QUALITY OF LIFE AND ASSOCIATED FACTORS AMONG PATIENTS WITH SCHIZOPHRENIA ATTENDING FOLLOW UP TREATMENT AT JIMMA UNIVERSITY MEDICAL CENTER PSYCHIATRIC CLINIC JIMMA, SOUTH WEST ETHIOPIA, 2018

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JIMMA, ETHIOPIA

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Abstract

Background: *Schizophrenia is one of the most severe, chronic and disabling mental disorder found globally. The chronic nature of the illnesses significantly interferes with functioning in domains like physical, psychological, social and economic at last results in poor quality of life.*

Objectives: *To assess quality of life and associated factors of patients with schizophrenia attending follow up treatment at Jimma University Medical Center psychiatric clinic, Jimma, South West, Ethiopia, 2018.*

Methods: *A hospital based cross sectional study design was employed. Data was collected by interviewer administered pre-tested semi structured questionnaire from 352study participants who were selected by systematic random sampling technique. Quality of life was assessed by using the world health organization quality of life assessment brief version and severity of symptoms (psychopathology) and medication adherence was assessed by positive and negative syndrome scale and Morisky medication adherence scale respectively. Data entry and analysis was done using Epi data version 3.1 and SPSS 20 statistical software. Different assumptions of linear regression model were checked. Linear regression analysis was performed to determine an association between independent and dependent variables.*

Result: *A total of 351 patients with schizophrenia were participated in this study with 99.7 % of response rate. The mean (± SD) age of the participant was 33.57 ± 7.96 years, and ranges from 18 to 54.The mean (± SD) score of the WHOQOL-BREF scale in this study was 74.34 ± 15.83. Patients with schizophrenia had lowest mean score on the social relationship domain of WHOQOL-BREF scale. Income (β: 5.81, 95% CI: 3.45-8.18) was found to be positively associated with QOL. On contrary positive symptoms (β: -0.33, 95% CI: -0.49-(-0.17)), negative symptoms (β: -0.26, 95% CI: -0.45-(-0.06)), general psychopathologies (β: -0.22, 95% CI: -0.32-(-0.12)), comorbid physical illness (β: -4.69, 95% 95% CI: -8.50-(-0.88)), ever use of tobacco (β: -3.95, 95% CI; -5.34-(-0.95)), ever use of Khat (β: -3.95, 95% CI; -6.02-(-1.88)) and medication non-adherent(β: -5.81, 95% CI: -8.24-(-3.41))were found to be negatively associated with QOL.*

Conclusion and recommendation: *The domain of social relationship was the lowest domain of quality of life for patients with schizophrenia. Therefore, in schizophrenic patients, priority interventions to improve the social deficits are important.*

Key words: *Quality of life, schizophrenia, WHOQOL-BREF, Jimma, Ethiopia*

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Acronyms

DSM-5 – Diagnostic and Statistical Manual of Mental Disorders, Version 5

DSM-IV-TR – Diagnostic and Statistical Manual of Mental Disorders, Version IV Text Revision

JUMC – Jimma University Medical Center

OPD – Outpatient Department

PANSS – Positive and Negative Symptom Scale

QOL – Quality of Life

RCT – Randomized Clinical Trial

SUD – Substance Use Disorders

UK – United Kingdom

WHO – World Health Organization

WHOQOL – World Health Organization Quality of Life Assessment

WHOQOL-BREF – World Health Organization Quality of Life Assessment Short version

YLD – Years Lived With Disability

Chapter 1: Introduction

1.1 Background

Schizophrenia is a severe and chronic mental disorder characterized by a group of symptoms that include distortions of thinking and perception, cognition and psychomotor abnormalities avolition and apathy as well as emotional and communication and emotional difficulties(1). These symptoms are categorized by positive symptoms (an excess or distortion of normal functions like hallucinations, delusions, abnormal thinking) or negative symptoms (diminution or loss of normal functions blunted affect, poverty of speech, Anhedonia and asociality), together with a significant decline in cognition and psychosocial functioning(2).

The lifetime prevalence of schizophrenia has generally been estimated approximately 1% worldwide and it is about the same in men and women(3).The two genders differ, however, in the onset and course of illness. Onset is earlier in men than in women. The peak ages of onset are 10 to 25 years for men and 25 to 35 years for women(4).

In treating and managing Schizophrenia, clinicians often focus on treating psychotic symptoms and ignore factors that are directly related to quality of life and prognosis of disease even though evaluation of patient's quality of life can help a lot in improving quality of care in patients with schizophrenia(6).The course of schizophrenia appears to be favorable in about 20% of those patients with schizophrenia, and a small number of individuals are reported to recover completely(7). Thus, there was a shift in concept of treatment with more emphasis on the aspect of patient's perspective one which a more important was quality of life(8).

Quality of life (QoL) in individuals with schizophrenia has been measured from both subjective and objective points of view. Subjective measures of QOL include general indicators of life satisfaction and a number of life domains such as satisfaction with work, family, social relations, finances, and housing situations. On the other hand, the objective measures of QOL usually include indicators of external life conditions, socio-demographic items, and a functioning role in society(9). However, the World Health Organization (WHO) focused on subjective aspect and defines quality of life as individuals' perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns(10).

As quality of life was considered as a measure of clinical outcome that prioritizes client assessment itself and the effects of a disease, a life change or a treatment has on their daily life and their level of satisfaction and well-being, their evaluation allows obtain a safe parameter for implementing clinical interventions that may have more positive impact on the lives of these people. Thus, the measurement of quality of life through the perception of the patient has been recommended(11).

1.2 Statement of the problem

Schizophrenia is one of the most severe, chronic and disabling mental disorders found anywhere in the world(4). It affects general health, functioning, autonomy, subjective wellbeing, and life satisfaction of those who suffer from it by altering individuals' perception of reality, often making them think and act in ways that are strange or abnormal by socially approved standards(12).

Globally, As estimated by the World Health Organization (WHO), about 24 million people suffer from schizophrenia(13).Also, it was ranked as one of the top ten illnesses contributing to the global burden of disease(3), accounting for 1.1% of the total disability-adjusted life years (DALY's) and 2.8% of years lost due to disability (YLD's). Furthermore, it was listed as the fifth leading cause of loss of DALYs in patients with 15-44 years(14).

In developing countries around 90% of people with schizophrenia remain untreated. However, the outcome of schizophrenia appears to be better in low and middle income countries(15).

In Ethiopia, mental illness is the leading non-communicable disorder in terms of burden. Indeed, in a predominantly rural area of Ethiopia, mental illness comprised 11% of the total burden of disease, with schizophrenia and depression included in the top ten most burdensome conditions, out-ranking HIV/AIDS (16).

As schizophrenia affects many areas of functioning, people with illness often lead an isolated and a marginalized existence in poor housing, with a low income, little education and poor vocational and social skills(12). Most individuals are employed at a lower level than their parents, and most, particularly men, do not marry or have limited social contacts outside of their family(7).Patients with schizophrenia are also prone to stigma, which leads to discrimination and thus affects their life opportunities, such as health care services, housing, education, employment and social relationships and all these leads to poor quality of life(17).

In schizophrenia, QoL may represent the functional effect itself and its treatment as perceived by the patient(18). The psychopathology has substantial impact on QoL, well-being and social and occupational function(19) and thus creates a considerable socio-economic burden(20). In schizophrenia, QoL is associated with emotional distress(21), depressive and negative

symptoms(22), low self-esteem and self-efficacy, as well as, lack of emotional and social support(21). Financial problem is associated with low QoL(18). In addition diseases duration and psychopathology severity are related with low QoL(23).

There is a little information available regarding quality of life of patients with schizophrenia in Ethiopia and there were a single study in our country which was limited to address factors like severity of illness and psychopathology of the schizophrenia. Thus, this study is aimed to assess the quality of life and associated factors of schizophrenia patient attending follow up treatment at Jimma University Medical Center (JUMC) psychiatric department.

Chapter 2: Literature review

2.1 Quality of life of patients with schizophrenia

Compared to the general population, a study from China found that patients with schizophrenia who were treated in primary care had lower level of QOL(24). According to one cross-sectional comparative study done in Pakistan among fifty consecutive patients with schizophrenia showed that patients with schizophrenia had significantly poorer quality of life when compared with healthy subjects(25)and also they have worse than that of other physically ill patients(26).

One cross sectional study conducted in Bangladesh among 83 patients with schizophrenia using convenient sampling and WHOQOL-BREF tool find out that most of the participants lead poor to moderate quality of life in four domains of the WHOQOL-BREF scale. Furthermore, this study indicated that, quality of life was poor on psychological domain(27).

A descriptive cross-sectional study done in Jordanian patients with schizophrenia showed that environmental health domain was the lowest among Jordanian patients with schizophrenia and the highest domain of QOL was the social relationship domain, and the highest source of social support was perceived from significant others(28).

According to one cross sectional study done in Southern Nigeria on the assessment of quality of life of patients with schizophrenia, it was described as the patients with schizophrenia were enjoying low quality of life(29).

2.2 Factors affecting quality of life of patients with schizophrenia

The quality of life in patients with schizophrenia can be affected by various factors including: socio-demographic, clinical, economic or social factors(30).Thus, the relationship between the quality of life of patients with schizophrenia and socio-demographic,clinical, environmental and treatment factors have been explored in many cross-sectional studies.

2.2.1 Socio-demographic factors and quality of life of patients with schizophrenia

A study done in Latin America on religion involvement and quality of life in patients with schizophrenia found that there was significant positive associations between religion and QoL,

but being a woman, older patient, having low educational level were associated with low QoL level(31).

A study done in Spain among patients with schizophrenia found that young people, women, married persons, and those with a low level of education report a better quality of life(26).

As a study conducted in Bangladesh, there was significant association between age and social relationship domain; marital status and physical health domain; educational level and physical health domain and environmental health domain, but, no association found between gender and other variables(27).

A study done in Poland in a group of 115 patients with schizophrenia from community mental health service centers found lower quality of life in the subgroups of: men, subjects who were divorced or widowed, living with parents, with worse living conditions and worse financial situation, financially dependent(32).Thus, higher income and better financial situation were also proved as significant determinants of better quality of life(33).

Also a study from Jordan reveals that QOL of patients with schizophrenia was correlated positively with social support, patients' educational and income level, and employment(28). But, one study done in Sweden showed that the socio-demographic indicators has a weak influence on the patient’s self-assessed quality of life(34).

Professional activity is another important factor that has an influence on the quality of life of patients with schizophrenia. The majority of research showed that patients who were employed declared better quality of life; mainly in general perception of health status and in physical health, psychological health and social relationships domains of WHOQOL-BREF(35).

One study done in India among patients with schizophrenia found that Social relationship domain of QOL was significantly negatively correlated with occupation with employed patients reporting better QOL in this domain. There were significant positive correlation of total monthly income with social relationship domain and total QOL(36).

A study done in south India, also described as age and professionals can affect the QOL of patients with schizophrenia. According to this study, QOL of patient improves with age, especially in the physical domain and it was significantly poor in professionals, in the

environmental domain of QOL scale. Although professionals have poor QOL in the psychological domain, it is not statistically significant(37).

One study done in 159 Saudi Arabian people with schizophrenia on factors affecting their quality of life found that religion helps people with schizophrenia to cope with and manage their mental illness, which improves their QoL, but the shame of having a mental illness negatively affects the social engagement of people with schizophrenia, limiting their participation in leisure and work activities and therefore diminishing their QoL(38).

According to one study done in Nigerian to examine the relationship between socio-demographic characteristics and subjective QoL among 99 outpatients with schizophrenia using the WHOQOL questionnaire, poor subjective QOL was associated with unemployment and poor social support(39).

As an institution based cross-sectional study done at Amanuel Mental Specialized Hospital among 422 patients with schizophrenia in 2017 on quality of life and associated factors, it was described as educational status (unable to read and write) and occupation (working in Non-Governmental Organization) is factor that is significantly associated with poor quality of life(40).

2.2.2Clinical factors and quality of life of patients with schizophrenia

Several studies have evaluated the associations between quality of life and clinical factors among individuals with schizophrenia. Studies on the impacts of clinical variables have shown that psychiatric symptoms have effects on overall QoL and daily living activities.

2.2.2.1 Psychopathology and quality of life of patients with schizophrenia

One meta-analysis done on psychiatric symptoms and quality of life of patients with schizophrenia found that positive and negative symptoms were more strongly related to poor QOL among studies of schizophrenia outpatients, whereas general psychopathology showed a consistent negative relationship with QOL across all study samples and treatment settings(41).

As a study done in Jordan, QOL of patients with schizophrenia was correlated negatively with severity of psychiatric symptoms, duration of untreated illness, and duration of treatment.

Furthermore, it was described as severity of affective symptoms was the highest, and severity of positive symptoms was the lowest.(28). Thus, the longer the length of the illness is associated with the worse the quality of life of patients with schizophrenia(26).

A cross sectional study done in India among 50 consecutive patients with schizophrenia outpatients on correlation of quality of life with illness severity and psychopathology found that quality of life is negatively correlated with negative symptoms and general psychopathology; but, there is no correlation observed between positive symptoms and overall quality of life. Furthermore, the perceived health domain had shown negative correlation with positive symptoms and illness severity. And also severity of illness is found to be negatively correlated with overall quality of life, perceived health and quality of life in environmental domain(6).

Another study done in India among patients with schizophrenia also showed that there were no statistically significant correlation between QOL parameters and clinical characteristics in patients with schizophrenia. Scores on positive subscale and total PANSS were significantly negatively correlated with physical, Psychological, social relationship domains and total QOL. Negative subscale had significant negative correlation with physical and psychological domains and total QOL. General psychopathology subscale had significant negative correlation with all subscales of QOL(36).

One study conducted in Thailand among eighty patients with schizophrenia on the predictors of quality of life found that, the Positive and Negative Syndrome Scale total score, positive symptoms, negative symptoms, disorganized thought, and anxiety/depression had showed a significant correlation with the overall quality of life and most of the four domain scores. According to this study the negative symptoms are found to be the main factors predicting a decrease in the four domains of quality of life – physical health, psychological, social relationships, and environment(42).

