatti tola ooltummaadha. Hirmaachuu fi dhiisuun filannoo keeti.

Maqaa qorataa ijoo: Amaanu'eel Yosef

Maqaa dhaabbatichaa: Yuunivarsiitii Jimmaa

Mata duree pirojektii qorannoo kanaa Jireenya Fooyya'aa fayyaa waliin walqabatee fi wantoota kanaan walqabatan namoota Dhibee mukaa'uu qaban gidduutti wal'aansa hordoffii Giddugala Meedikaalaa Jimmaa, kibba lixa Itoophiyaatti hirmaatan 2022

Kaayyoon pirojektichaa inni guddaan: Fayyaa Sammuu Kilinikaalaa fi Hawaasaa Walitti Makamaa Mastersii Saayinsii gartokkoon guutuuf

Hojimaata: Pirojektii kana irratti fedhii keessaniin akka hirmaattan isin afeerra. Pirojektii kana irratti hirmaachuuf fedhii yoo qabaattan unka waliigaltee hubachuu fi mallatteessuu qabdu. Sana booda, namoota odeeffannoo walitti qabaniin af-gaaffii ni taasifama.

Balaa/Miidhaa: Pirojektii qorannoo kana irratti hirmaachuun balaan hin jiru. Faayidaa bu'aa qorannoof jecha qorannicha irratti akka hirmaattan abdii qabna.

Faayidaa: Pirojektii qorannoo kana irratti yoo hirmaatte, faayidaan kallattiin siif ta'u jiraachuu dhiisuu danda'a, garuu hirmaannaan kee kaayyoo qorannichaa akka galmaan ga'uuf nu gargaaruu hin oolu

Onnachiiftuu: Pirojektii kana irratti hirmaachuuf onnachiiftuu ykn kaffaltiin tokkollee siif hin kennamu.

Iccitii: Odeeffannoon pirojektii qorannoo kanaaf walitti qabame iccitii ta'ee kan eegamu yoo ta'u, odeeffannoon waa'ee kee qorannoo kanaan walitti qabamu faayila keessatti kuufamee,

maqaa kee malee, garuu lakkoofsa koodii itti ramadame. Qorataa muummee irraa kan hafe eenyuufuu kan hin mul'anne yoo ta'u, cufamee kan turu ta'a.

Mirga diduu ykn ofirraa baasuu: Qorannoo kana irratti hirmaachuu diduudhaaf mirga guutuu qabda. Gaaffii tokko tokkoof ykn hundaaf deebii kennuu dhiisuu filachuu dandeessa, deebii kee kennuu yoo hin barbaanne. Akkasumas yeroo barbaaddetti mirga kee tokkollee osoo hin dhabin qorannoo kana keessaa ba'uuf mirga guutuu qabda.

Nama qunnamuu qabdu: Gaaffii yoo qabaattan namoota dhuunfaa armaan gadii keessaa kamiyyuu qunnamuu dandeessu yeroo barbaaddanitti gaafachuu dandeessu.

Amaanu'eel; Lakkoofsi bilbilaa: +251 935561541, Amaanu'eel Yosef

+251 920488557, Haayilamaariyaam Hayilesilassii

+251 910058532, Guuteemaa Ahimad

+251 967670149, Arefaaynee Aleenkoo

Email: amanuelyossef11@gmail.com, hailemariamh@gmail.com, gutemaahmed@gmail.com, arefeaynealenko@gmail.com irratti ergaa dabarsitu

B. Hayyama odeeffannoo qabu

Qabiyyee sanada kanaa fi maalummaa pirojektii qorannoo kanaa akkan hubadhe, akkasumas pirojektii qorannoo irratti fedhiidhaan hirmaachuuf hayyama akkan kennu kanaan mirkaneessa. Yeroo barbaadetti pirojekticha keessaa ba'uuf ofiin of bulchuu akkan jiru nan hubadha.

