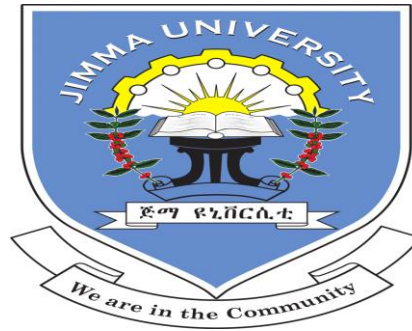


PREVALENCE AND ASSOCIATED FACTORS OF DEPRESSION AND ANXIETY  
AMONG PATIENTS WITH PULMONARY TUBERCULOSIS ATTENDING TREATMENT  
AT PUBLIC HEALTH FACILITIES IN JIMMA ZONE,SOUTHWEST ETHIOPIA, 2019



BY

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A RESEARCH THESIS SUBMITTED TO DEPARTMENT OF PSYCHIATRY INSTITUTE  
OF HEALTH, FACULTY OF MEDICAL SCIENCE, JIMMA UNIVERSITY, IN PARTIAL  
FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTERS OF  
SCIENCE IN INTEGRATED CLINICAL AND COMMUNITY MENTAL HEALTH.

OCTOBER, 2019

JIMMA, ETHIOPIA

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## **Abstract**

**Background:** Depression and anxiety are the most commonly occurring psychiatric comorbidities among patients with Tuberculosis. When anxiety and depression co-occur in Tuberculosis patients they result in poor adherence to anti tuberculosis medication. This in turn results in lower success rate of Tuberculosis treatment and upsurges morbidity and mortality.

**Objective:** To assess prevalence and associated factors of depression and anxiety among pulmonary tuberculosis patients on follow up treatment at health facilities in Jimma zone, 2019.

**Methods:** Facility based cross sectional study was conducted from April -May, 2019. Data was collected from 410 pulmonary tuberculosis patients using Hospital anxiety and depression scale through face to face interview. Data was entered into Epi data version 3.1 and analyzed by Statistical Package for social sciences version 23. Binary logistic regression was used to test the association between an outcome variable and explanatory variable. To declare independent association multiple logistic regression models was done and adjusted odd ratio with 95 % CI was calculated. P-value of <0.05 was considered statistically significant.

**Result:** Prevalence of depression and anxiety among Pulmonary tuberculosis patients were 229 (55.9 %) and 224 (54.6 %) respectively. After adjusted for the effect of potential confounding variables, the odds of having depression were 3.6 times higher among those who had high perceived stress [AOR=3.6(1.97, 6.56)]. Perceived Tuberculosis stigma [AOR=9.31(5.02, 17.26)], Family history of mental illness [AOR=4.03(1.59,10.23)] and Low body mass index [AOR=2.01(1.08,3.73)] were significantly associated with depression. Strong social support [AOR=0.22 95%CI (0.08, 0.54)] was found to be protective factor for depression. Females were 2.36 times more likely to have anxiety [AOR=2.36 (1.35, 4.13)]. Perceived Tuberculosis stigma [AOR=3.84 (2.14, 6.90)], High perceived stress [AOR=4.51(2.57, 7.91)] and family history of mental illness [AOR=2.58 (1.16, 5.74)] had significant association with anxiety.

**Conclusion and Recommendation:** More than half of the study participants were found to have probable depression and anxiety. Perceived Tuberculosis stigma, high perceived stress, low body mass index and family history of mental illness were significantly associated with both depression and anxiety. Routine screening of depression and anxiety with particular attention provided to patients with identified risk factors has of paramount importance.

**Key words:** Anxiety, Depression, Tuberculosis, Jimma, Ethiopia.

## **Acknowledgement**

Above all, my deep heart-felt thank goes to my advisors Mr. Arefayne Alenko (BSc, MSc), Sr Worknesh Tessema and Mrs. Almaz Mamaru (BA, MA) for their valuable and unlimited help starting from topic modification up to the development of this thesis.

I also need to extend my grateful thanks to Mettu University for funding me this research thesis.

I would like to thank data collectors and study participants.

Last but not least, I would like to thank Jimma University, department of psychiatry and my families for their valuable psychological and social support.