A one year randomized clinical trial (RCT) study done in United Kingdom (UK) among 363 patients with schizophrenia has indicated as improved adherence to medication leads to improved QOL(43).

As a study done in Nigeria among 313 patients with schizophrenia attending outpatient treatments, 40.3% of the respondents were medication non-adherent and respondents with poor

medication adherence had lower scores on all domains of the WHOQOL-BREF and on the facets of Overall QOL and General Health compared with medication-adherent subjects(44). Also, another study done in Nigeria found that there is significant negative correlations between the overall, health satisfaction, physical and psychological domains of quality of life and medication adherence: i.e. participants with poorer medication adherence were more likely to have poorer mean scores on the overall QOL, health satisfaction, physical and psychological domains of the WHOQOL(45).A study from Nigeria also have found as poor quality of life was reported to be associated with another illness- related factors such as co morbid medical problems(46).

According one study done at Amanuel Mental Specialized Hospital among 422 patients with schizophrenia in 2017 on quality of life and associated factors, it was described as having depression and sexual dysfunction are factors significantly associated with poor quality of life(40).

2.2.2.2 Substance use and quality of life of patients with schizophrenia

Another clinical factor that affects the quality of life of patients with schizophrenia is substance use status. According to one study conducted in Turkey among patients dually diagnosed with schizophrenia and substance use disorders, and in non-substance-using male schizophrenia outpatients there are significantly lower QoL scores in the co morbid group, specifically in the psychological domain of WHOQOL-BREF(47).Contrary to this, dual-diagnosed patients with schizophrenia and substance use in the study from Australia expressed higher levels of satisfaction with their QoL compared with non- comorbid patients(48).

In general, patients with schizophrenia suffer from worse living conditions and they have a lower quality of life as compared to the general population. Several studies also have described as the quality of life in patients with schizophrenia can be affected by various factors including: Socio-demographic factors like age, sex, marital status, religion, income, occupation, educational status and employment: Clinical factors such as age at onset, duration of treatment, severity of the illness, and duration of the illness, medication adherence and substance use status.

2.3 Conceptual framework

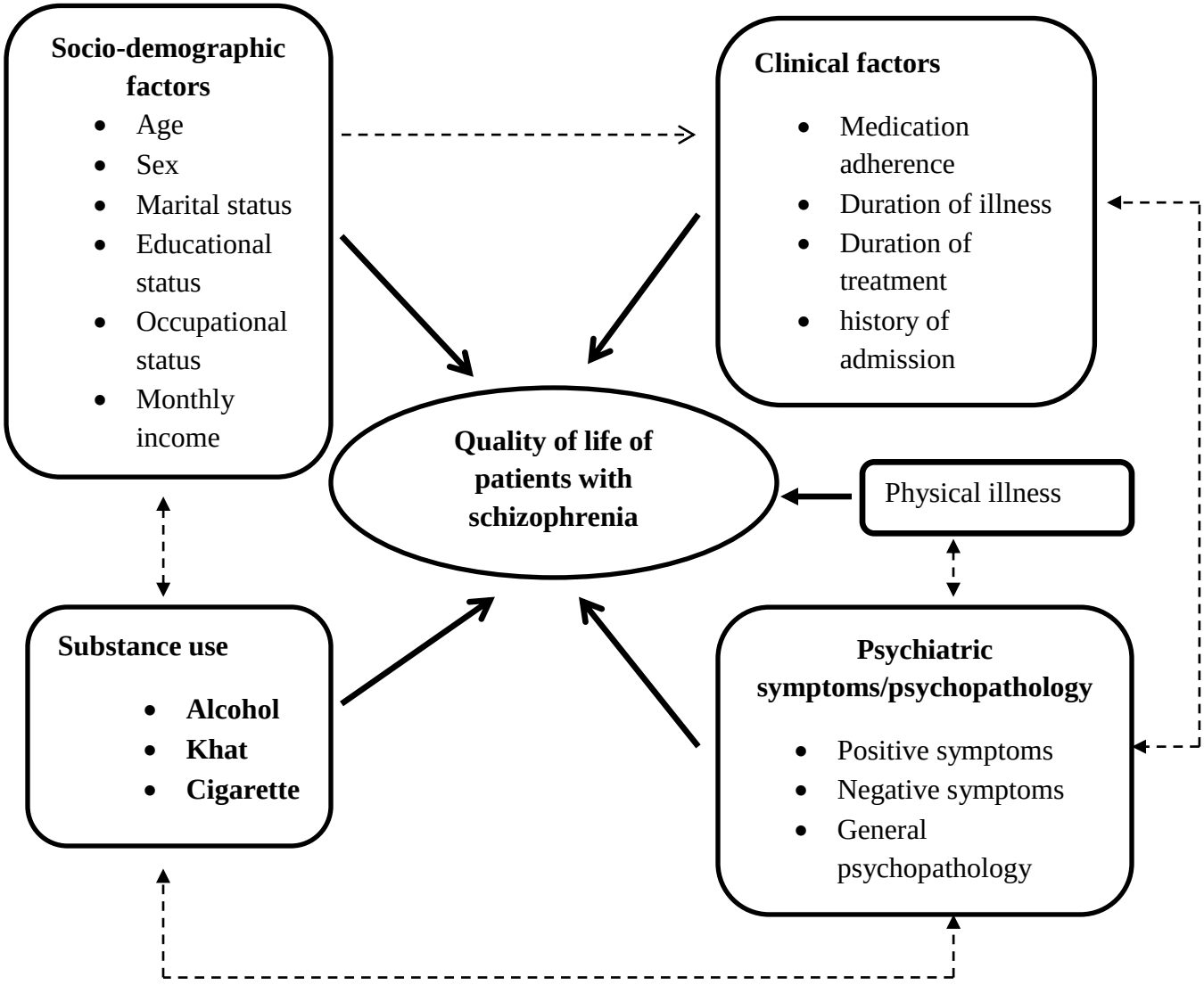

Figure 1:Conceptual frame work affecting QoL of patients with schizophrenia developed after reviewing literature

2.4 Significance of the study

Schizophrenia is one of the most chronic, devastating psychiatric disorders. It affects all aspects of person's life such as physically, psychologically, socially and economically. Also, because of the chronic nature of illness, impact of schizophrenia on quality of life of the patient causes worse functioning. So, in order to minimize the impact of this disorder and improve the quality of life of patients with schizophrenia, assessing and knowing status of quality of life of patients with schizophrenia and those factors affecting quality of life is very helpful. However, there were a single study in our country which was limited to address factors like severity of illness and psychopathology of the schizophrenia.

Thus, this study was aimed to assess the quality of life and associated factors of schizophrenia patient attending follow up treatment at Jimma University Medical Center (JUMC) psychiatric department which will fill the knowledge gap on the quality of life and associated factors of schizophrenia. It will provide knowledge for mental health professionals and other care providers for evidence based medical practice. The finding of the study will be also used as a base line data for health planners and managers for the development of strategies to improve quality of life of patients with schizophrenia, will give an input to improve quality of care and will guide researchers to study in this area. Furthermore, the finding of the study will help clinicians in making judgments about the areas in which a patient is most affected by disease, and in making management decisions.

Chapter 3: Objectives

3.1 General objectives

- To assess quality of life and associated factors of patients with schizophrenia attending follow up treatment at JUMC psychiatry clinic, 2018.

3.2 Specific objectives

- To describe the QoL of patients with schizophrenia attending follow up treatment at JUMC psychiatric clinic, 2018
- To identify factors associated with QoL of patients with schizophrenia attending follow up treatment at JUMC psychiatric clinic, 2018

Chapter 4: Methods and Materials

4.1 Study area and period

The study was conducted in Jimma University Medical Center (JUMC) psychiatry clinic from April 15 - June15, 2018. JUMC was found in Jimma town, Oromia regional state, which was 352 km south west of Addis Ababa, the capital city of Ethiopia. JUMC was one of the oldest governmental hospitals, which was established in 1937 during Italian occupation for the service of their soldiers. After the withdrawal of the colonial conquerors, it has been running as public hospital under the Ministry of Health by different names at different times and currently named as "Jimma University Medical Center". Psychiatric clinic of JUMC was established in 1996 next to Amanuel mental health specialized hospital and renders service including inpatient and outpatients for about 15 million population as catchment in south west Ethiopia. Currently there are more than 1000 patients who are attending follow up treatments at OPD monthly and on average around 50 patients are visiting daily. Officially the psychiatric clinic has 40 beds for inpatient services and 7 OPD.

4.2 Study design

Hospital based cross-sectional study design was employed

4.3 Population

4.3.1 Source population

All patients with schizophrenia attending follow up treatment at JUMC psychiatric clinic.

4.3.2 Study population

Sample of patients with schizophrenia who attended the outpatient treatment of JUMC psychiatric clinic during the study period

4.4Inclusion and Exclusion criteria

4.4.1 Inclusion criteria

Patients with schizophrenia aged 18 or above

4.4.2 Exclusion criteria

Patients who are acutely disturbed and unable to communicate due to their illness

4.5Sample size and sampling techniques

4.5.1 Sample size determination

The minimum number of sample size required for this study was determined by using the formula to estimate single population mean, using the following assumptions

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

Where, n = minimum required sample size

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

$\boldsymbol{\delta}$ = Standard deviation (SD) of the mean for quality of life score, taken from previous published study at Amanuel Mental Specialized Hospital which was 9.13(34).

D = Margin of error (1)

$$n = \frac{(\frac{z\alpha}{2})^2 \delta^2}{d^2} \quad , \quad = \frac{(1.96)^2 * 9.13^2}{(1)^2}$$

n = 320

Then adding 10% (320 x 0.10 = 32) of non-respondent the total sample size for this study was 320+32=352

4.5.2 Sampling techniques

The average number of patients with schizophrenia who visit the outpatient department per two month period of data collection was around 720. The sample size required for this study was 352. Systematic random sampling was used to select the sample patients. The sampling fraction was: 720/352 = 2.04. The number of the first patient included in the sample was determined by lottery method. Thus every 2nd patients were included for the study. While a patient was found ineligible based on inclusion and exclusion criteria, the next patient was considered. Patient card number was used as a code to avoid repeated interview of a single patient.

4.6Study variables

4.6.1Dependent variable

Quality of life score

4.6.2Independent variables

- Socio-demographic factors
  - Age
  - Sex
  - Ethnicity
  - Religion
  - Monthly income
  - Marital status
  - Educational status
  - Occupational status
- Clinical factors
  - Duration of the illness
  - Positive symptom
  - Negative symptom
  - General psychopathology
  - History of admission
  - Substance use(alcohol, Khat & cigarette)
  - Duration of treatment
  - Medication adherence
  - Physical illness

4.7. Data collection procedure and instrument

4.7.1. Data collection Instrument

Patient's quality of life was measured using the World Health Organization Quality of Life Scale – Brief version (WHOQOL – BREF) which is a 26-item self-administered generic questionnaire. It is a short version of the WHO QOL – 100 scale(49).The WHOQOL-BREF is a sound, cross-culturally valid assessment of QOL, as reflected by its four domains: physical, psychological, social and environment(50).It is a suitable for the assessment of QOL in patients with schizophrenia(51). It produces a profile with four domain scores: physical health (7 items),

psychological health (6 items), social relationships (3 items), environmental domain (8 items) as well as two separately scored items about the individuals' perception of their quality of life (QI) and health (Q2). Each item was scored in a Likert format from 1(very dissatisfied) to 5 (very satisfied).The scores of questions 3, 4 and 26 are reversed, so as to transform these negatively framed questions to positively frame. Then the scores of items in each domain are added and the mean calculated to give the domain score. The mean of each domain and the mean of total score were also calculated. The mean score in each domain indicates the individual's perception of their satisfaction with each aspect of their life, relating it with quality of life. Mean scores of WHOQOL-BREF was used to describe Quality of Life of the patients. Hence, higher scores on each of the domains indicates higher quality of life in that particular area(52). The Cronbach's α in this study was 0.96.

Regarding medication adherence, it was measured by 4-item Morisky Medication Adherence Scale (MMAS-4)(53). It was a self-reported, medication taking behavior scale. It consists of four items with a scoring scheme of Yes=1 and No=0.The items in MMAS-4 were summed to give a range of scores from zero to four (0-4). For this study, any participant who scored 1 or more was considered as non- adherent while those who score 0 were taken as adherent. The Cronbach's α in this study was 0.77.

Positive and negative syndrome scale (PANSS) was used to measure the positive and negative symptoms of schizophrenia and severity of symptoms. It has 30 items which was rated on 7 point Likert scale (Absent= 1, minimal= 2, mild= 3, moderate= 4, moderate severe= 5, severe= 6 and extreme= 7). The scale was conceived as a carefully defined and operationalized method that evaluates positive, negative, or other symptom dimensions on the basis of a formal semi-structured clinical interview and other informational sources. In the 30 items, 7 are grouped to form a positive scale, measuring symptoms that are superadded to a normal mental status, and 7 items constitute negative scale, assessing features absent from a normal mental status, remaining 16 items constitute general psychopathology scale that measures the general psychiatric symptoms(54).The Cronbach'sα in this study was 0.97. Patient card was reviewed for presence of physical illness.

The Alcohol, Smoking and Substance Involvement Screening Test (ASSIST) was used to assess substance use related problems(55). It was developed under the auspices of world health

organization by an international group of addiction researchers and clinicians and it has 8 items. Score of 0-3 indicates lower risk, 4-26 indicates moderate risk, >= 27 indicates high risk.

4.7.2Data collection procedure

The data was collected by face to face interview by using semi structured and pre-tested interviewer administered questionnaires. Four data collectors (MSc psychiatric professionals) were employed for 2 months data collection periods. Study participants were identified by data collectors by reviewing patient record. Then, data was collected from selected study participants. The questionnaire covered a range of topics including QOL, socio-economic and demographic factors and clinical factors. Two day training was given for data collectors and the supervisor.