Mallattoo hirmaataa Guyyaa

_____ _____ .

Maqaa fi mallattoo nama odeeffannoo walitti qabu_____ Guyyaa_____ .

Maqaa fi mallattoo supparvaayizara_____ Guyyaa_____ .

C. Fuula walii galtee maatii (hirmaattota umuriin isaanii 18 gadi ta'eef)

Ilmi/intalli/obboleessi/obboleettiin/_____keessan qorannicha iratti akka hirmaatuuf/ttuuf fedhii qabduu?

Eeyyee Lakki

Ani/nuti qabiyyee fi kaayyoo qorannoo kanaa haalaan hubadheera/hubanneerra. Kana malees Ilmi/intalli/obboleessi/obboleettiin/_____koo/keenya/ qorannoo kana irratti yoo hirmaate/tte miidhaan isa/ishee irra gahu tokkollee akka hin jirre hubadheera/hubanneerra. Kanaafuu Ani/nuti, akka maatii hirmaatichaatti, Ilmi/intalli/obboleessi/ obboleettiin/ _____ koo/keenya qorinnicha irratti akka hirmaatuuf/ttuuf fedhii qabaachuu

koo/keenya/ ni mirkaneessa/mirkaneessina.

Mallattoo maatii hirmaataa_____ guyyaa_____

_____ guyyaa_____

Maqaa fi Mallattoo nama odeeffannoo funaanuu_____

_____guyyaa_____

Maqaa fi Mallattoo to’ataa funaansa odeeffannoo_____ _____guyyaa

_____

Dabalata II: Gaaffiilee (Afaan Oromoo version)

Koodii Lakk. _____

Qajeelfama: Gaaffiiwwan armaan gadii waa'ee jireenyaa fooyya'aa fi wantoota kanaan walqabatan dhukkubsattoota dhibee mukaa'uu hordoffii qaban JMC, Jimma, Ethiopia, 2022

Gaaffiin kun kutaa kudhan qaba. Gaaffii fi deebii xumuruuf gara daqiiqaa 30 fudhata. Gaaffii hunda guutuuf fedhiin qabdu milkaa'ina pirojektichaaf barbaachisummaa guddaa qaba. Obsa keessaniif hedduu galatoomaa!!!

KUTAA 1ffaa: Odeeffannoo hawaas-dimoogiraafii

Ajaja: Gaaffiiwwan armaan gadii amala hawaas-dimoogiraafii deebii kennaa madaalu.

Koodii	Wanta	Filannoo deebii kennuu
101	Umuriin keessan Meeqa?	Waggaa_____
102	Saala	1. Dhiira 2. Dhalaa
103	Amantiin keessan maali?	1. Ortodoksii 2. Musliima 3. pirootestaantii 4. Kaatolikii 5. Kan biroo(caqasi)_____
104	Sabni keessan kami?	1.Oromoo 2. Amaara 3. Dawuroo 4. Guraagee 5. Kan biroo(caqasi)_____
105	Haalli fuudhaa fi heerumaa keessan kami	1. Kan hin fuune/heerumne 2. Kan fuudhe/heerume 3. Kan fuudhee/heerumee seeraan gargar bahe 4.kan fuudhee/heerumee haati manaa/abbaan manaa boqote 5. kan fuudhee/fuudhee ajaja seeraan ala addaan bahe
106	Sadarkaan Barnoota keessanii hagam?	1.Kan hin baranne 2. Sadarkaa tokkoffaa 3. sadarkaa lammaffaa 4. Diiploomaa fi isaa ol
107	Hojiin keessan maali?	1.. hojjetaa mootummaa 2. hojjetaa dhaabbata dhuunfaa 3. daldalaa 4. qote bulaa 5.Haadha manaa 6. Hojjetaa guyyaa 7. Hojii hin qabu 8. Kan biroo(caqasi)_____
108	Amma eenyu waliin jiraachaa jirta?	1.Maatii waliin 3. Firoottan 2. Kophaa isaa 4. Kan biroo(caqasi)_____