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## **Abbreviation and acronyms**

ASSIST: Alcohol, Smoking and Substance Involvement Screening Test

BDI: Beck depression inventory

BMI: Body mass index

GAD-7: Generalized anxiety disorder -7

HADS: Hospital anxiety and depression scale

HADS-A: Hospital anxiety and depression scale anxiety subscale

HADS-D: Hospital anxiety and depression scale depression subscale

HARS: Hamilton anxiety rating scale

HDRS: Hamilton depression rating scale

LMICs: Low and middle income countries

MDR-TB: Multidrug resistant tuberculosis

PHQ-9: Patient health questionnaire -9

PTB: Pulmonary tuberculosis

TB: Tuberculosis

WHO: World health organization

XDR-TB: Extensively drug resistant tuberculosis

YLD: Years lived with disability

# CHAPTER ONE: INTRODUCTION

## 1.1 Background

Depression is a common mental disorder characterized by depressed mood, loss of interest or pleasure, decreased energy, feelings of guilt or worthless, disturbed sleep or appetite and poor concentration. It remains one of the global public health concerns that affect more than 350 million people worldwide(1).

Anxiety is characterized most commonly as a diffuse, unpleasant, vague sense of apprehension often accompanied by autonomic symptoms(2). Anxiety ranked the sixth largest contributor to non-fatal health loss and globally affect an estimated 264 million people (3).

Anxiety and depression were the leading causes of global burden of disease. Even though difference in the prevalence rate exists within world health organization(WHO) region, an estimated 4.4% of the global population suffers from depression and 3.6% from anxiety disorder globally(3).

Recently Research revealed that concern in psychiatric co-morbidity particularly depression and anxiety among Tuberculosis (TB) patients and understanding of its significances has been increasing. The occurrence of depression and anxiety among TB patients is associated with non-compliance to treatment which is considered the main barrier to control TB. Treatment noncompliance in turn escalates the risk of morbidity and mortality from the disease(4–7).

So far studies across the world had indicated high prevalence of depression and anxiety among TB (4–11). In Ethiopia both were even found higher among TB; Anxiety 41.5%(4) and depression in the range from 19.8% to 54% (11–15). However most of the previous studies have addressed common mental disorders which suggested only psychological distress rather than particular psychiatric disorders(16,17).

To the best awareness of the available information few studies investigated depression among TB patients and studies assessed anxiety among TB patients was limited. Those studies lack specificity for particular TB types as well, and reported data on the magnitude of depression and anxiety among PTB patients in particular is lacking. So this study focused on contributing to the scarce evidence on the prevalence and correlates of anxiety and depression among PTB patients in particular.

## **1.2 Statement of the problem**

Anxiety and depression are the major psychiatric co-morbidity among TB patients. The occurrence of anxiety and depression with TB interferes with the daily life of an affected individual, associated with higher morbidity and mortality from the disease since individuals who have these co-morbidities are less likely to seek treatment and if they do so they are less likely to take medications regularly(4,18).

Worldwide TB is one of the top ten causes of death, an estimated 10.0 million people developed TB only in 2017, and over 95% of the cases and deaths were in developing countries. TB remains a major global health problem despite that it can be cured with a timely diagnosis and appropriate intervention(19).

Ethiopia is one among the 30 high TB burden countries that collectively accounted for about 87% of the world's TB cases, and was found in the list of 14 countries that shared the three lists of high TB burden (TB, TB/HIV and MDR-TB)(19).TB ranked the third leading cause of disability in Ethiopia(20).

Depression, Anxiety and TB were the major global health problem(3,19),their consequences in terms of lost health were vast. Depression alone accounted for 7.5% of all YLD globally,7.9% in WHO African region and 10% of all YLD in Ethiopia(3).

The relationship between TB and common mental illness were complex and do collaboratively through social, behavioral, and biological means to increase the burden of the disease. Initially being infected with TB increases the risk of getting these psychiatric co-morbidities through the stigma and negative emotional reaction resulting from the TB(4,18,21).

Depression and anxiety may also be the consequence of the physiological reaction to the disease like disturbances in the hypothalamic-pituitary-adrenal axis and may also be attributed to the side effects of some anti-TB medication(4,18,21).

Anxiety and depression adversely affect the ability to cope with stress, the side effects of medication and other challenges of daily life(4,10,22). It may be because of depression and anxiety, patient with TB use negative coping behaviors such as substance use which may end up with poor treatment outcomes(23). Particularly depression is under-recognized condition that if occur co-morbid with TB, it is associated with increased risk of TB recurrence, contribute to disease progression, and may hinder the physiological response to anti-tuberculosis treatment(4,17,21).

Mainly depression adversely influence an individual health care seeking behavior, diet, medication adherence and compliance with treatment causing a considerable challenge for global TB control(21). Furthermore Anxiety and depression may exacerbate other primary social susceptibilities imposed by TB related stigma like isolation from social activities and give rise to added long-term impairment of patient's overall psychosocial well-being(10,15,22,24,25).