4.8Operational definitions

- **Adherence to medication** – Any participant scoring more than 0 by Morisky Medication Adherence Scale (MMAS-4) was considered as non- adherent while those with 0 scores were taken as adherent.
- **Physical illness** – is any diagnosed medical problems like hypertension; diabetic mellitus, heart failure made by clinician during follow up period
- **Quality of life** – is an individuals' perception of their position in their life for the past two weeks. It will be measured by WHOQOL-BREF which contains 4 domains and 2 general questions (a total of 26 items). High score indicates good QOL and low score indicates poor QOL.
- **Schizophrenia** – It is a clinical diagnosis reached by clinician based on DSM-IV/DSM-5 diagnostic criteria as reviewed from patient card.
- **Substance use** –Ever use of any psychoactive substance in their life time.

4.9Data quality control

The questionnaire was prepared first in English and translated into Afaan Oromo/Amharic then back translated to English by another person who was blinded for English version to check clarity of questionnaire. Two days of training was given for data collectors and supervisor. Pre-test was conducted (5% of the sample size) at Agaro General Hospital before the main study was conducted to identify potential problems on data collection tools and to check consistency of the

questionnaires' and modification of the questionnaire. Regular supervision and support was given for data collectors by the supervisor and principal investigator to ensure that all necessary data are properly collected. The collected data were checked for completeness and consistency by supervisors and principal investigator on daily bases during data collection time.

4.10Data Processing and Analysis

The collected data were checked, coded and entered into Epi data version 3.1, and then data was exported to SPSS version 20 statistical software for cleaning and analysis. The patients' socio-demographic and clinical related characteristics were analyzed using descriptive statistics: i.e. frequencies and percentages were calculated for the categorical variables while means and standard deviations were calculated for continuous variables. Bivariate/simple linear regression analysis was done for each independent variable against the dependent variable. In simple linear regression analysis variables with p-value <0.25 were considered as candidate for multiple linear regression to establish the variables that independently predict quality of life after verifying the lack of multi-co linearity among explanatory variables, linearity of relations, normality of the distribution. After checking the assumptions of for linear regression, transformation of some variables were done that violate the assumptions such as participants' income. Statistical significant of independent predictors were declared at 95% confidence level and (P-value <0.05) and unstandardized β was used for interpretation. Finally, the results of the study were summarized by using tables, graphs and narrative descriptions.

4.11Ethical consideration

Ethical clearance was obtained from the Ethical review board of Jimma University Institute of health. The data collectors clearly explained the aims of the study for study participant. Data was collected after obtaining written consent from each participant. The right was given to the study participants to refuse or discontinue participation at any time they want and the chance to ask any thing about the study. For the purpose of anonymity participant's name was not use at the time of data collection and all other personnel information kept entirely anonymously and confidentially.

4.12Dissemination plan

The results of the study would be submitted to Jimma University Faculty of Medicine, Institute of Health and the copies of papers also submitted to hospital administration of JUMC department of psychiatry and to JUMC administrative office psychiatry clinic. The research paper will be presented in health professional organizations‟ annual meetings, professional conferences and trainings. Finally, attempts will be made to publish results in national and international journal to disseminate worldwide.

Chapter 5: Result

5.1Description of socio-demographic and clinical characteristics of the study participants

A total of 352 patients with schizophrenia were participated in this study and the response rate is n = 351 (99.7%). Of 351 patients with schizophrenia participated in this study, more than two-third 242 (68.9%) of them were male. About two-third 228 (65%)of the participants were Muslims followed by Orthodox 66(18.8%). About two-third of them 236(67.2%) were Oromo and 38(10.8%) were Amhara by ethnicity. More than half of the study participants 193 (55%) were married, 120 (34.2%) of them were single(never married) and the remaining were divorced and widowed. As to the educational status, more than one out of four 95(27.1%) of the study participants had no formal education and 99(28.2%) of the participants has attended the primary school. Also the study has revealed that 84 (23.9%) were farmers and majority of the participants 203 (57.8%) were from urban area.

The mean(± SD) age of participants was 33.57 $\pm$ 7.961 year, and range from 18 to 54 years. The median score of the average monthly income of the participant was 600 Ethiopian Birr with inter quartile range of 1000 Ethiopian Birr.

Table 1**:** The basic socio-demographic characteristics of the participants (n= 351)

Variables	**Variable categories**	**Frequency(n=351)**	**Percentage(100)**
Sex	Male	242	68.9
	Female	109	31.1
Marital status	Never married	120	34.2
	Married	193	55.0
	Divorced	30	8.5
	Widowed	8	2.3
Religion	Muslim	228	65.0
	Orthodox Christian	66	18.8
	Protestant Christian	57	16.2
Ethnicity	Oromo	236	67.2
	Amhara	38	10.8
	Yem	6	1.7
	Dawuro	13	3.7
	Kaffa	30	8.5
	Other*	28	8.0
Occupational status	Government worker	79	22.5
	Farmer	84	23.9
	Merchant	35	10.0
	House wife	45	12.8
	Daily labor	45	12.8
	Other**	63	17.9
Educational status	No formal education	95	27.1
	Primary school	99	28.2
	Secondary school	77	21.9
	Above secondary	80	22.8
Residence	Urban	203	57.8
	Rural	148	42.2

Other Tigre, Walayta: other**:-student,*

5.2 Clinical related characteristics of the study participants

5.2.1 Severity of the illness (by PANSS)

Severity of the illness of the study participant was measured by positive and negative syndrome scale (PANSS). The mean (± SD) total score of PANSS was(63.70 ±34.78). General psychopathology were found to be the most severe (highest)psychiatric symptoms among patients with schizophrenia with mean(±SD) score of (30.26±18.13) followed by negative symptoms mean(±SD) score of (18.22±9.52), then, positive symptoms mean(±SD) score of (15.21±9.28) (Table 2).

Table 2: Participants mean distribution of PANSS scale.

		Range	
Variables	**Mean (± SD)**	**Minimum**	**Maximum**
PANSS total	63.70± 34.78	30	159
Domains of PANSS			
Positive symptom	15.21 ± 9.28	7	38
Negative symptom	18.22 ± 9.52	7	40
General psychopathology	30.26 ± 18.13	16	81

SD – standard deviation

5.2.2 Duration of illness, admission history and co morbid medical illness

The median score of duration of the illness was 4 year with IQR of 6, and the median score of duration on treatment was 4 year with IQR of 4. Almost half of the study participants 169(48.1%) have a history of admissions and the rest 182(51.9%) has no history of admissions. As reviewed the patients chart, 20(5.7%) of the study participants had co morbid medical illness and 331(94.3%) have no the history of the co morbid medical illness. These co morbid physical illnesses were(13 participants) hypertension, (1 participant) diabetes mellitus, (1 participant) HIV/AIDS, (2 participants) asthma and (3 participants) gastritis.

5.2.3 Medication adherence

Regarding the medication adherence status of the patients as measured by MMAS-4, of the 351 patients with schizophrenia who participated in this study, 240(68.4%) are adherent to the medications and 111(31.65%) are non-adherent.

5.2.4 Substance use

Regarding the substance use related factors, 152(43.3%), 248(70.7%) and 97(27.6%) had used tobacco, Khat and alcohol in their life time respectively (Figure 2).

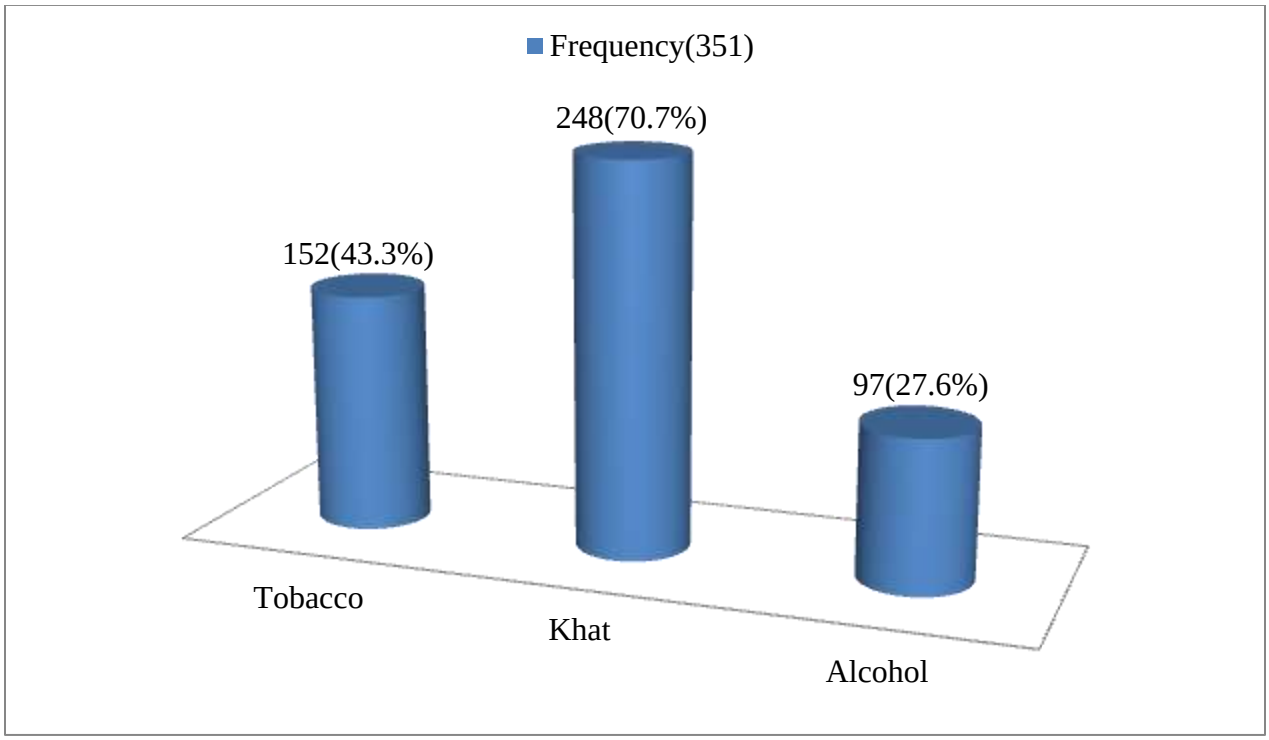

Figure 2: Participants ever use of substances

5.3 Quality of life of patients with schizophrenia

Study participants quality of life was assessed by world health organization quality of life brief version scale (WHOQOL-BREF) and the mean total quality of life score was found to be (74.34±15.83).The highest QOL domain of the patients with schizophrenia in this study was environmental health domain mean score of (22.42 ± 5.09), followed by physical health domain mean score of (20.49 ± 4.25), psychological health domain mean score of (18.15 ±4.14) and

social relationships domain mean score of (7.57 ± 2.36) (Table 3). The WHOQOL-BREF scale demonstrated a high internal consistency reliability coefficient (Cronbach's alpha=0.96).

Table 3: Mean distribution of QOL of patients with schizophrenia attending follow up treatment at JUMC, 2018.

		Range	
Variables	**Mean (± SD)**	**Minimum**	**Maximum**
WHOQOL-BREF	74.34 ± 15.83	32	107
Domains of WHOQOL-BREF			
Physical health	20.49 ± 4.25	9	29
Psychological health	18.15 ± 4.14	6	27
Social relationships	7.57 ± 2.36	3	15
Environmental health	22.42 ±5.08	8	34
Items			
Item 1	2.79 ± 0.89	1	5
Item 2	2.87 ± 0.93	1	5

SD- standard deviation

On QOL descriptions, patients with schizophrenia had lowest score on the social relationship domain of WHOQOL-BREF. Patients with chronic mental illness dislike the stigma of mental illness, which excludes them from social life. These patients are subject to many different kinds of formal and informal discrimination.

5.4 Factors associated with quality of life

Bivariable analysis

Bivariable and multivariable regression analysis were done to identify predictors of quality of life of patients with schizophrenia.

During a bivariable analysis variables like participants monthly income, positive symptom, negative symptom, general psychopathology, being medication non-adherent, having no history of admission, having co morbid physical illness, ever use of tobacco and ever use of Khat were found to have statistical association with the outcome variable and considered as a candidate for the final model (Table 4).

Table 4: Bivariable Linear Regressions of QoL of patients with schizophrenia attending follow up treatment at JUMC, 2018.

Variable	R^2	β	95% CI	P-value
Age of participants	0.001	0.002	-0.208-0.211	0.987
Female participants	0.009	3.225	-0.357-6.807	0.077
Participants marital status				
Married *	0.003	0		
Single	0.006	-2.625	-6.124-0.873	0.141
Divorced	0.000	0.361	-5.593-6.316	0.905
Widowed	0.004	6.563	-4.570-17.697	0.247
Participants educational status				
College or above *	0.001			
No education	0.002	-1.688	-5.430-2.055	0.376
Primary education	0.005	2.388	-1.303-6.079	0.204
Secondary education	0.000	0.451	-3.571-4.474	0.826
Participants occupational status				
Government *	0.000	-0.058	-4.044-3.928	0.977
Private	0.002	-1.741	-5.638-2.157	0.380
Unemployed	0.000	0.071	-5.485-5.627	0.980
Other	0.000	0.761	-4.217-5.740	0.764
Monthly income	0.150	15.998	11.995-20.000	<0.001
Duration of illness	0.004	-2.850	-7.718-2.018	0.250
Duration of treatment	0.003	-0.193	-0.539-0.154	0.275
Positive symptom	0.572	-1.289	-1.407-(-1.172)	<0.001
Negative symptom	0.628	-1.317	-1.424-(-1.210)	<0.001
General psychopathology	0.620	-0.688	-0.744-(-0.631)	<0.001
Medication non adherent	0.427	-21.061	-23.627-(-18.494)	<0.001
No history of admission	0.040	6.385	3.087-9.682	<0.001
Co morbid physical illness	0.080	-19.338	-26.225-(-12.451)	<0.001
Ever use of tobacco	0.321	-18.069	-20.838-(-15.299)	<0.001

Ever use of Khat	0.122	-12.111	-15.537-(-8.684)	<0.001
Ever use of alcohol	0.003	1.829	-1.889-5.547	0.334

**- reference group, other- house wife, student*

Multi variable analysis

In the final multi variable linear regression model, participants' average monthly income (β: 5.81, 95% CI: 3.45-8.18) medication non-adherence(β: -5.81, 95% CI: -8.24-(-3.41)), positive symptom (β: -0.33, 95% CI: -0.49-(-0.17)), negative symptom (β: -0.26, 95% CI: -0.45-(-0.06)), general psychopathology (β: -0.22, 95% CI: -0.32-(-0.12)), ever use of tobacco (β: -3.95, 95% CI; -5.34-(-0.95))ever use of Khat (β: -3.95, 95% CI; -6.02-(-1.88)) and co morbid physical illness (β: -4.69, 95% CI: -8.50-(-0.88)) were found to be statistically significantly associated with quality of life (Table 5).