KUTAA 2ffaa: unka qabeenya manaa (EDHS Wealth Index Questionaires)

Ajaja: gaaffiileen armaan gadii qabeenya manaa keessan ilaallatu.

koodii	**Gaaffiilee**	**Deebii**
201	Bakki jireenya keessanii eessa?	1. Magaalaa 2. baadiyyaa
202	Mana keessan keessa humni ibsaa/elektrikaa jiraa?	1. Eeyyen 2. lakki
203	Mana keessan keessa raadiyoon jiraa?	1. Eeyyen 2. lakki
204	Mana keessan keessa televiziyoonni jiraa?	1. Eeyyen 2. lakki
205	Mana keessan keessa qorrisiiftuun /cabbeessituun/ (refrigerator) jiraa?	1. Eeyyen 2. lakki
206	Mana keessan keessa eeleen elektirikaa jiraa?	1. Eeyyen 2. lakki
207	Mana keessan keessa minjaalli jiraa?	1. Eeyyen 2. lakki
208	Mana keessan keessa teessoon/barcumni/ jiraa?	1. Eeyyen 2. lakki
209	Mana keessan keessa sireen/ firaashni ispoonjii/ boraatiin ispoonjii/ jiraa?	1. Eeyyen 2. lakki
210	Maatii keessan keessa lakkoofsa baankii/'buukii'/ namni qabu jiraa?	1. Eeyyen 2. lakki
211	Maddi bishaan dhugaatii maatii keessanii maalidha	1. ujummoo bishaanii 2. kan biroo(caqasi)_____
212	Manni fincaanii maatiin keessan guyyuu fayyadaman haalli isaaa akkami?	1. Boolla mana fincaanii banaa 2.Manni fincaanii hin jiru /dirree irratti fayyadamna/ 3. Others(specify)
213	Mana keessanitti nyaata bilcheesssuuf boba'aa akkamii fayyadamtu?	1.Human ibsaa 2. Muka/qoraan/ 3.Kan biroo(caqasi)_____
214	Manni keessan lafti isaa maal irraa hojjetame?	1.Lafa/ cirracha/ 2.Kan biroo(caqasi)_____
215	Ijoon alaa mana keessanii maal irraa hojjetame	1.Shimalaa fi dhoqqee irraa 2. Kan biro (caqasi)_____

216	Baaxiin mana keessanii maal irraa hojjetame	1.Sibiila/qorqoorroo/ 2.Kan biroo(caqasi)_____

KUTAA 3ffaa: WHOQOL-BREF

Ajaja: Madaalliin kun waa'ee qulqullina jireenya keetii, fayyaa keetii ykn kutaalee jireenya keetii biroo maaltu akka sitti dhaga'amu gaafata.

Koodii	**Koodii meeshaa**	**Wanta**	**Baayyee hiyyeessa**	**hiyyeessa**	**Hiyyeessas ta'ee gaarii miti**	**gaarii**	**Baay'ee gaarii**
301	(G1)	Qulqullina jireenyaa kee akkamitti madaalta?	1	2	3	4	5
			Baayyee hin quufne	**Hin quufnee**	**Hin quufnes hin quufne**	**kan gara an ciise**	**Baayyee itti quufe**
302	(G4)	Fayyaa keetti hangam quuftee jirta?	1	2	3	4	5
Gaaffiiwwan armaan gadii torban lamaan darban keessatti wantoota tokko tokko hangam akka si mudate si gaafatu.							
			Gonkumaa miti	**Xiqqoo**	**Hammagiddu galeessaa**	**Baay'ee**	**Hammagarmalee**
303	(F1.4)	Dhukkubbiin qaamaa wanta gochuu qabdu akka hin raawwanne hammam akka si dhorku sitti dhaga'ama?	1	2	3	4	5
304	(F11.3)	Jireenya kee guyyaa guyyaa keessatti hojjechuuf yaala fayyaa kamiyyuu hangam si barbaachisa?	1	2	3	4	5
305	(F4.1)	Jireenya hangam gammadda?	1	2	3	4	5