Nowadays Treatment for drug-susceptible TB is almost in effect that adherence to medication is crucial to achieve cure, to lessen TB transmission, and to avert the occurrence of drug resistant TB. Among the factors that have posed the difficulty to achieve the stated goal was the presence of unrecognized depression and anxiety which affect a greater proportion of individuals on treatment for TB(4,5,7,17,18,21).

Despite the high occurrence and impacts of depression and anxiety among TB patients it has been not extensively investigated in Ethiopia in general and the study setting in particular. Without addressing the burden of these mental illnesses adherence and prevention of disease transmission will remain an enormous challenge. Thus addressing these conditions are important to reduce morbidity and mortality associated with the disease. So in an attempt to address this, the current study assessed the prevalence and associated factors of depression and anxiety among PTB patients on follow up at public health facilities in Jimma zone.

### **1.3 Significance of the study**

Early detection and treatments of mental illness has far-reaching significances to reduce morbidity and mortality associated with the TB especially in developing countries where over 95% of TB cases and death occur.

As recognizing the magnitude of the problem is important for designing early and appropriate intervention, this study assessed the prevalence of anxiety and depression among PTB patients.

The study also identified the associated factors which contribute for the high prevalence of anxiety and depression, thus the finding will be accommodating in order to come up with possible solutions to improve the mental health status of PTB patients.

It will provide baseline data and recommend possible intervention strategies for factors contributing to these conditions for policy makers and intervention designers to design intervention strategies regarding mental health services in TB clinic.

Moreover it will lay background for further studies and would add to the limited body of literature on the prevalence of depression and anxiety among PTB patients in Ethiopia.

## **CHAPTER TWO: LITERATURE REVIEW**

### **2.1 Prevalence of depression and anxiety among tuberculosis patients**

Regarding prevalence of depression and anxiety among TB patients there has been different studies across the globe with different result. In cross sectional study carried out in turkey which assessed anxiety, depression, loneliness and stigmatization in 208 PTB which hospital anxiety and depression scale(HADS) cut off point 10 for anxiety and 7 for depression used, it was found that the magnitude of anxiety was (26.0%) and depression was (60.5%) (10).

The results from a comparative study conducted in Greece showed that by using Spiel Berger state-trait anxiety scale and beck depression inventory(BDI),40.67% and 9.93% of 30 TB patients included in the study were observed to have anxiety and depression respectively(26).

Finding from comparative study conducted in Romania which assessed Anxiety and depression among 63PTB patients and 63 healthy controls by using HADS score >11, showed that 43% had Anxiety and depression was observed in 49% (11).

Result from a cross sectional study carried out in Brazil on 86 PTB by using HADS cut off point  $\geq 11$  for both anxiety and depression, indicated that 31.4% of patient had depression and 38.4% had anxiety(22).

A cross-sectional survey conducted in china indicated that 18.13% of 1252 PTB patient had depression and 18.37% had anxiety based on HADS cut off point  $\geq 8$  for both (23).Another cross sectional study conducted in china found the magnitude of depression 48% among1342TB patient by using center for epidemiologic studies depression scale(27).

Depression observed in 50% of 106TB patients in study conducted in India based on BDI (28). Based on HDRS  $\geq 7$  the magnitude of depression was found to be 39.5% from similar study conducted on 108 PTB in a tertiary care general hospital in banglore India(29).

In Another cross sectional survey conducted 100 TB patients in India using BDI-II  $\geq 13$  and Hamilton Anxiety Rating Scale (HARS)  $\geq 14$ , it was found 35% of patients had comorbid depression and 39% had anxiety(9).

Similar cross sectional study carried out in India on 262 TB patients in which PTB and EPTB included and PHQ-9  $\geq 5$  used, 40.83% found to have depression(30).

Depression were found among 41.9% of PTB patients, and 17.1% suffered from anxiety as per the finding of prospective observational study carried out in northern India on 198 PTB patient by using MINI International Neuropsychiatric Interview Schedule PLUS(31).

In the study conducted in Indira Gandhi Medical College in which 120 TB patients consecutively enrolled ,Generalized Anxiety Disorder Questionnaire (GAD-7) and PHQ-9 were used, The Results showed that 49% of TB patients had moderate to severe level of depression, whereas 54% TB patients had moderate to severe level of anxiety (7). The study conducted in West Bengal on 110 which used PHQ-9  $\geq 5$  showed that the magnitude of depression was 62%(32).

In the Study conducted in Pakistan which assesses the relationship between anxiety, depression and illness perception in TB patients, it was found that Prevalence of depression was (46%), and anxiety was (47%) (33).

A cross sectional Study conducted in Pakistan by using Hamilton depression rating scale(HDRS)  $\geq 8$ , it was found that the magnitude of depression was 49.4%, Out of whom 41.5% , 34.1% and 21.9% were mildly, moderately and severely depressed respectively(34).