Predictors of quality of life of patients with schizophrenia in this study like monthly income, medication non adherent, positive symptoms, negative symptoms, general psychopathology, having comorbid physical illness, ever use of Khat and tobacco contribute to 76% of the variation in the quality of life patients with schizophrenia (R=0.872, R^2=0.760, F=82.058, P<0.001)

Table 5: Final regression model

R	R^2	Adjusted R^2	P-value at 95% CI
0.872	0.760	0.751	<0.001

Table 6: Multivariable Linear Regression model for quality of life of patients with schizophrenia

	Unstandardized Coefficient β	P-value at 95% CI	95% Confidence Interval for β	
			Lower	Upper
Constant	74.23	0.000	71.06	87.39
Monthly income	5.81	0.000	3.45	8.18
Medication non adherent	-5.82	0.000	-8.24	-3.41
Positive symptom	-0.33	0.003	-0.49	-0.17
Negative symptom	-0.26	0.009	-0.45	-0.06
General psychopathology	-0.22	0.000	-0.32	-0.12
Comorbid physical illness	-4.69	0.016	-8.50	-0.88
Ever use of tobacco	-3.15	0.005	-5.34	-0.95
Ever use of Khat	-3.95	0.000	-6.02	-1.88

$R=0.872$, $R^2=0.760$, $F=82.058$, $P<0.001$

Chapter 6: Discussion

Our study indicates that, patients with schizophrenia had lowest score on the social relationship domain of WHOQOL-BREF. Variables like income, positive symptoms, negative symptoms, general psychopathologies, co morbid physical illness, ever use of tobacco, ever use of Khat and medication non-adherent are the main predictors for QOL in patients with schizophrenia.

In this study, the lowest score on social relationship domain of QOL in schizophrenic patients could be due to the negative symptoms present in these patients, which affect the patient's ability to live independently, to perform activities of daily living, to be socially active and maintain personal relationships. Also, it could be due to patients with chronic mental illness like schizophrenia dislike the stigma of mental illness, which excludes them from social life. Furthermore, the self-stigma that the patients with mental illness have could also be the possible explanation as it was studied at Dilla University referral hospital, south Ethiopia(56).

A birr increase in the monthly income of the patient, the total quality of life score increased by 5.81($p<0.001$) point. This indicates that there were significant positive correlation between average monthly income of the patients with schizophrenia and their total QOL. Similar results about relationship of income and QOL were also reported from different countries like Jordan and India(31, 41). This was understandable as patients who were financially satisfied had expectations like normal people and able to meet their basic needs.

Our study found that about three in ten of patients with schizophrenia are non-adherent to the medications and the rest are adherent to their medications. Being non-adherent to medication decreases the total quality of life score by 5.82($p<0.001$) points as compared to those patients with schizophrenia who are adherent to their medications. These participants who are non-adherent to the medications were more likely to have lower mean score of the total QOL scores indicating that they have negative correlations with the total QOL scores. This finding was supported with the study done in Nigeria that showed medication non-adherent was negatively correlated with the good QOL scores(45). This could be explained by being non- adherence to medications may lead to the relapse, worsening of symptoms and deterioration of the patients' mental health.

The result from this study indicates that there were negative relationships between QOL and the severity of the psychiatric symptoms. As the mean score of positive symptom increase by one unit, the total quality of life score decreased by 0.33 ($p<0.001$). As the mean score of negative symptom increases by one unit, the total quality of life score decreased by 0.26 ($p=0.009$) point. And also a point increase in the mean score of general psychopathology resulted in 0.22 point decrease in the total score of quality of life ($p<0.001$) of patients with schizophrenia. These results were in accordance with previously reported results in similar populations which reported that severity of the illness affects the QOL of patients with schizophrenia(7,27,31,41,45). This could be due to the nature and chronic course of the illness.

The result of this study also found that being ever user of tobacco decreases the score of total quality of life by 3.15 ($p=0.005$) as compared to those who are none user of tobacco. Additionally, being ever user of Khat decreases the score of total quality of life by 3.95 ($p<0.001$) as compared to those who are none users of Khat. Similar to the results of our current study, one study from Turkey reported that patients who are dually diagnosed with schizophrenia and substance use had significantly lower QoL scores than those non-substance-using patients with schizophrenia(47). This could be due to those patients with schizophrenia who have co morbid substance use problems have poorer course of the illnesses and it is more attributable to the direct effect of drugs on the worsening symptoms and the financial costs. Contrary to our results, dual-diagnosed patients with schizophrenia and substance use in the study from Australia (48)expressed higher levels of satisfaction with their QoL compared with non- co morbid patients. This inconsistency could be related to several factors, such as differences in the samples and the selected QoL measures (WHOQOL-BREF vs the Quality of Life Scale).

Our study also indicated that having comorbid medical illness leads to poor quality of life mean that having comorbid physical illness decreases the total quality of life score by 4.69 ($p= 0.016$) points as compared to those patients with schizophrenia who have no comorbid physical illnesses. This result was supported by a study from Nigeria that found as poor quality of life was reported to be associated with another illness- related factors such as co morbid medical problems(46). This could be explained as it is obvious that having more than one illness could result in worse outcome.

LIMITATION OF THE STUDY

Our study investigated the quality of life and its associated factors of patients with schizophrenia who are on follow up treatments. Therefore, our study uses sound and cross-culturally valid data collection tools and incorporate several factors to reflect an actual representation of the quality of life of patients with schizophrenia in that area. It also has sufficient response rate.

However, our study has also certain limitations; The WHOQOL-BREF mainly focuses on the subjective domain of QOL which may lead to lack of the objective measure and an over reporting of QOL in individuals with schizophrenia. Comorbidity of physical illness was reviewed from patient record. Tools like PANSS needs longer time training to be efficiently used.

CONCLUSIONS

The domain of social relationship had the lowest mean score of WHOQOL-BREF for patients with schizophrenia. Positive symptoms, negative symptoms, general psychopathologies, co morbid physical illness, ever use of tobacco, ever use of Khat and medication non-adherent were negatively associated with good QoL of patients with schizophrenia. However, only income is positively associated with good QoL of patients with schizophrenia.

RECOMMENDATIONS

For Jimma Zone Health Bureau and Jimma Town Health and Administration Offices;

We recommend to plan and develop strategies for community support programmes to increase and enhance social relationships and support for patients with schizophrenia and give them opportunities to develop close relationships. By doing so, improving the social relationship of those patients with schizophrenia will have a positive effect on their QOL.

We also recommend for creating income generating activities for patients with schizophrenia and encourage mental health service delivery institutions to provide at least “fee free” mental health service.

We recommend also to creating and developing public education and awareness; Well-planned public awareness and education campaigns can reduce stigma and discrimination, increase the use of mental health services, and bring mental and physical health care closer to each other.

For Jimma University Medical Center and department of psychiatry;

Assessing and treating the non- psychotic signs and symptoms present with patients of schizophrenia has to be the targets of clinicians for treatments aiming to improve their QoL. We also recommend to give due attention for the co morbidities present with schizophrenia like physical illness and substance use problems especially Khat and cigarette in order to improve their QOL. Furthermore, we recommend establishing rehabilitation center for patients with schizophrenia.

Pay attention towards enhancing the adherence of patients with schizophrenia towards their medications by strategies like patient education, treating side effects early, because of it will have a significant contribution in enhancing their QoL.

Also, we recommend encouraging psychosocial treatments like case management services and peer support programs in order to enhance the patients’ capacity on building broader networks of relationships and income generating activities.

References

1. Tandon R, Gaebel W, Barch DM, Bustillo J, Gur RE, Heckers S, et al. Definition and description of schizophrenia in the DSM-5. Schizophr Res. 2013;150(1):3–10.

2. Ritsner M, Kurs R. Impact of antipsychotic agents and their side effects on the quality of life in schizophrenia. Expert Rev Pharmacoeconomics Outcomes Res. 2002;2(4):347–56.

3. Ayano G. Schizophrenia: A Concise Overview of Etiology, Epidemiology Diagnosis and Management: Review of literatures. J Schizophr Res. 2016;3(2):1026.

4. Sadock BJ, Sadock VA, Ruiz P. Kaplan & Sadock's synopsis of psychiatry : behavioral sciences/clinical psychiatry: 11th edition. 2015.

5. Assefa D, Shibre T, Asher L, Fekadu A. Internalized stigma among patients with schizophrenia in Ethiopia : a cross-sectional facility-based study. 2012;

6. Gaur V, Jagawat T, Gupta S, Khan PA, Souza MD, Sharan A. Quality of life in outpatient Schizophrenics : Correlation with illness severity and psychopathology. 2015;18(1):95–101.

7. American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders 5th edition: DSM-5,APA. 2013. 99 p.

8. Pitkänen A. Improving quality of life of patients with schizophrenia in acute psychiatric wards.

9. Narvaez JM, Twamley EW, McKibbin CL, Heaton RK, Patterson TL. Subjective and objective quality of life in schizophrenia. Schizophr Res. 2008;98(1–3):201–8.

10. Group. TW. The World Health Organization Quality of Life Assessment (the WHOQOL): position paper from the World Health Organisation. Soc Sci Med. 1995;41:1403–9.

11. Fontelene de Oliveira M, Moura Castro RC, Pereira Calou CG, Fontenele de Oliveira M, de Souza Aquino P, Lima da Silva CG, et al. Ways to measuring quality of life in mental health. Int Arch Med [Internet]. 2015;2013–6. Available from: http://imed.pub/ojs/index.php/iam/article/view/1128

12. Clifford LJ. A Qualitative Study of Medication Adherence amongst People with Schizophrenia. 2012;

13. WHO. Mental disorders. Geneva: Switzerland World Health Organization. Mental disorders. 2016.

14. Ayuso-Mateos JL. Global burden of schizophrenia in the year 2000 : Version 1 estimates [Internet]. World health organization. 2001. p. 1–11. Available from: http://www.who.int/healthinfo/statistics/bod_schizophrenia.pdf

15. Isaac M, Chand P MP. Schizophrenia outcome measures in the wider international community. The British Journal of Psychiatry. 2007. p. 71–7.

16. House MH, Package E. Federal Democratic Republic of Ethiopia Ministry of Health.NATIONAL MENTAL HEALTH STRATEGY 2012/13 - 2015/16. 2004;(February).

17. Pitkanen A. Thesis: IMPROVING QUALITY OF LIFE OF PATIENTS WITH SCHIZOPHRENIA. 2010. 82 p.

18. Awad, A. G., & Voruganti LNP. Measuring quality of life in patients with schizophrenia: an update. Pharmacoeconomics. 2012. p. 183–92.

19. Tyson, P. J., Laws, K. R., Flowers, K. A., Mortimer, A. M., & Schulz J. Attention and executive function in people with schizophrenia: Relationship with social skills and quality of life. International Journal of Psychiatry in Clinical Practice. 2008. p. 112–9.

20. Abouzaid, S., Tian, H., Zhou, H., Kahler, K., Harris, M., & Kim E. Economic Burden Associated with Extrapyramidal Symptoms in a Medicaid Population with Schizophrenia. Community Mental Health Journal. 2014. p. 51–8.

21. Ritsner MSLAA. Predicting 10-year quality-of-life outcomes of patients with schizophrenia and schizoaffective disorders. Psychiatry & Clinical Neurosciences. 2014. p. 308–17.

22. Fitzgerald, P. B., Williams, C. L., Corteling, N., Filia, S. L., Brewer, K., Adams, A., de

Castella, A. R., Rolfe, T., Davey, P., & Kulkarni J. Subject and observer-rated quality of life in schizophrenia. Acta Psychiatrica Scandinavica. 2001. p. 387–92.

23. Chang, L.-R., Lin, Y.-H., Wu Chang, H.-C., Chen, Y.-Z., Huang, W.-L., Liu, C.- M., Liu, C.-C., & Hwu H-G. Psychopathology, rehospitalization and quality of life among patients with schizophrenia under home care case management in Taiwan. Journal of the Formosan Medical Association. 2013. p. 208–15.

24. Li Y, Hou CL, Ma XR, Zhong BL, Zang Y, Jia FJ, et al. Quality of life in Chinese patients with schizophrenia treated in primary care. Psychiatry Res. 2017;254(August):80–4.

25. S.Q. B, Q.M. B, A. M. Correlation between quality of life and positive and negative symptoms of schizophrenia. Pakistan J Med Heal Sci [Internet]. 2015;9(1):367–70. Available from: http://pjmhsonline.com/JanMar2015/correlation_between_quality_of_l.htm%5Cnhttp://ovidsp.ovid.com/ovidweb.cgi?T=JS&PAGE=reference&D=emed13&NEWS=N&AN=2015876107

26. Bobes J, Garcia-Portilla MP, Bascaran MT, Saiz PA, Bousoño M. Quality of life in schizophrenic patients. Dialogues Clin Neurosci. 2007;9(2):215–26.