306	(F24.2)	Jireenyi kee hangam hiika akka qabu sitti dhaga'ama?	1	2	3	4	5
			Gonkumaa miti	**Xiqqoo**	**Hammagiddu galeessaa**	**Baay'ee**	**Hammagarmalee**
307	(F5.3)	Hammam xiyyeeffachuu dandeessa?	1	2	3	4	5
308	(F16.1)	Jireenya kee guyyaa guyyaa keessatti hammam nageenyi sitti dhagahama?	1	2	3	4	5
309	(F22.1)	Naannoo qaamaa kee hangam fayya qabeessa?	1	2	3	4	5
Gaaffiiwwan armaan gadii torban lamaan darban keessatti wantoota tokko tokko guutummaatti hammam akka si mudate ykn hojjechuu dandeesse si gaafatu.							
			Gonkumaa miti	**Xiqqoo**	**Gidduga leessaan**	**Irra-gud dinaan**	**Guutummaan guututti**
310	(F2.1)	Jireenya guyyaa guyyaadhaaf humna gahaa qabdaa?	1	2	3	4	5
311	(F7.1)	Bifa qaama keetii fudhachuu ni dandeessaa?	1	2	3	4	5
312	(F18.1)	Fedhii keessan guutuuf qarshii gahaa qabduu?	1	2	3	4	5
313	(F20.1)	Odeeffannoon jireenya kee guyyaa guyyaa keessatti si barbaachisu hangam siif argama?	1	2	3	4	5
314	(F21.1)	Hammam carraa sochii boqonnaa qabdu?	1	2	3	4	5
			Baayyee	**hiyyeessa**	**Hiyyeessas ta'ee**	**gaarii**	**Baay'ee**

			hiyyeessa		**gaarii miti**		**gaarii**
315	(F9.1)	Hammam akka gaariitti naanna'uu dandeessa?	1	2	3	4	5
Gaaffiiwwan armaan gadii torban lamaan darban keessatti gama jireenya kee adda addaatiin hammam gaarii ykn quufa akka sitti dhaga'ame akka dubbattu si gaafatu.							
			Baayyee hin quufne	**Hin quufne**	**Hin quufnes hin quufne**	**Kan gara an ciise**	**Baayyee itti quufe**
316	(F3.3)	Hirriba keetiin hangam quufteetta?	1	2	3	4	5
317	(F10.3)	Dandeettii keetiin hangam quuftee jirta hojii jireenya guyyaa guyyaa keessan raawwachuuf?	1	2	3	4	5
318	(F12.4)	Dandeettii hojii qabdutti hangam quuftee jirta?	1	2	3	4	5
319	(F6.3)	Ofitti hammam quuftee jirta?	1	2	3	4	5
320	(F13.3)	Akkam quuftee kee hariiroo dhuunfaa?	1	2	3	4	5
321	(F15.3)	Jireenya saalqunnamtii keetiin hangam quuftee jirta?	1	2	3	4	5
322	(F14.4)	Deeggarsa godhameef hangam quuftee jirta hiriyoota kee irraa argatta?	1	2	3	4	5
323	(F17.3)	Akkam quuftee jirta haala bakka jireenyaa keessanii?	1	2	3	4	5
324	(F19.3)	Argachuu keetiin hangam quuftee jirta gara tajaajila fayyaatti?	1	2	3	4	5
325	(F23.3)	Geejjiba keessanitti hangam quuftaniittu?	1	2	3	4	5