As per the finding from other cross sectional study carried out in Pakistan 80% of 256 sputum positive PTB patients were found to have depression based on HDRS  $>6$ (35).

Findings from A cross sectional study conducted in Pakistan, Jinnah postgraduate medical Centre using PHQ-9 and GAD-7 indicated that 56% of TB patients had moderate to severe level of depression, whereas 65% TB patients had moderate to severe level of anxiety(5).

Result from a cross sectional survey conducted in manila Philippines on 561 PTB by using PHQ-9  $\geq 10$  shows that depression was observed in 16.8% (36).

Cross sectional Study conducted in Faisalabad Pakistan which used BDI-II  $\geq 10$ , in which 60 TB patient enrolled showed that 80% of TB patients were suffered from depression (37). Results from another study conducted in Pakistan by using HADS  $\geq 11$ , showed that 47(72.2%) of 65 PTB patients had severe to moderate degree of anxiety and depression(6).

In the Study conducted in Angola 38.3% and 49.4% of 81TB patients had anxiety and depression respectively(38).Depression was observed on 46.9% of 390 TB patient based on PHQ-9 as per the finding of the study carried out in Tanzania(39).

Study conducted in southwest Cameroon showed that the prevalence of depression among TB patients was 61.1 %, out of 265 patients included in the study 36.6 % had mild depression and 24.5 % had moderate depression (40).

A comparative cross sectional study conducted in Nigeria showed that 45.5% of TB patients had depression from which 13.6% was found to have mild and 31.9% was found to have moderate to severe depression(41).According to the finding from another Study carried out in Nigeria Depression was observed in 27.7% of TB patients (42).

The magnitude of depression among TB/HIV co- infected was 30% (95%CI 25-35) as per Finding from Study conducted in Lesotho which used PHQ-9  $\geq 5$ (43). Depression was observed among 34.4% (95%CI 29.29-39.93) of TB patients as per the finding from Mulago hospital, Uganda by using PHQ-9 cutoff point  $\geq 5$ (44).

Depression and anxiety have considerable contributions to the burden of disease in Ethiopia. it is well known that these condition were higher in patients with chronic illness and, even higher among TB patients, about 64% of TB/HIV co-infected patients had psychological distress(16).Magnitude of psychological distress among TB patient was found to be 63.3% (95% CI: 58.1, 68.1) on another study carried out in eastern Ethiopia(45).

In Ethiopia, in particular the magnitude of depression among TB patients was in the range from 19.8%,  $\geq 7$  on Kessler-10 in Jimma to 54% (95%CI = 50.2, 57.7%) using PHQ-9 $\geq 10$ (12,13).

Finding from Another study conducted in Ethiopia indicated the magnitude of depression and anxiety among TB patients was 43.4% and 41.5% respectively (11).

Cross sectional study conducted in eastern Ethiopia by using PHQ-9  $\geq 5$  as cut off point showed the prevalence of depression among TB patient was 51.9% (95%CI = 42.7, 62.2%)(14). In a Similar cross sectional study carried out in Ethiopia 31.1% (95% CI 26.5–35.7) of TB patients was observed to have depression(15).

Even though a number of studies conducted in different countries point out that depression and anxiety are commonly associated with PTB there was scarcity of scientific literature on this particular topic in Ethiopia, accordingly this study focused on contributing to the scientific literature gap on the topic in the country.



## **2. 2 Factors associated with depression and anxiety among tuberculosis patients**

It has been proposed that a complex interaction of biological, social and psychological factors contribute for depression and anxiety among tuberculosis patients.

### **2.2.1 Socio-demographic factors**

In a cross-sectional survey conducted in china it was found that divorce and low income were associated with depression (23). Result from a cross sectional study conducted in Pakistan showed that living in rural area and being in the age range of 46-60 years was significantly associated with depression (34).

Study in India revealed that being male, older age and single marital status were identified as risk factors for depression among TB patients (28). Another study in India demonstrated that being in the age 20- 39 years and being male were associated with depression(30). Being female was significantly associated with high prevalence of depression and anxiety in another study carried out in India (7).

Being married were associated with anxiety and being female were significantly associated with depression as per the finding from study conducted in Angola(38). Study in Nigeria shows that older age and single marital status were factors associated with depression among TB patients(41). Study in Lesotho demonstrated that depression was higher among those with low level of education(43). In the study conducted in Ethiopia older age ,being female, and level of education were independently associated with depression(13).