27. Hasan M, Mahmud S, Yeasmin B, Mandal S. Original article Quality of life of schizophrenic patients in a tertiary care hospital in Bangladesh. 2015;

28. Hamaideh S, Al-Magaireh D, Abu-Farsakh B, Al-Omari H. Quality of life, social support, and severity of psychiatric symptoms in Jordanian patients with schizophrenia. J Psychiatr Ment Health Nurs. 2014;21(5):455–65.

29. Alshowkan A, Curtis J, White Y. Quality of life for people with schizophrenia: a literature reviewQuality of life for people with schizophrenia: a literature review Quality of life for people with schizophrenia: a literature review. Arab J Psychiatry [Internet]. 2012;23(2):122–31. Available from: http://ro.uow.edu.au/cgi/viewcontent.cgi?article=1152&context=smhpapers

30. Alshowkan A, Curtis J, White Y. Quality of life for people with schizophrenia : a

literature review. Arab J Psychiatry. 2012;23(2):122–31.

31. Caqueo-Urízar A, Urzúa A, Boyer L, Williams DR. Religion involvement and quality of life in patients with schizophrenia in Latin America. Soc Psychiatry Psychiatr Epidemiol. 2016;51(4):521–8.

32. Makara-Studzinska M, Wolyniak M, Partyka I. Sociodemographic determinants of the quality of life in patients with schizophrenia. Fam Med Prim Care Rev [Internet]. 2012;14(1):52–7. Available from: http://ovidsp.ovid.com/ovidweb.cgi?T=JS&CSC=Y&NEWS=N&PAGE=fulltext&D=emed10b&AN=2013791950 http://lshtmsfx.hosted.exlibrisgroup.com/lshtm?sid=OVID:embase&id=pmid:&id=doi:&issn=1734-3402&isbn=&volume=14&issue=1&spage=52&pages=52-57&date=2012&title=Family+M

33. Cardoso CS, Caiaffa WT, Bandeiro M et al. Factors associated with low quality of life in schizophrenia. Cad Saude Publica. 2005. p. 1338–1348.

34. Hansson L. Subjective quality of life in schizophrenic patients living in the community . Relationship to clinical and social characteristics. 1999;256–63.

35. Chan S yu I. Quality of life of clients with schizophrenia. Issues and innovations in nursing practice. J Adv Nurs. 2010. p. 72–83.

36. Singh P, Midha A, Chugh K, Solanki R. Schizophrenia: Impact on quality of life. Indian J Psychiatry [Internet]. 2008;50(3):181. Available from: http://www.indianjpsychiatry.org/text.asp?2008/50/3/181/43632

37. Ramadas S, Bonanthaya V. Quality of life of patients with schizophrenia and its determinants. 2017;3(December):108–14.

38. Alshowkan A, Curtis J, White Y. Factors affecting the quality of life for people with schizophrenia in Saudi Arabia: A qualitative study. African J Psychiatry (South Africa) [Internet]. 2015;18(4). Available from: https://www.scopus.com/inward/record.uri?eid=2-s2.0-84946763500&partnerID=40&md5=981a6fb877d49b7492a2a0330a1a5dae

39. Adewuya AO MR. Subjective quality oflife of Nigerian schizophrenia patients: sociodemographic and clinical correlates. Acta Psychiat Scand. 2009. p. 160–4.

40. Fanta T, Abebaw D, Haile K, Hibdye G, Assefa D. Assessment of Quality of Life and Associated Factors among Patients with Schizophrenia in Ethiopia , 2017. 2017;2(3):11–8.

41. Eack SM, Newhill CE. Psychiatric Symptoms and Quality of Life in Schizophrenia : A Meta-Analysis. 2007;33(5):1225–37.

42. Suttajit S, Pilakanta S. Predictors of quality of life among individuals with schizophrenia. Neuropsychiatr Dis Treat. 2015;11:1371–9.

43. Hayhurst KP, Drake RJ, Massie JA, Dunn G, Barnes TRE, Jones PB, et al. Improved quality of life over one year is associated with improved adherence in patients with schizophrenia. Eur Psychiatry [Internet]. 2014;29(3):191–6. Available from: http://dx.doi.org/10.1016/j.eurpsy.2013.03.002

44. Adelufosi AO, Adebowale TO, Abayomi O, Mosanya JT. Medication adherence and quality of life among Nigerian outpatients with schizophrenia. Gen Hosp Psychiatry [Internet]. 2012;34(1):72–9. Available from: http://dx.doi.org/10.1016/j.genhosppsych.2011.09.001

45. Ogunnubi OP, Olagunju AT, Aina OF, Okubadejo NU. Medication adherence among Nigerians with schizophrenia: Correlation between clinico-demographic factors and quality of life. Ment Illn. 2017;9(1).

46. O. A, O. F, B. M. A review of quality of life studies in nigerian patients with psychiatric disorders. African J Psychiatry (South Africa) [Internet]. 2013;16(5):333–7. Available from: http://www.journals.co.za/WebZ/images/ejour/medjda2/medjda2_v16_n5_a6.pdf?sessionid=01-49716-180866232&format=F%5Cnhttp://ovidsp.ovid.com/ovidweb.cgi?T=JS&PAGE=reference&D=emed11&NEWS=N&AN=2013546355

47. Aras HI, Yazar MS, Altınbaş K. Quality of life among dually diagnosed and non-substance-using male schizophrenia outpatients. South African J Psychiatry [Internet]. 2013;19(2):35. Available from: http://hmpg.co.za/index.php/sajp/article/view/916

48. Herman M. Neurocognitive functioning and quality of life among dually diagnosed and non-substance abusing schizophrenia inpatients. 2004;282–91.

49. World Health Organization. PROGRAMME ON MENTAL HEALTH WHOQOL User Manual. SpringerReference [Internet]. 2012;(September):1–106. Available from: http://www.springerreference.com/index/doi/10.1007/SpringerReference_28001

50. Skevington SM, Lotfy M, O'Connell KA. The World Health Organization's WHOQOL-BREF quality of life assessment: Psychometric properties and results of the international field trial a Report from the WHOQOL Group. Qual Life Res. 2004;13(2):299–310.

51. Mas-Expósito L, Amador-Campos JA, Gómez-Benito J, Lalucat-Jo L. The World Health Organization Quality of Life Scale Brief Version: A validation study in patients with schizophrenia. Qual Life Res. 2011;20(7):1079–89.

52. The WHOQOL Group. Whoqol-Bref: Introduction , Administration , Scoring and Generic Version of the Assessment. Program Ment Heal. 1996;(December):16.

53. Morisky DE, Green LW, Levine DM. Concurrent and Predictive Validity of a Self-reported Measure of Medication Adherence [Internet]. Vol. 24, Medical Care. 1986. p. 67–74. Available from: http://content.wkhealth.com/linkback/openurl?sid=WKPTLP:landingpage&an=00005650-198601000-00007

54. Fiszbein A OLKS. The Positive and Negative Syndrome Scale (PANSS): Rationale and standardisation. Vol. 155, British Journal of Psychiatry. 1989. p. 59–65.

55. Alcohol T. The Alcohol, Smoking and Substance Involvement Screening Test (ASSIST).

56. Ayenalem AE, Tiruye TY, Muhammed MS. Impact of Self Stigma on Quality of Life of People with Mental Illness at Dilla University Referral Hospital , South Ethiopia. 2017;5(5):125–30.

57. Wang XQ, Petrini MA, Morisky DE. Predictors of quality of life among Chinese people with schizophrenia. Nurs Health Sci [Internet]. 2017;19(2):142–8. Available from: http://doi.wiley.com/10.1111/nhs.12286

58. Eack SM, Newhill CE. Psychiatric symptoms and quality of life in schizophrenia: A meta-analysis. Schizophr Bull. 2007;33(5):1225–37.

Appendices

Annex I: Information sheet

- **Title of the research project:**
- Assessment of quality of life and associated factors of patients with schizophrenia attending follow treatment at Jimma University Medical Center (JUMC) psychiatric clinic, Jimma, south west, Ethiopia, 2018.
- **Name of the principal investigator:**
  Defaru Desalegn Likasa
- **Name of the organization**
  Jimma University
- **Name of the sponsors:**
  Jimma University
- **Introduction:**
  Schizophrenia is one of the most chronic, devastating psychiatric disorders. Because of the chronic nature of illness, it affects all aspects of person's life such as physically, psychologically, socially and economically, that results in poor quality of life.Therefore to help them, the level of quality of life and associated factors needs to be known.
- **Purpose of the research project:**

The purpose of this research is to assess quality of life and associated factors of patients with schizophrenia attending follow treatment at JUMC psychiatric clinic, Jimma, south west, Ethiopia. The study will help to know the level of quality of life and associated factors among patients with schizophrenia and to improve quality of life of patients with schizophrenia and will guide researchers to study in this area. Furthermore, the finding of the study will help clinicians in making judgments about the areas in which a patient is most affected by disease, and in making management decisions.

- **Procedure:**

We invite you to participate in this project. If you are willing to participate in this project, you need to understand and sign the agreement form. Then after, you will be interviewed by the data collectors. You do not need to tell your name or to give your telephone number to

the data collector and all your responses and the results obtained will be kept confidentially by using coding system whereby no one will have access to your response.

- **Risk/Discomfort:**

By participating in this research project, you may fill that it has some discomfort especially on wasting time about 40 minutes. We hope you will participate in the study for the sake of the benefit of the research result. There is no risk in participating in this research project.

- **Benefits:**

If you participate in this research project, there may not be direct benefit to you but your participation is likely help us to meet the research objective. Ultimately, this will help us to improve quality of services provided to patients with schizophrenia in this country.

- **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 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 right.

- **Person to contact**:

This research project was reviewed and approved by the ethical committee of Jimma University. If you have any question you can contact any of the following individuals and you may ask any time you want.

1. Defaru Desalegn: Jimma University

Tell: +251-917 28 48 22

E-mail: defdesalegn2007@gmail.com

Annex I: Informed consent form

Are you voluntary to participate in the study? Yes ☐ No ☐

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_____

Annex III: Questionnaire English version

Questionnaires for the assessment of quality of life and associated factors of patients with schizophrenia attending followup treatment at Jimma University Medical Center (JUMC) psychiatric clinic, Jimma, south west, Ethiopia, 2018.

INTRODUCTION: Thank you for agreeing to take part in this brief interview. This study is intended to assess the QOL of patients with schizophrenia in our country above all aiming to know the level of their quality of life and giving the way for the holistic integration of mental health service in the care of people with schizophrenia there by increasing the quality of care for these people. You are not expected to give your name or phone number. Every data obtained from you will be kept confidential. Without permission from you and legal body any part of this study will be disclosed to third person.

INSTRUCTION: The questionnaire has six parts. It will take about 40 minutes to complete the interview. Please try to respond all questions. Thank you very much for your patience!

The questionnaire consists of five parts;

Part I: Questions related to the socio demographic characteristics of the patient

NO		Age	Religion	Ethnicity	Educational status	Occupational status	Place of residence	Marital status	Family size
SR1 to SR									

8									

Religion:
1. Muslim
2. Orthodox
3. Protestant
4. Other specify _____

Ethnicity:
1. Oromo
2. Kaffa
3. Yem
4. Dawuro
5. Amhara
6. other

Educational status:
1. No formal education
2. Primary school
3. Secondary
4. Above secondary

Marital status:
1. Never married
2. Married
3. Divorced
4. Widowed

Residence
1.Urban
2.Rural

Occupational status:
1. Gov/ worker
2. Farmer
3. Merchant
4. House wife
5. Daily labor
6. Other _____

Part II: World Health Organization Quality of Life Assessment Questionnaire

Instructions:

This assessment asks how you feel about your quality of life, health, or other areas of your life. Please answer all the questions. If you are unsure about which response to give to a question, please choose the one that appears most appropriate. This can often be your first response.

Please keep in mind your standards, hopes, pleasures and concerns. We ask that you think about your life in the last two weeks.

Please read each question, assess your feelings, and circle the number on the scale for each question that gives the best answer for you.

		very poor	Poor	Neither poor nor good	Good	Very good
1	How would you rate your quality of life?	1	2	3	4	5

		Very dissatisfied	Dissatisfied	Neither dissatisfied nor satisfied	Satisfied	Very satisfied
2	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
3	To what extent do you feel that physical pain prevents you from doing what you need to do?	1	2	3	4	5
4	How much do you need any medical treatment to function in your daily life?	1	2	3	4	5
5	How much do you enjoy life?	1	2	3	4	5
6	To what extent do you feel your life to be meaningful?	1	2	3	4	5

		Not at all	A little	Moderately	Mostly	Completely
7	How well are you able to concentrate?	1	2	3	4	5
8	How safe do you feel in your daily life?	1	2	3	4	5
9	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
10	Do you have enough energy for everyday life?	1	2	3	4	5
11	Are you able to accept your bodily appearance?	1	2	3	4	5
12	Have you enough money to meet your needs?	1	2	3	4	5
13	How available to you is the information that you need in	1	2	3	4	5

	your day-to-day life?					
14	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
15	How well are you able to get around?	1	2	3	4	5

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 dissatisfied nor satisfied	Satisfied	Very satisfied
16	How satisfied are you with your sleep?	1	2	3	4	5
17	How satisfied are you with your ability to perform your daily living activities?	1	2	3	4	5
18	How satisfied are you with your capacity for work?	1	2	3	4	5
19	How satisfied are you with yourself	1	2	3	4	5
20	How satisfied are you with your personal relationships?	1	2	3	4	5
21	How satisfied are you with your sex life?	1	2	3	4	5
22	How satisfied are you with the support you get from your friends?	1	2	3	4	5
23	How satisfied are you with the conditions of your living place	1	2	3	4	5

24	How satisfied are you with your access to health services	1	2	3	4	5
25	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
26	How often do you have negative feelings such as blue mood, despair, anxiety, depression?	1	2	3	4	5