Gaaffiin armaan gadii torban lamaan darban keessatti wantoota tokko tokko yeroo meeqa akka sitti dhaga'ame ykn si mudate argisiisa.							
			Gonkumaa	**Darbee darbee**	**Yeroo baayyee**	**Yeroo baayyee**	**Yeroo hunda**
326	(F8.1)	Yeroo meeqa miira gadhee kan akka miira diimaa, abdii kutachuu, yaaddoo, dhiphina sammuu qabda?	1	2	3	4	5

KUTAA 4ffaa: Gaaffilee Dhukkubicha Waliin Walqabatan

Ajaja: Gaaffiiwwan armaan gadii dhukkuba waliin jiraattaniin wal qabatee gaaffii qophaa'eedha. Kunis kan guutamu kaardii keessan irraa fi isin gaafachuudhaani.

koodii	**Jijjiiramaa**	**Filannoo deebii kennuu**
401	Dhukkuba kanaan yoo qabamtan waggaan keessan meeqa ture?	Waggaa_____
402	Dhukkubichi isin qabee hangam tureera?	Guyyaa_____ Ji'a_____ Waggaa_____
403	Yeroo wal'aansaa	Guyyaa_____ Ji'a_____ Waggaa_____
404	Baay'ina kutaalee waggaatti	_____
405	Dhukkuba walfakkaataa (comorbid illness) jedhamuun adda baafame	1.eeyyee 2. lakk
406	Yoo deebiin 405 eyyee taye	Ifa godhi_____

KUTAA 5ffaa: Gaaffiiwwan Iskeelii Hordoffii Qoricha Morisky (MMAS-4) wajjin walqabatan .

Koodii		**Eeyyee**	**Lakki**

501	Qoricha sammuu namaa kakaasu fudhachuu dagattee beektaa?		
502	Qoricha sammuu namaa kakaasu fudhachuuf yeroo tokko tokko of eeggannoo hin qabduu?		
503	Yeroo tokko tokko yeroo qoricha fudhattu yoo sitti hammaate, qoricha sammuu namaa hadoochu fudhachuu kee ni dhiiftaa?		
504	Yeroo miira gaariin sitti dhaga'amu yeroo tokko tokko qoricha sammuu namaa hadoochu fudhachuu kee ni dhiiftaa?		
Waliigala			

KUTAA 6ffaa: GAAFFII FAYYAA DHUKKUBSATTOOTAA (PHQ-9) .

Ajaja: Gaaffiiwwan armaan gadii torban 2 darban keessatti madaalu; rakkoolee armaan gadii keessaa kamiinuu yeroo meeqa si dhiphise

koodii	**Jijjiiramaa**	Gonkumaa miti	Guyyoota hedduu	Guyyaa walakkaa ol	Guyyaa hunda jechuun ni danda'ama
601	Wantoota hojjechuuf fedhii ykn gammachuu xiqqoo qabaachuu	0	1	2	3
602	Miirri gadi bu'uu, dhiphachuu ykn abdii kutachuu	0	1	2	3
603	Rakkoo kufuu ykn hirriba keessa turuu, ykn garmalee rafuu	0	1	2	3
604	Miira dadhabbiin ykn humna xiqqoo qabaachuu	0	1	2	3
605	Miira dadhabbiin ykn humna xiqqoo qabaachuu	0	1	2	3
606	Miira gadhee ofitti dhaga'amuu ykn kufaatii ta'uu kee ykn ofii keetii ykn maatii kee kuffistee jirta	0	1	2	3
607	Wantoota akka gaazexaa dubbisuu	0	1	2	3

	ykn televijiinii ilaaluu irratti xiyyeeffachuuf rakkachuu				
608	Suuta jedhanii socho'uu ykn dubbachuu akka namoonni kaan hubachuu danda'anitti. Yookaan faallaa kanaa baay'ee fiigicha ykn boqonnaa dhabuu waan ta'eef yeroo biraa caalaa baay'ee socho'aa turte	0	1	2	3
609	Yaada yoo du'ee wayya, ykn of miidhuu	0	1	2	3