### **2.2.2 Psychosocial factors**

Result from a cross sectional survey conducted in manila Philippine(36) and India(28) revealed that low social support was significantly associated with depression. Social stigma associated with the disease and Poor social support were discussed as the associated factors with depression and anxiety among TB patients in the study carried out in India(9).

Poor social support and perceived TB stigma were reported as factors associated with depression in study carried out in Ethiopia(15). Another study in Ethiopia demonstrated that poor social support and perceived TB stigma were significantly associated with depression and anxiety(11).

### **2.2.3 Clinical factors**

Study in India revealed that having PTB were risk factors for depression among TB patients(28). being in the first four months of treatment were associated with depression as per the finding from cross sectional study conducted in India (30).

Result from a cross sectional survey conducted in manila Philippine revealed that lower BMI was significantly associated with depression (25). It was also reported from study carried out in china that abnormal BMI had significant association with depression (23).

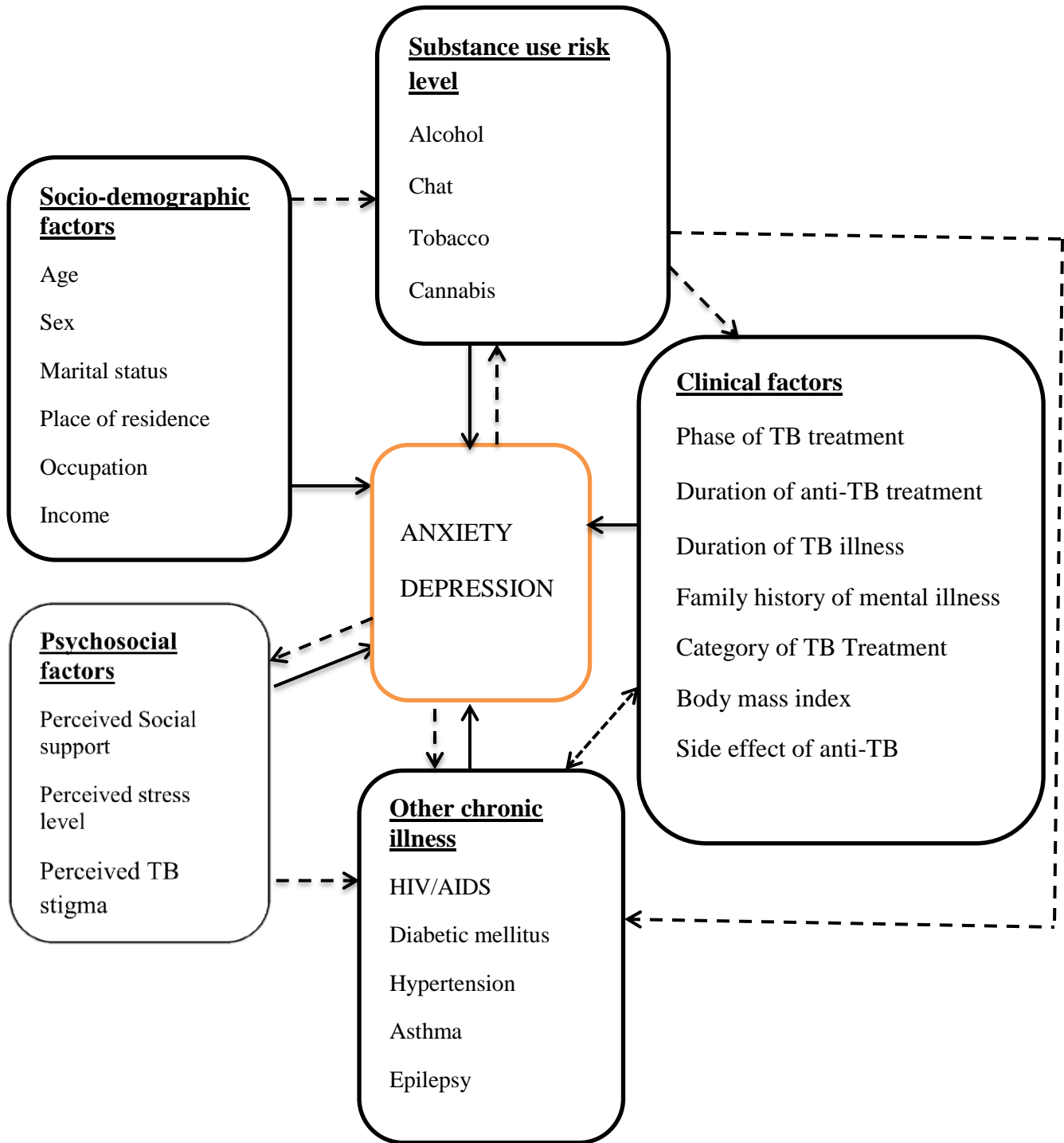
Having family history of mental illness, being on retreatment for TB and having HIV/TB co-infection were factors significantly associated with having depression as per the finding of Study conducted in southwest Cameroon(40). Result from a comparative study conducted in Nigeria showed long illness duration and having PTB were risk factors associated with depression (41).