Part III: Positive and Negative Symptom Severity Assessment Questionnaire

		Absent	Minimal	Mild	Moderate	Moderate severe	Severe	Extreme
P1	Delusions	1	2	3	4	5	6	7
P2	Conceptual disorganization	1	2	3	4	5	6	7
P3	Hallucinatory behavior	1	2	3	4	5	6	7
P4	Excitement	1	2	3	4	5	6	7
P5	Grandiosity	1	2	3	4	5	6	7
P6	Suspiciousness/persecution	1	2	3	4	5	6	7
P7	Hostility	1	2	3	4	5	6	7

		Absent	Minimal	Mild	Moderate	Moderate severe	Severe	Extreme
N1	Blunted affect	1	2	3	4	5	6	7
N2	Emotional withdrawal	1	2	3	4	5	6	7
N3	Poor rapport	1	2	3	4	5	6	7

N4	Passive/apathetic social withdrawal	1	2	3	4	5	6	7
N5	Difficult in abstract thinking	1	2	3	4	5	6	7
N6	Lack of spontaneity and flow of conversation	1	2	3	4	5	6	7
N7	Stereotyped thinking	1	2	3	4	5	6	7

		Absent	Minimal	Mild	Moderate	Moderate severe	Severe	Extreme
G1	Somatic concern	1	2	3	4	5	6	7
G2	Anxiety	1	2	3	4	5	6	7
G3	Guilt feelings	1	2	3	4	5	6	7
G4	Tension	1	2	3	4	5	6	7
G5	Mannerisms and posturing	1	2	3	4	5	6	7
G6	Depression	1	2	3	4	5	6	7
G7	Motor retardation	1	2	3	4	5	6	7
G8	Uncooperativeness	1	2	3	4	5	6	7
G9	Unusual thought content	1	2	3	4	5	6	7
G10	Disorientation	1	2	3	4	5	6	7
G11	Poor attention	1	2	3	4	5	6	7
G12	Lack of judgment and insight	1	2	3	4	5	6	7
G13	Disturbance of volition	1	2	3	4	5	6	7
G14	Poor impulse control	1	2	3	4	5	6	7
G15	Preoccupation	1	2	3	4	5	6	7
G16	Active social avoidance	1	2	3	4	5	6	7

Part IV: Medication Adherence Questionnaire

S/No:	Questions	Yes	No
MA1	Do you ever forget to take your medicine?	1	0
MA2	Are you careless at times about taking your medicine?	1	0
MA3	When you feel better do you sometimes stop taking your medicine?	1	0
MA4	Sometimes if you feel worse when you take the medicine, do you stop taking it?	1	0

Part V: Clinical Related Factors

S/No:	Questions	Responses
CR1	How long the duration of the illness?	1. In month _____ 2. In year _____
CR2	How long the duration of the illness?	_____
CR3	Is there diagnosed comorbid physical illness? (card review)	1.Yes 2. No
CR4	If your response to question CR4 is 'yes' write the diagnosis.	_____
CR5	Have you ever used substance in the past 12 months?	1. Yes 2. No

Part VI: Substance Related Factors

ASSIST QUESTIONNARIE	Tobacco	Alcoholic beverages	Marijuana	Cocaine	Opioids	Sedatives	Amphetamines	Hallucinogens	Inhalants	*Other specify
1. In your life, which of the following substance(s) have you ever used?	1 ☐	1 ☐	1 ☐	1 ☐	1 ☐	1 ☐	1 ☐	1 ☐	1 ☐	1 ☐
2. In the past three months, how often you have used the substances you mentioned?										
NEVER	0	0	0	0	0	0	0	0	0	0
ONCE OR TWICE	2	2	2	2	2	2	2	2	2	2
MONTHLY	3	3	3	3	3	3	3	3	3	3
WEEKLY	4	4	4	4	4	4	4	4	4	4
DAILY OR ALMOST DAILY	6	6	6	6	6	6	6	6	6	6
3. In the past three months, how often have you had a strong desire or urge to use____?										
NEVER	0	0	0	0	0	0	0	0	0	0
ONCE OR TWICE	3	3	3	3	3	3	3	3	3	3
MONTHLY	4	4	4	4	4	4	4	4	4	4
WEEKLY	5	5	5	5	5	5	5	5	5	5
DAILY OR ALMOST DAILY	6	6	6	6	6	6	6	6	6	6
4. In the past three months, how often has your use of _____ led to health, social, legal or financial problem?										
NEVER	0	0	0	0	0	0	0	0	0	0
ONCE OR TWICE	4	4	4	4	4	4	4	4	4	4
MONTHLY	5	5	5	5	5	5	5	5	5	5
WEEKLY	6	6	6	6	6	6	6	6	6	6
DAILY OR ALMOST DAILY	7	7	7	7	7	7	7	7	7	7
5. In the past three months, how often have you failed to do what was normally expected of you because of your use of _____?										
NEVER	0	0	0	0	0	0	0	0	0	0
ONCE OR TWICE	5	5	5	5	5	5	5	5	5	5
MONTHLY	6	6	6	6	6	6	6	6	6	6
WEEKLY	7	7	7	7	7	7	7	7	7	7
DAILY OR ALMOST DAILY	8	8	8	8	8	8	8	8	8	8
6. Has a friend or relative or anyone ever expressed concern about your use of _____?										
NO, never	0	0	0	0	0	0	0	0	0	0
YES, in the past 3 months	6	6	6	6	6	6	6	6	6	6
YES, but not in the past 3 months	3	3	3	3	3	3	3	3	3	3
7. Have you ever tried and failed to control, cut down, or stop using_____?										
NO, never	0	0	0	0	0	0	0	0	0	0
YES, in the past 3 months	6	6	6	6	6	6	6	6	6	6
YES, but not in the past 3 months	3	3	3	3	3	3	3	3	3	3
Have you ever used any drug by injection? Non-medical use only	**0=NO**	**2-Yes, in the past three months**	**1-Yes, but not in the past three**	*Specify "other" Drugs here:						

YuunibarsiitiiJimmaa

InistiyuutiiSaayinsiiFayyaa

Muummeekutaayaalaasammuu (Psychiatry)

GucaOdeeffannooIttinFunaannatan

Galma

Gaaffilenkunnen waa'ee sadarkaaqulqullinajireenyaa fi wantoota isaan waliin wal qabataniidhukkubsattootadhibeesammuucimaa (schizophrenia) hospitaalamedikaalaajimmaattiyaaladeddebi'insaargachaajiraniiqorachuufkanqophaa'e dha.

Qajeelfama: Gaafannoonkunisfulaafulatttidhukkubsattootadhibeesammuucimaa**(schizophrenia)** qorannoo kana irratti hirmaatanittiingaafachuufi. Innis kutaaleeja,a of keessaa kan qabu yoo ta'udaqiiqaa 30 hanga 45tti kan fudhatudha. Kanaaf gaaffilee maradeebisuuyaala.Hirmaachukeessaniif baay'ee galatoomaa!

Hub. Gaafannonkun kan guutamuudanda'ugaafataagaaffichaan qofaa ta'eehirmaattotafedhaqabanii fi waliigalteegutanirraa dha. Lakkoofsa deebii sirriiqabateguuti ykn ittimari.

Qorannoo kana irratti hirmaachufeeyyamamadhaa?EeyyeeLakki ☐ ☐

mallattoohirmaataa _____ Guyyaaa _____

Lakkoofsaaddaahirmaattotaa /koodiihirmaattotaa _____

Maqaa fi mallattoo gaafataa_____ Guyyaa_____

Maqaa fi mallattoo to'ataa_____ Guyyaa_____

kutaa 1ffaa: GaafannooRagaaleeEenyummaaHawwaasummaa fi Dinagdee

saalaa	Galiiji'aan	Umurii	Amantaa	Sabummaa	Sadarkaabarumsaa	HaalaOgummaa	Bakka Jireenyaa	HaalaFudhaa fi Heerumaa	Baayina Maatii

Amantaa:
1. Musliima
2. Orthodox
3. Protestant
4. Kan biro

_____

Lammummaa:
1. Oromoo
2. Kafaa
3. Yemi
4. Dawuro
5. Amhara
6. Kan biroo

HaalaBarumsaa:
1. Barumsaidilee kan hinbaranne
2. Sad. Jalqabaa
3. Sad. 2ffaa
4. Sad 2ffaa oli

Bakka jireenyaa
1. Magaalaa
2. Badiyyaa

HaalaFudhaa fi Herumaa:
1. Kan hin herumne/ hin fuune
2. Kan heerumte/fuudhe
3. Kan addabahan
4. Kan jalaadu'e/te

HaalaOgummaa:
1. HojjetaaMootummaa
2. Qoteebulaa
3. Daldaalaa
4. Haadha warraa
5. Hojjetaa guyyaa
6. Kan biroo

Kutaa 2ffaa: DhaabbataFayyaaAddunyaatti Gaaffilee Waa'ee QulqullinaJireenyaaQoratan

Qajeelfama: Gaaffilee kunneen waa'ee sadarkaaqulqullinajireenyakeessanii, fayyaakeessanii fi kan biroo isaan waliin wal qabataniimaaltuakkaisinitiidhagahamu kan gaafatu dha. Kanaaf gaaffilee hundaaf deebii keessan kenna. Yeroo deebii keessan kennitan, filannowwanjirankeessaa irra caalatti deebii koonaafta'akanjettanfiladhaa. Innis deebii keessan isa tokkoffata'a jechuun dha.

Yeroo isingaafannutorban 2'n darban keessatti waa,eejireenyakeessanii ni yaaddujenneetu dha. Kanaafsadarkaajireenyakeessanii, abdii fi gammachuuqabdanii, fi akkasumasyaaddoqabdanii hin dagatiinaa.

Tokkon tokkoon gaaffilee dubbisun fedhii keessan madaalatilakkofsa deebii keessanii isa sirriita'eettimara.

		Garmaleegadibu'aa	Gadibu'aa	Gaarisbadaasmiti	Gaarii dha	Baay'ee gaarii dha
1	Haalaqulqullinajireenyakeessaniiakkamittimadaaltuu?	1	2	3	4	5

		Baay'ee natti hin tolle	Natti hin tolle	Nattitoluunistoluudhiisunisnatti hin dhagahamu	Nattitoleera	Baay'ee nattitoleera
2	Haallifayyummaakeessani hammam sinittitoleeraa?	1	2	3	4	5

Gaaffileenarmaangadiitorbanlamaan darban keessatti wantootnigaragaraahangamakkasi mudatan kangaafatudha

		Gonkumaa	Xiqqoo	Gidduugaleessa	Baay'ee	Garmalee baay'ee
3	Dhukkubbinqaamaa waanta atidalaguufeeturraasidhorkuudhanhangamsittidhagahamaa?	1	2	3	4	5
4	Jireenyakee guyyaa guyyaa keessatti yaalaanmeedikaalahangamsibarbaachisaa?	1	2	3	4	5
5	Jireenyakeettihangambohaartaa?	1	2	3	4	5
6	Jireenyikeehangamhiikaqabeessata'eesiitidhagahamaa?	1	2	3	4	5

		Gonkumaa	Xiqqoo	Gidduugaleessa	Irra caalatti	Dhibbaadhibbatti
7	Haalliyaadakee walitti qabachuukee hammam fayyaadhaa?	1	2	3	4	5

8	Jireenyikee guyyaa guyyaa hammam fayyaalessata'eesittidhagahamaa?	1	2	3	4	5
9	Naannoonjireenyakee hammam fayyaaqabeessadhaa?	1	2	3	4	5

Gaaffileenarmaangadiitorbanlamaan darban keessatti wantootnigaragaraahangamakkadhibbaadhibbattisi mudatan ykn raawwachuu dandeessu kangaafatu dha

		Gonkumaa	Xiqqoo	Giddugaleessa	Irra caalatti	Dhibbaadhibbatti
10	Jireenyakee guyyaa guyyaafannisaagahaaqabdahoo?	1	2	3	4	5
11	Haalauumamaqaamotakeetti hammam gammadaadha?	1	2	3	4	5
12	Fedhiikeeguuttachuufqarshiigahaaqabdahoo?	1	2	3	4	5
13	Odeeffannoonjireenyakee guyyaa guyyaa keessatti sibarbaachisanhangamsittiargamuudanda'uu?	1	2	3	4	5
14	Bashannanaaf yeroo mijataahangamargachuudandeessaa?	1	2	3	4	5

		Baay'ee yaraa dha	Yaraa dha	Yaraasgaariis miti	Gaarii dha	Baay'ee gaarii dha
15	Dandeesseeqe'eekeessasocho'uufhangamfayyaadhaa?	1	2	3	4	5

Gaaffileenarmaangadiitorbanlamaan darban keessatti waa'ee wantootagaragaraajireenyakee waliin wal qabataniiwantasittidhagahame hammam gaarii ykn akkasittitoleerukangaafatu dha

		Baay'ee natti hin tolle	Natti hin tolle	Nattitoluunist oluudhiisunis natti hin dhagahamu	Nattitoleera	Baay'ee nattitoleera
16	Hirribnikeeakkamsittitoleeraa?	1	2	3	4	5
17	Raawwiikee guyyaa guyyaanraawwachuufhaallidandeettikee hammam sittitoleeraa	1	2	3	4	5
18	Dandeettinkeeatihojiifqabduhangamsittitoleeraa?	1	2	3	4	5
19	Atiofiinkee/mataankeehangamsittitoleeraa?	1	2	3	4	5

20	Hariiroon nama waliin qabduhangamsittitoleeraa?	1	2	3	4	5
21	Jireenyisaalqunnamtiikeehangamsittitoleeraa?	1	2	3	4	5
22	Gargaarsiatihiriyyootakeerraargattuhangamsittitoleeraa?	1	2	3	4	5
23	Haalli bakka jireenyakeehangamsittitoleeraa?	1	2	3	4	5
24	Tajaajilafayyaaargachuunkeehangamsittitoleeraa	1	2	3	4	5
25	Haalligeejibakeehangamsittitoleeraa?	1	2	3	4	5

Gaaffiinarmaangadiitorbanlamaan darban keessatti wantootnigaragaraa yeroo hammamiifakkasittidhagahaman ykn si mudatan kangaafatu dha