KUTAA 7ffaa: Brief resilient coping scale

Instructions: Himoonni armaan gadii amalaafi gocha kee hammam akka gaariitti akka ibsan ilaali.

koodii		**Tasumaa na hin ibsu**	**Na hin ibsu**	**Qaama bilisaa**	**Na ibsa**	**Baayyee gaarii na ibsa**
701	Haala rakkisaa jijjiiruuf karaa kalaqaa nan barbaada.	1	2	3	4	5
702	Wanti na mudatu maal iyyuu yoo ta'e, deebii ani itti kennu to'achuu akkan danda'u nan amana.	1	2	3	4	5
703	Haalota rakkisoo ta'an waliin wal'aansoo qabuun karaa gaariin guddachuu akkan danda'u nan amana.	1	2	3	4	5
704	Kasaaraa jireenya keessatti na mudatu karaa itti bakka buusu dammaqinaan barbaada.	1	2	3	4	5

KUTAA 8ffaa: safara gargaarsa hawaasummaa osloo (Oslo social support scale)

Ajaja: Gaaffiileen armaan gadii muuxannoo walitti dhufeenya hawaasummaa keessanii ilaallatu. Muuxannoo dhuunfaa keessan irraa ka'uun deebii kennaa

koodii	Gaaffiiwwan	Filannoo deebii kennuu
801	Rakkoon dhuunfaa cimaan yeroo isin mudatetti namootni isinitti dhiyoo kan isiniif birmatan meeqatu jiru.(filannoo tokko qfa filadhaa)	1.homtuu hi jiru 2.1 yookiin 2 3. 3 hanga 5 4.namoota 5 ol
802	Wanta isin hojjettan ykn jiruu keessan keessatti namootni hangam isiniif dhimmu yookiin dhiphatu (filannoo tokko qofa filadhaa)	1. dhiphina ykn dhimma hinqaban 2.dhimma ykn fedhii baay'ee xiqqoo qabu 3. hin beeku 4. muraasa 5. baay'ee
803	Yeroo barbaaddanitti olla keessan irraa gargaarsa qabatamaa argachuun hangam isinitti salphata?	1.baay'ee ulfaataadha. 2. ulfaataa dha 3. ni danda'ama 4. salphaadha 5. baay'ee salphaa dha

KUTAA 9ffaa: Safara dhiibama namoota dhukkuba sammuu cimaa waliin jiraatanii (Perceived Devaluation and Discrimination Scale (PDD)

Ajaja: Kanneen armaan gadii yaada namoonni kan waa'ee namoota dhukkuba sammuu cimaa waliin jiraatanii ilaalchisee yaaduu danda'aniidha. yaada dhuunfaa keessan irraa ka'uun guutaa

koodii	Qabiyyee (ilaalchawwan)	ciminaan ittiin walii hin glu	Ittiin walii hin galu	Ittiin walii gala	Ciminaan ittiin walii gala
901	Namoonni baay'een nama yeroo ta'e wayii dhukkuba sammuu cimaan qabamee ture waliin hiriyaa dhiyoo ta'uu danda'u	1	2	3	4
902	Namoonni baay'een namni dhukkuba sammuu cimaa qabu akkuma namoota biro ciminasammuu qaba jedhanii yaadu	1	2	3	4
903	Namoonni baay'een namni dhukkuba sammuu cimaaf yaalamee tur akkuma	1	2	3	4