Study conducted in Ethiopia revealed that co-morbid HIV infection had significant association with depression and anxiety. Being on intensive phase of TB treatment were factors significantly associated with anxiety as per the finding from the same study(11).

### **2.2.4 Substance use related factors**

Smoking history was associated with depression among PTB patients according to study conducted in china(23).Current use of alcohol were associated with depression in a cross sectional study conducted in India(30). The finding from study in Ethiopia indicated that current use of tobacco, alcohol or chat had significant association with anxiety (11).

### 2.3 Conceptual framework



**Figure 1:** Conceptual framework for factors associated with depression and anxiety among TB patients (developed after literature reviewed).

## **CHAPTER THREE: OBJECTIVES**

### **3.1 General objectives**

To assess prevalence and associated factors of depression and anxiety among PTB patients attending treatment at TB follow up clinic in public health facilities in Jimma zone, Southwest Ethiopia, 2019.

### **3.2 Specific objectives**

To determine prevalence of depression among PTB patients attending treatment at TB follow up clinic in Jimma zone, Southwest Ethiopia, 2019.

To determine prevalence of anxiety among PTB patients attending treatment at TB follow up clinic in Jimma zone, Southwest Ethiopia, 2019.

To identify factors associated with depression among PTB patients attending treatment at TB follow up clinic in Jimma zone, Southwest Ethiopia, 2019.

To identify factors associated with anxiety among PTB patients attending treatment at TB follow up clinic in Jimma zone, Southwest Ethiopia, 2019.

## **CHAPTER FOUR: METHODS AND MATERIALS**

### **4.1 Study Area and Period**

The study was conducted from April- May, 2019 at government health facilities in Jimma zone, which is one of the 20 zones in Oromia regional state. Jimma town, the capital city of the zone is located 352 km in the southwestern direction from Addis Ababa (the capital city of Ethiopia). Currently the zone is divided into 21 administrative woreda (20 rural, 1urban), has 553 kebeles (514 rural and 39 urban), and 1city administrative Jimma town with 17 urban kebele. On average about 617 PTB patients were on follow up treatment in public health facilities in the zone currently. 124 Health centers, 7 hospitals and 512 health posts are providing service in the zone.

### **4.2 Study Design**

Institution based cross sectional study was conducted.

### **4.3 Population**

#### **4.3.1 Source population**

All PTB patients attending TB follow up treatment at public health facilities in Jimma zone.

#### **4.3.2 The study population**

PTB patients who had follow-up visit in selected health facilities during the data collection period.

#### **4.3.3 Study unit**

Individual PTB patient

### **4.4. Inclusion and exclusion criteria**

#### **4.4.1 Inclusion criteria**

PTB patients aged  $\geq 18$  on follow up treatment for  $\geq 4$  weeks in selected health facilities.

#### **4.4.2 Exclusion criteria**

Acutely physically or mentally ill and unable to respond because of the illness

PTB patients on treatment for depression or anxiety

MDR-TB

## 4.5 Sample size determination and sampling technique

### 4.5.1 Sample size determination

The sample size required for this study was calculated by using single population proportion

formula with 95% of confidence level that falls within 5% margin of error.  $n = \frac{z^2 pq}{d^2}$  Where:

d= margin of error = 5%

P = (41.5 prevalence of anxiety among tuberculosis patient, 43.4% prevalence of depression:

Taken from study conducted in walaita sodo Ethiopia (11)).