		Gonkumaa	Darbeedarbee	Yeroo baay'ee	Irra caalaatti yeroo baay'ee	Yeroo hundaa
26	Yeroo hammamiif waanta hintaaneyaaduun, dhiphachuun, gadduun, sittidhagahamaaturee	1	2	3	4	5

Kutaa 3ffaa: Gaaffilee waa'ee sadarkaa ciminaa amalootadhukkubasammuupoozetivii fi negatiiviiqoratan (Positive and Negative Symptom Severity Assessment Questionnaire)

		Hin jiru	Baay'ee xiqqoo	Xiqqoo	Giddugaleessa	Giddugaleessata'eecimaa	Cimaa kan ta'e	Garmaleecimaa kan ta'ee
P1	Amantaaaddaadogoggorata,ee (Delusions)	1	2	3	4	5	6	7
P2	Hubannaawalxaxaa (Conceptual disorganization)	1	2	3	4	5	6	7
P3	Wanta nu bira hin jirreakkawaan nu bira jirutti himuu (Hallucinatory behavior)	1	2	3	4	5	6	7
P4	Gammachuuqabaachuu	1	2	3	4	5	6	7
P5	Sababigahaa osoo hin qabaatinolol of qabu	1	2	3	4	5	6	7
P6	Sababi tokko maleenamootni na miidhuufijedhaniishakkuu	1	2	3	4	5	6	7
P7	Amala diinummaa (hostility)	1	2	3	4	5	6	7

		Hin	Baay'ee	Xiqqoo	Giddugaleessa	Giddugaleessata'eecimaa	Cimaa	Garma

		jiru	xiqqoo				kan ta’e	leecimaa kan ta’ee
N1	Fuulamiirri isaa gad-bu’e (blunt affect)	1	2	3	4	5	6	7
N2	Ta’iwwanjireenyafmiiradhabuu	1	2	3	4	5	6	7
N3	Walitti dhufeenyagadibu’aa	1	2	3	4	5	6	7
N4	Hirmaannahawwaasummaf fedhii fi kaka’umsadhabuu	1	2	3	4	5	6	7
N5	Haalagaragaraan (gadfageessanii) yaaduudadhabuu	1	2	3	4	5	6	7
N6	Dubbiiqindeessaniidubbachudadhabuu	1	2	3	4	5	6	7
N7	Yaada faayidaa hin qabneendeddebisaniiqabamuu	1	2	3	4	5	6	7

		Hin jiru	Baay’ee xiqqoo	Xiqqoo	Giddugaleessa	Giddugaleessata’eecimaa	Cimaa kan ta’e	Garmaleecimaa kan ta’ee
G1	Qaamaan kan walqabaterakkooilaalchaa	1	2	3	4	5	6	7
G2	Dhiphachuu	1	2	3	4	5	6	7
G3	Ballessan kan kootijedhanii of ceepha’uu	1	2	3	4	5	6	7
G4	Sodaachuu	1	2	3	4	5	6	7
G5	Sochiiqaamaa kan uumaman ta’uu hin dandeenye	1	2	3	4	5	6	7
G6	Gadduu/gammachuudhabuu	1	2	3	4	5	6	7
G7	Hir’achuusochiiqaamaa	1	2	3	4	5	6	7
G8	Eeyyamamaa ta’uu dhiisuu/beekaadiduu	1	2	3	4	5	6	7
G9	Yaada qabiyyeen isaa duraan hin baratamne	1	2	3	4	5	6	7
G10	Yeroo, bakka fi nama addabaasudadhabuu	1	2	3	4	5	6	7
G11	Xiyyeeffannoo dhabuu	1	2	3	4	5	6	7
G12	Murteesirrikennuudadhabuu fi dhukkubaqabaachubeekuudadhabuu	1	2	3	4	5	6	7
G13	Rakkookaka’umsaaqabaachuu fi yaada,	1	2	3	4	5	6	7

	amala, sochii fi dubbiiofiito'achuu							
G14	Fedhii fi raawwiiofiito'achuudadhabuu	1	2	3	4	5	6	7
G15	Yaada tokkon dursaniiqabamuu	1	2	3	4	5	6	7
G16	Sababiishakkii ykn soda irraan kan ka'edhimmootahawwasummaarraabaqachuu	1	2	3	4	5	6	7

Kutaa 4ffaa: Gaaffilee waa'ee qoricha/dawaaseeraanfayyadamuu

S/No:	Gaaffiwwan	Eeyyee	Lakki
MA1	Qorichakeefudhachuudagattteebeektaa?	1	0
MA2	Waa'ee qorichakeefudhachuumaalnadhibejetteebeektaa?	1	0
MA3	Yeroo dhukkubnikeesittifooyya'udarbeedarbeeqorichafudhachuu ni dhiistaa?	1	0
MA4	Yeroo qorichafudhachaa jirtutti darbeedarbee osoo dhukkubnisitticimee, qorichichafudhachuu ni dhaabdaa?	1	0

kutaa 5ffaa: Wantootakilinikaala waliin wal qabatan

S/No:	Gaaffiwwan	Deebii
CR1	Turtiindhukkubichaahangamta'a?	_____
CR2	Yeroo hangamiifyaalaarraturte?	_____
CR3	Ciisteeyaalamteebeektaa?	1. Eeyyee 2. Lakki
CR4	Yoo deebiinkeegaaffii CR3 "eeyyee" ta'e, yeroo hangamiifakkaciistebarreessi	_____
CR5	Dhukkubaqaamaa kan biroo ni qaba/bdi? (kaardiiilaali)	1. Eeyyee 2. Lakki
CR6	Yoo deebiinkeegaaffii CR5 "eeyyee" ta'e, gosadhukkubichaabarreessi	_____

kutaa 6ffaa: Wantootasammuu nama hadoochanfayyadamuu waliin wal qabatan

GAAFFILEE WAA'EE WANTOOTA SAMMUU NAMAA HADOOCHAN "ASSIST"	Tamboo	Alkoolii	Maariju'an aa	kokeenii	Oppoo'idii	Sedetivii	Amfitaamiinii	Halusinoogenii	Inhalantii	*kan biroo
1. Bara jieenyakee keessatti wantootasammuunamahadoochankamfayyadamteebeektaa?	1 ☐	1 ☐	1 ☐	1 ☐	1 ☐	1 ☐	1 ☐	1 ☐	1 ☐	1 ☐
2. ji'a 3 darban keessatti, wantootasammuunamahadoochansi'ahangamfayyadamtee?										
GONKUMAA	0	0	0	0	0	0	0	0	0	0
SI'A TOKKO YKN LAMA	2	2	2	2	2	2	2	2	2	2
JI'A JI'AAN	3	3	3	3	3	3	3	3	3	3
TORBEE TORBEEN	4	4	4	4	4	4	4	4	4	4
GUYYAA GUYYAAN	6	6	6	6	6	6	6	6	6	6
3. ji'a 3 darban keessatti, si'ahangam waanticha_____fidifidisiinjedheebeekaa?										
GONKUMAA	0	0	0	0	0	0	0	0	0	0
SI'A TOKKO YKN LAMA	3	3	3	3	3	3	3	3	3	3
JI'A JI'AAN	4	4	4	4	4	4	4	4	4	4
TORBEE TORBEEN	5	5	5	5	5	5	5	5	5	5
GUYYAA GUYYAAN	6	6	6	6	6	6	6	6	6	6
4. ji'a 3 darban keessatti, wantootasammuunamahadoochanfayyadamuunkeerakkoofayyaa, hawwasummaa, seeraa ykn qarshiisi'ahangamsirraangahee?										
GONKUMAA	0	0	0	0	0	0	0	0	0	0
SI'A TOKKO YKN LAMA	4	4	4	4	4	4	4	4	4	4
JI'A JI'AAN	5	5	5	5	5	5	5	5	5	5
TORBEE TORBEEN	6	6	6	6	6	6	6	6	6	6
GUYYAA GUYYAAN	7	7	7	7	7	7	7	7	7	7
5. ji'a 3 darban keessatti, sababiiwantootasammuunamahadoochanfayyadamtuuf waanta sirraaeegamusi'ahangamraawwachudadhabdee?										
GONKUMAA	0	0	0	0	0	0	0	0	0	0
SI'A TOKKO YKN LAMA	5	5	5	5	5	5	5	5	5	5
JI'A JI'AAN	6	6	6	6	6	6	6	6	6	6
TORBEE TORBEEN	7	7	7	7	7	7	7	7	7	7
GUYYAA GUYYAAN	8	8	8	8	8	8	8	8	8	8
6. Hiriyyaankee, firrikee ykn namni biroon waa'ee fayyadamuukeesittihimeebeekaa?										
LAKKI, gomkumaa	0	0	0	0	0	0	0	0	0	0
EEYYEE, ji'a 3 darban keessan	6	6	6	6	6	6	6	6	6	6
EEYYEE, garuu ji'a 3 darban keessa miti	3	3	3	3	3	3	3	3	3	3
7. Of to'achuuf, ykn fayyadamuudhaabuufyaaliigootee osoo hin milkaa'inhafteebeektaa?										
LAKKI, gomkumaa	0	0	0	0	0	0	0	0	0	0
EEYYEE, ji'a 3 darban keessan	6	6	6	6	6	6	6	6	6	6
EEYYEE, garuu ji'a 3 darban keessa miti	3	3	3	3	3	3	3	3	3	3
Waantootasammuu nama hadoochanlilmootinfudhatteebeektaa ?? Dhukkubameedikaalanaddatti	**0-lakki**	**2-eeyye ji'a 3 as**	**1-eeyye ji'a 3 dura**	*kan biroo :						

ጂማዩኒቨርሲቲ

ጤናሳይንስኢኒስቲቱት

ስነ_አእምሮት/ክፍል

የቃለመጠይቅቅጽ

መግብያ፡ የሚከተሉትጥያቄዎችየተዘጋጁትበጅ/ዩ/ሜ/ሴበተመላላሽህክምናላይያሉየከባድአእምሮህመምተኞችንየህወትደረጃ ጥራትእናተያያዥጉዳዬችንለማጥናትነዉ

መመሪያ፡ እነዝህጥያቄዎችበመጠይቁላይየሚሳተፉየከባድአእምሮታማሚዎችን（schizophrenia)በግንባርቀርቦየሚጠየቁናቸዉ፡ ፡ መጠይቁምአምስትክፍሎችያሉትሲሆንከ30_45
ደቅቃይፈጃል፡ ፡ በመሆኑምሁሉንምጥያቄዎችንለመመለስይሞክሩ፡ ፡ ለተሳትፎዎበጣምእመሰግናለን፡ ፡

አንክሮት፡ መጠይቁየሚሞላውበጠያቂውብቻነው፡ ፡ እንዲሁምበተጠያቂውፍላጎትነዉ፡ ፡ ተገቢዉንምላሽየያዘውንይምረጡወይምያክብቡ፡ ፡

በዝይመጠየቅላይለመሳተፍፍቃደኛኖት? አዎአይደለም ☐ ☐

የተሳታፍፍርማ _____ ቀን_____

የቃለመጠይቅቁጥር/ኮድ_____

የመረጃሰብሳቢስምናፍርማ_____ ቀን_____

የተቆጣጣሪስምናፍርማ_____ ቀን_____

ክፍልአንድ፡የማህበራዊናስነ-ህዝብእንዲሁምሌሎችግላዊመራጃዎችንለማጥናትየተዘጋጀቃለመጠይቅ

ጾታ	ወራዊ ገቢ	እድሜ	ሐይማኖ ት	ብሔር	የትምህርትደ ረጃ	የስራሁኔታ	የመኖሪቦታ	የጋብቻሁኔ ታ	የቤተሰብይዘ ት

ኃይማኖት
5. ሞስሊም
6. ኦርቶዶክስ
7. ፕሮቴስታንት
8. ሌለ _____

ብዙር:
7. ኦሮሞ
8. ከፋ
9. የም
10. ዳዉሮ
11. አማራ
12. ሌለ

የትምህርትደረጃ:
5. ያልተማ/ች
6. 1ኛ ደረጃ
7. 2ኛ ደረጃ
8. ከዚያበላይ

የጋብቻሁኔታ
5. ያላገባ/ች
6. ያገባ/ች
7. የተፋታ/ች
8. የሞትበት/ባት

የመኖሪያቦታ
3.ከተማ
4.ገጠር

የስራሁኔታ:
7. የጫግስትሰራተኛ
8. ገበሬ
9. ነጋዴ
10. የቤትእሞቴት
11. የቀንሰራተኛ
12. ሌለ _____

ክፍልሁለት: የአለምአቀፍየጤናድርጅትየህይወትጥራትመመዘኛቃለመጠይቅ

መመሪያ:

ይህግምገማስለእርሶየህይወትጥራት፣ጤናወይምሌሎችየህይወቶደረጃዎችምንእንደሚሰማዎትይጠይቀል።እባክዎንለሁሉምጥያቄዎችምልሻይስጡ።ለጥያቄዎችምንምላሽእንደሚሰጥእርግጠኛካልሆኑየተሸለነውብለውየሚያስቡትንይምረጡ።ይህምንአልባት ምየመጀመሪያምላሾሊሆንይችላል።እባክሆንየእርሶንደረጃዎች፣ተስፋዎችናጭንቀቶችያስታውሱበመጨረሻስለህይወቶእንዲያስቡ በትእንጠይቃለን።ባለፉትሁለትሳምንታትስለህይወቶእንዲያስቡእንጠይቀወታለን።

እባኮንእነያንዳንዱንጥያቄዎችያንብቦቸውፍላጎቶንይገምግሙናለእርሶጥሩየሆነውንምላሽከመመዘኛውስጥያለውንቁጥርያክብቡ

		በጣምዝቅተኛ	ዝቅተኛ	መጥፎምጥሩምአይደለም	ጥሩ	በጣምጥሩ
1	የህይወትጥራቶንእንዴትይገመግሙታል	1	2	3	4	5

		በጣምእርካታአይሰማኝም	እርካታአይሰማኝም	መርካትምአለ መርካትምአይ ሰማኝም	እርካታይ ሰማኛል	በጣምእርካታ ይሰማኛል
2	በጤንነቶምንያህልእርካታይሰማዎ ታል	1	2	3	4	5