	namoota biroo amanamaadha jedhanii yaadu`				
904	Namoonni baay'een namni dhukkuba sammuu cimaatiin qabamee ture mana barumsaatti barsiisaa isaanii yoo ta'e ni fudhatu	1	2	3	4
905	Namoonni baay'een dhukkuba sammuu cimaatiif yaala fudhachuun mallattoo kufaatii dhuunfaati jedhanii amanu	1	2	3	4
906	Namoonni baay'een nama dhama dhukkuba sammuutiif hospitaala garee ture yeroo muraasaaf hagam fayyaa ta'uyyuu akka ijoollee isaanii kunuunsuuf hin qacaran	1	2	3	4
907	Namoonni baay'een waa'ee namoota dhukkuba sammuu cimmaf yaalamii baay'ee hin yaadan	1	2	3	4
908	Hojjechiistonni baay'een nama dandeettii cimaa qabu ta'eee dhukkuba sammuu cimaaf yaalamee yoo tureyyuu ni qacaru	1	2	3	4
909	Hojjechiiftonni baay'een nama dhukkuba sammuun qabamee hin beeekne qacaruu filatu	1	2	3	4
910	Nmoonnin an beeku baay'een isaanii namoota dhukkuba sammuu cimaaf yaalaman namoota birootiin walqixa ilaalu.	1	2	3	4
911	Shamarran dargaggoon baay'een dargaggeessa dhukkuba sammuu	1	2	3	4

	cimaaf yaalamee ture waliin jaalala eegaluuf fedhii hin qaban				
912	Namoonni baay'een anmni dhukkuba sammuu cimaaf yaalamee ture baay'ee hamaa fi kan hin tilmaamamneedha jedhanii yaadu.	1	2	3	4

KUTAA 10ffaa: Gaaffiilee fayyadamuu araada adda addaa

Ajaja: gaaffiilee armaan gadiif haala fayyadama wantoota araada nama qabsiisanii ilaalchisee muuxannoo dhuunfaa keessanii guutaa.

koodii	**Gaafiiwwan**	**deebii**
1001	Bara jireenya keessaniitti wantoota nama qabsiisan araada adda addaa fayydamatanii beektu(kan yaalaaf ajajaman hindabalatu)	1. Eeyyen 2. lakki
1002	Deebiin keessan gaaffii '1001f 'eeyyen' yyo ta'e araad isa kam fayyadamtanii beektu.(kan fayyadamtan mara filadhaa)	1. Oomishawwan tamboo (tamboo xuuxamu, tamboo alanfatamuu fi kkf.) 2. Oomishawwan alkoolii (biiraa, wayinii, Araqee, Farsoo, fi kkf.) 3. Jimaa 4.Hashiisha (Cannabis/hashish/marijuana) 5. Kan biro (caqasi_____)
1003	Ji'oota sadan darban keessa araadawwan kanneen fayydamtanii beektuu?	1. Eeyyen 2. lakki
1004	Deebiin keesssan gaafii '1003f' 'eeyyen' yoo ta'e araada isa kam fayyadamatanii beektu.(kan fayyadamtan mara filadhaa)	1. Oomishawwan tamboo (tamboo xuuxamu, tamboo alanfatamuu fi kkf.) 2. Oomishawwan alkoolii (biiraa, wayinii, Araqee, Farsoo, fi kkf.) 3. Jimaa 4.Hashiisha (Cannabis/hashish/marijuana) 5. Kan biro (caqasi_____) __

Annex III: Declaration

I, the undersigned, Master of ICCMH student declare that this thesis is my original work in partial fulfillment of the requirement for a Master of science in integrated clinical and community mental health.

Name: Amanuel Yosef

Signature: _____

To be submitted to**:** Department of Psychiatry, Faculty of Medicine, Institute of Health, Jimma University.

Date of Submission: _____

This proposed work has been submitted for examination with our approval as university advisor(s).

Advisors Name	**Signature**	**Date**
1. Mr. Hailemariam Hailesilassiie (MSc, Assistant prof.)	_____	_____
2. Mr. Gutema Ahmed (MSc, Assistant prof.)	_____	_____
3. Mr. Arefeayne Alenko (Assistant prof., PhD fellow)	_____	_____

Approval of examiner

Name of examiner _____

Signature _____

Date _____

Approval of department head

Name of department head _____

Signature _____

Date _____