n = Calculated sample size

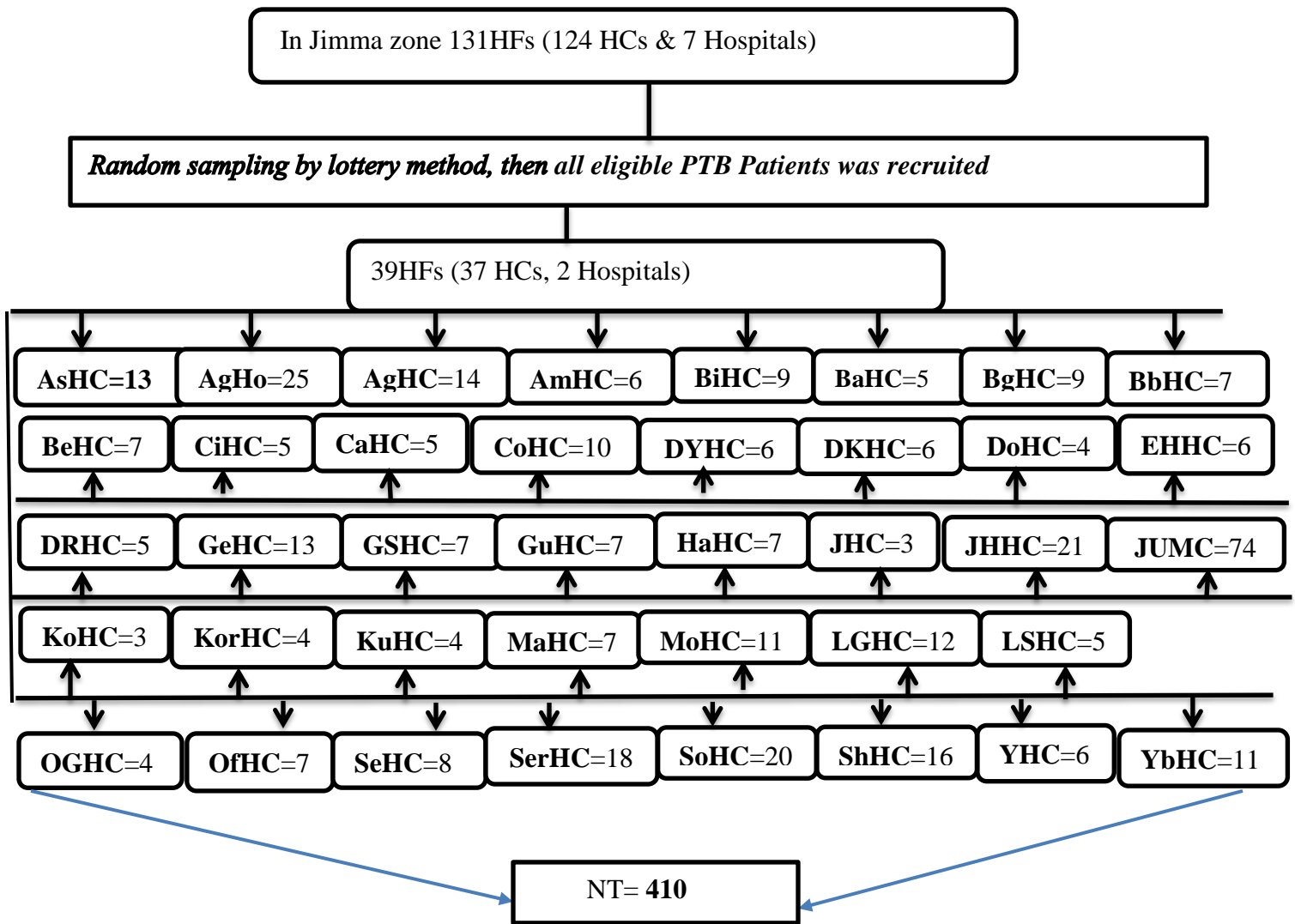
Z= the reliability coefficient corresponding to 95% confidence level (Z= 1.96)

$$n = \frac{z^2 pq}{d^2} = \frac{(1.96)^2 (0.59)(0.41)}{(0.05)^2} = 371, n = \frac{z^2 pq}{d^2} = \frac{(1.96)^2 (0.57)(0.43)}{(0.05)^2} = 376$$

Taking n= 376 and Adding 10% non-response rate, n=414.

### 4.5.2. Sampling technique and procedures

39 health facilities (37 HCs and 2 Hospitals) were selected randomly by lottery method from 131HFs (124 HCs and 7 Hospitals) in the zone. This becomes 30% of public health facilities in the zone. First each facility had a given code then the code was written on piece of paper and put it in the box. To ensure randomization after shaken vigorously; the required size of sample paper drawn out of the box and the selected code were registered. Because there were a limited number of PTB patients in the selected health facilities during the data collection period all eligible PTB patients who visited the selected health facilities during the study period were included. Taking their unique TB registration number Patient attended more than once during the study period were included only on the first contact.