የሚከተሉትጥያቄዎችባለፉትሁለትሳምንታትውስጥምንያህልነገሮችእንዳገጠሞትይጠይቃሉ

		በጭራሽ	በጥቂት	በመጠኑ	በጣም	እጅግበጣም
3	አካላዊህመሞበምንያህልመጠንለመስራትካሰቡትስራአስተጎጎሎታል?	1	2	3	4	5
4	የዕለትተዕለትተግባሮትንለመከወንምንያህልህክምናይፈልጋሉ?	1	2	3	4	5
5	በምንያህልመጠንበሕይወቶደስተኛኖት?	1	2	3	4	5
6	በምንያህልመጠንህይወቶትርጉምአለውብለውያስባሉ?	1	2	3	4	5

		በጭራሽ	በጥቂት	በመጠኑ	ብዙጊዜ	ሙሉበሙሉ
7	ምንያህልትኩረትማድረግይችላሉ ?	1	2	3	4	5
8	በእለታዊህይወቶዙሪያምንያህልደህንነትይሰማዎታል?	1	2	3	4	5
9	ቁስአካለዊአከባቢዎምንያህልጤናኛነው?	1	2	3	4	5

የሚከተሉትጥያቄዎችባለፉትሁለትሳምንታትበምንያህልመጠንሙሉበሙሉነገሮችንለመከወንየነበሮትንልምድይጠይቃሉ

		በጭራሽ	በጥቂት	በመጠኑ	ብዙጊዜ	ሙሉበሙሉ
10	ለዕለትተዕለትእንቅስቃሴዎትበቂአቅምአለዎት ?	1	2	3	4	5
11	በተፈጥራዊአካሎትደስተኛኖት?	1	2	3	4	5

12	ፍላጎቶንለማሟላትበቂገንዘብአለዎት?	1	2	3	4	5
13	በእለትተዕለትህይወቶየሚፈልጉትንመረጃበምንያህልመጠንያገኛሉ?	1	2	3	4	5
14	ለመዝናናትምንያህልዕድልአለዎት?	1	2	3	4	5

		በጭራሽ	በጥቂት	በመጠኑ	ብዙጊዜ	ሙሉበሙሉ
15	ከአከባቢዎትጋርያለዎትቁርኝትምንያህልነው?	1	2	3	4	5

የሚከተሉትጥያቄዎችባለፉትሁለትሳምንታትበተለያዩየህይወቶመስክጥሩስሜትወይምእርካታእንደተሰማዎትይጠይቃሉ

		በጭራሽአረካም	አረካም	መርካትምአለመርካትምአልተሰማኝም	እረካለው	በጣምእረካለው
16	በሚተኙትእንቅልፍበምንያህልመጠንይረካሉ?	1	2	3	4	5
17	የዕለትተዕለትተግባሮንለመከወንባሎትአቅምበምንያህልመጠኝይረሉ?	1	2	3	4	5
18	ሥራለመስራትባሎትችሎታበምንያህልመጠንይራካሉ?	1	2	3	4	5
19	በምንያህልመጠንበእራሶትይረካሉ?	1	2	3	4	5
20	ከሰውጋርባሎትግንኙነትበምንያህልመጠንይረካሉ?	1	2	3	4	5
21	በሚፈጽሙትየግብረ-ሥጋግኙነትበምንያህልመጠንይረካሉ?	1	2	3	4	5
22	ከጓደኞቾበሚያገኙትእርዳታበምንያህልይረካሉ?	1	2	3	4	5
23	በመኖሪያቦታዎሁኔታምንያህልይረካሉ?	1	2	3	4	5
24	ባለዎትየጤናአቅርቦትበምንያህልይረካሉ?	1	2	3	4	5
25	ባለዎትየመጓጓዣአቅርቦትምንያህልይረካሉ?	1	2	3	4	5

የሚከተሉትንጥያቄዎችየሚያመለክቱትየተወሰኑነገሮችንባለፉትሁለትሳምንታትጊዜውስጥምንያህልእንደተሰማዎትእንደአጋጠመዎትይጠይቃሉ.

		በጭራሽ	አልፎአልፎ	ብዙጊዜ	በጣምብዙጊዜ	ሁልጊዜ
26	በአብዛኛውጊዜአሉታዊስሜትማለትምየጭጋጋማነትስሜት፣ተስፋመቁረጥ፣ጭንቀትናድባቴይሰማዎታል ?	1	2	3	4	5

ክፍልሦስት: ጠንካራአዎንታዊእናአሉታዊምልክቶችንመገምገሚያጥያቄዎች

		የለም	ትንሽ	መለስተኛ	መካከለኛ	መካከለኛጠንከርያለ	ከባድ	እጅግበጣም ከባድ
P1	የተሳሳተልዩአምነቶች	1	2	3	4	5	6	7
P2	የግንዛቤመዛባትወይምችግር	1	2	3	4	5	6	7
P3	የሌለንነገርእንዳለአድርጎመረዳት	1	2	3	4	5	6	7
P4	መደሰት	1	2	3	4	5	6	7
P5	ያለበቂምክንያትእራስንከፍከፍማድረግ	1	2	3	4	5	6	7
P6	ያለምንምምክንያትሰዎችያጠቁኛልየሚልእምነት	1	2	3	4	5	6	7
P7	ጠላትነት	1	2	3	4	5	6	7

		የለም	ትንሽ	መለስተኛ	መካከለኛ	መካከለኛጠንከርያለ	ከባድ	እጅግበጣምከባድ
N1	ደስታየማይታይበትየፊትገጽታ	1	2	3	4	5	6	7
N2	ስሜትማጣት	1	2	3	4	5	6	7
N3	ደካማየሆነመስተጋብር	1	2	3	4	5	6	7
N4	ማህበራዊተሳትፎአለማድረግ	1	2	3	4	5	6	7
N5	የብዙአቅጣጫምልከታችግር	1	2	3	4	5	6	7
N6	የንግግርቆይታናፍልሰትችግር	1	2	3	4	5	6	7
N7	ዓላማየሌለውተደጋጋሚሀሳብ	1	2	3	4	5	6	7

		የለም	ትንሽ	መለስተኛ	መካከለኛ	መካከለኛጠንከርያለ	ከባድ	እጅግበጣምከባድ
G1	አካልንበተመለከተየሥነ-ልቦናችግር	1	2	3	4	5	6	7
G2	ጭንቀት	1	2	3	4	5	6	7
G3	የጥፋተኝነትስሜት	1	2	3	4	5	6	7
G4	ውጥረትወይምፍርሀት	1	2	3	4	5	6	7
G5	ዓላማየሌለውተደጋጋሚድርጊትእናከተፈጥሮዊየሰውነትአቀማመጥውጪሰውነትንማድግ	1	2	3	4	5	6	7
G6	ድባቴ	1	2	3	4	5	6	7
G7	የእንቅስቃሴመቀነስ	1	2	3	4	5	6	7

G8	አለመተባበርወይምፍቃደኛአለመሆን	1	2	3	4	5	6	7
G9	ያልተለመደየሀሳብይዘት	1	2	3	4	5	6	7
G10	አከባቢንለመለየትመቸገር	1	2	3	4	5	6	7
G11	ትኩረትማጣት	1	2	3	4	5	6	7
G12	የማመዛዘንችግርናስለሀመም ማወቅናመረዳትአለመቻል	1	2	3	4	5	6	7
G13	የተነሳሽነትችግር	1	2	3	4	5	6	7
G14	ድርጊትናስሜትንአለመቆጣጠር	1	2	3	4	5	6	7
G15	በአንድነገርላይመወሰን	1	2	3	4	5	6	7
G16	ከመህበራዊጉዳዮችራስንማግለል	1	2	3	4	5	6	7

ክፍልአራት: የመድሐኒትአወሳሰድጥያቄዎች

ተ.ቁ	**ጥያቄ**	**አዎ**	**አይደለም**
MA1	መድሐኒትለመውሰደእረስተውያውቃሉ?	1	0
MA2	መድሐኒትየሚወስዱበትንሰዓትይዘነጋሉ?	1	0
MA3	ሲሻሎትአልፎአልፎመድሐኒትመውሰድያቆማሉ?	1	0
MA4	መድሐኒትበመውሰድላይእያሉህመሙከባሰበዎትመድሐኒቱንያቆርጣሉ?	1	0

ክፍልአምስት: ከህመምወይምከበሽታጋርየተያያዙምክንያቶች

ተ.ቁ	**ጥያቄ**	**ምላሽ**
CR1	የህመሙጊዜምንያህልነው?	_____
CR2	ህክምናውምንያህልጊዜነው?	_____
CR3	ተኝተውታክመውያውቃሉ?	1.አዎ 2. አይደለም
CR4	ተኝተዉታክመውየሚያውቁከሆኔለምንያይልግዘነው?	
CR5	ተያያዥአካላዊህመምአለ? (የታካሚውንካርድማገላበጥ)	1.አዎ 2. አይደለም
CR6	ለተራቁጥር CR3 ምላሽአዎከሆነየምርመራውንውጤትወይምየህመሙንአይነት.	_____

ክፍልሲድስት፡ ከአደንዛዢ ዒጽመጠቀምጋርየተያያዘንክንያቶች

ጥያቄ	Tobacco	Alcoholic beverages	Marijuana	Cocaine	Opioids	Sedatives	Amphetamines	Hallucinogens	Inhalants	*Other specify
8. በህይወት ዘመኖ፣ከሚከተሉት አደንዛዢ ዕፆች መካከል የትኞን ተጠቅመዎል?	1 ☐	1 ☐	1 ☐	1 ☐	1 ☐	1 ☐	1 ☐	1 ☐	1 ☐	1 ☐
9. ባለፉት ሦስት ወራት ውስጥ፣ ከላይ የጠቀሱት አደንዛዢ ዕፅ በምን ያህል ድግግሞሽ ተጠቅመዋል?										
በጭራሽ	0	0	0	0	0	0	0	0	0	0
አንዴ ወይም ሁለቴ	2	2	2	2	2	2	2	2	2	2
በየወሩ	3	3	3	3	3	3	3	3	3	3
በየሳምንቱ	4	4	4	4	4	4	4	4	4	4
በየቀኑ ወይም በየቀኑ በሚባል ደረጃ	6	6	6	6	6	6	6	6	6	6
10. ባለፉት ሦስት ወራት ውስጥ፣ አደንዛዢ ዕፅን ለመጠቀም ምን ያህል ጠንካራ ፍላጎት ነበሮት?										
በጭራሽ	0	0	0	0	0	0	0	0	0	0
አንዴ ወይም ሁለቴ	3	3	3	3	3	3	3	3	3	3
በየወሩ	4	4	4	4	4	4	4	4	4	4
በየሳምንቱ	5	5	5	5	5	5	5	5	5	5
በየቀኑ ወይም በየቀኑ በሚባል ደረጃ	6	6	6	6	6	6	6	6	6	6
11. ባለፉት ሦስት ወራት ውስጥ፣ የሚጠቀሙት አደንዛዢ ዕፅ ለጤና፣ለማህበራዊ፣ለኢኮኖሚያዊ፣እና ለወንጀልችግሮች በምን ያህል ግዜ መጠን ደርጎታል ?										
በጭራሽ	0	0	0	0	0	0	0	0	0	0
አንዴ ወይም ሁለቴ	4	4	4	4	4	4	4	4	4	4
በየወሩ	5	5	5	5	5	5	5	5	5	5
በየሳምንቱ	6	6	6	6	6	6	6	6	6	6
በየቀኑ ወይም በየቀኑ በሚባል ደረጃ	7	7	7	7	7	7	7	7	7	7
12. ባለፉት ሦስት ወራት ውስጥ፣ የሚጠቀሙት አደንዛዢ ዕፅ ይጠበቅቦት የነበውን ሓላፍነት እንዳይወጡ በሚን ያህል ግዜ መጠን ጫና አሳድሮቦታል?										
በጭራሽ	0	0	0	0	0	0	0	0	0	0
አንዴ ወይም ሁለቴ	5	5	5	5	5	5	5	5	5	5
በየወሩ	6	6	6	6	6	6	6	6	6	6
በየሳምንቱ	7	7	7	7	7	7	7	7	7	7
በየቀኑ ወይም በየቀኑ በሚባል ደረጃ	8	8	8	8	8	8	8	8	8	8
13. ጎዳኛዎት፣ዘመዶት ወይም ለላ ሰው የእርሶ አደንዛዢ ዕፅን መጠቀም አሳስቧቸው ያውቃሉ ?										
አይ,በጭራሽ	0	0	0	0	0	0	0	0	0	0
አዎ, ባለፉት ሦስት ወራት ዉስጥ	6	6	6	6	6	6	6	6	6	6
አዎ, ግን ባለፉት ሦስት ወራት ዉስጥ አይደለም	3	3	3	3	3	3	3	3	3	3
14. የሚጠቀሙትን አደንዛዢ ዕፅ ለማቆም ወይም ለማቋረጥ ሞክሮ ሳይሳካሎት ቀርቶ ያውቃሉ?										
አይ,በጭራሽ	0	0	0	0	0	0	0	0	0	0
አዎ, ባለፉት ሦስት ወራት ዉስጥ	6	6	6	6	6	6	6	6	6	6
አዎ, ግን ባለፉት ሦስት ወራት ዉስጥ አይደለም	3	3	3	3	3	3	3	3	3	3
ከ 2_7 ጥያቀዎች ድሚር										
በመርፈ የሚሰጡ መድሓኒቶችን ተጠቅመው ያውሉ ? ለሕኪሚና ከሚሰጡ ውጭ ያሉትንን	**0=አይ**	አዎ, ባለፉት ሦስት ወራት ዉስጥ	አዎ, ግን ባለፉት 3 ወ አይደለም	***ለሎቹን መድሓኒቶችን እዚ ይገልጹ:**						