**Figure 2:** Schematic presentation of sampling procedure for the study conducted on prevalence and associated factors of depression and anxiety among PTB patients on follow-up in selected health facilities in Jimma Zone, 2019

**Note:** HC=Health center, Ho=Hospital, Ag=Agaro, Am=Ambuye, Bi=Bilida, Ba=Baballa, Bg= Bake Gudo, Bb=Babo, Be=Beshasha, Ci=Cime, Ca=Cago,Co=coocee, DK=Detu kersu DY=Dabo yaya Do=Doyo, DR =Darge, EH=Edo hidhata, Ge=Gembe, GS=Getashewa,Gu=Guyo, Ha=Haro, J=Jimate, JH= Jimma higher,Ko=kore, kor= korjo, Ku=Kusaye,Ma= Maxoso, Mo= Mole, LG=limu genet, LS=Limu shaye, OG=Omo gurudde, Of=Ofkole, Se= Seka, Ser=Serbo, So= Sokorru Sh= Sheki, Y=Yaci, Yb= Yabu

#### **4.6 Data collection method and instrument**

Data was collected by six trained professional nurses using translated pretested questionnaire. Before data collection letter of permission submitted to each selected health facilities, and short discussion was made with clinician running TB clinic on how they can support the data collectors to facilitate the data collection procedure. Data was collected through face to face interview at health facilities. Data collectors and supervisors had two day training on the process of data collection, data collection instrument and data handling. The data collection instrument had the following components.

**Section 1:** Socio-demographic factors were assessed by structured questionnaire.

**Section 2:** Questionnaire used to assess perceived Social support, perceived TB stigma and perceived stress level. Oslo 3 items perceived social support scale was used to assess perceived level of social support. The tool has been reported to work well in previous studies(11). It was found reliable (Cronbach  $\alpha= 0.84$ ) in the current study.

*Perceived TB stigma:* was assessed by adopted 11 item perceived TB stigma scale. Instrument consisted of four-point Likert scale (strongly disagree, disagree, agree, strongly agree) questions. It was found reliable and has (Cronbach  $\alpha = 0.76$ ) in the current study.

*Perceived stress level:* assessed by 10 item perceived stress scale. Item rated on a five point Likert-type scale (0 = never to 4 = very often). Higher score indicates greater stress. Psychometric properties of the tool has been shown to be valid in Ethiopia(46). In the current study it has (cronbach  $\alpha = 0.78$ ).

**Section 3:** *Depression and anxiety* were assessed by HADS: 14-Item questionnaire commonly used to screen for symptoms of anxiety and depression. HADS was originally designed to screen for depression and anxiety among physical illness. The 14-item can be separated into two 7 item sub-scales for anxiety (HAD-A) and depression (HAD-D). It was validated in Ethiopia and its internal consistency was 0.78 for anxiety, 0.76 for depression subscales and 0.87 for full scale(47). In the current study HAD-A cronbach  $\alpha =0.81$ , it was 0.82 for HAD-D and 0.89 for full scale.

**Section 4:** Clinical factors like presence of comorbid chronic illness (HIV-AIDS, Hypertension, Diabetic mellitus, Epilepsy and Asthma), duration of illness, phase of treatment and category of treatment was assessed by structured questionnaire and some were extracted from the patient chart after informed consent.



**Section 5** : *Substance use risk level* was assessed by using WHO Alcohol, Smoking and Substance Involvement Screening Test (ASSIST v3.1)(48). The psychometric properties of the tool has been tested and shown to be valid and reliable (49). The ASSIST risk score ranges from 0 to 31 for tobacco and 0–39 for alcohol, cannabis and khat (stimulant).

## **4.7. Study variables**

### **4.7.1. Dependent variables**

Depression

Anxiety

### **4.7.2. Independent variables**

#### **Socio demographic factors**

Age

Sex

Marital status

Educational status

Religion

Occupation

Place of residence

Household family size

Income

#### **Psychosocial factors**

Perceived Social support

Perceived stress level

Perceived TB stigma

#### **Clinical factors**

Duration of illness (TB)

Duration of anti TB treatment

Phase of treatment

Body mass index (BMI)

Category of treatment

Family history of mental illness

Comorbid chronic illness

#### **Substance use risk level**

Alcohol

Tobacco

Chat

Cannabis

#### **4.8. Operational definition**

**Substance use risk level:** defined as follows; alcohol low risk score from (0-10), moderate (11-26) and high risk ( $\geq 27$ ). The risk score for chat, tobacco and cannabis were similar; low (0 to 3), moderate (4 to 26) and high ( $\geq 27$ )(48). Because of small sample in the category for alcohol, tobacco and cannabis the risk was categorized into Risk exists and risk doesn't exist(48). The risk level for chat was defined based on the above protocol: low risk 0-3, moderate to high  $\geq 4$ .

**Comorbid chronic illness:** presence of atleast one of the five (HIV, DM, Eilepsy, Asthma and Hypertension) chronic illness.

**Duration of symptoms/ illness:** Defined as the time duration of TB symptoms before the diagnosis of TB (13).

Low BMI:  $BMI < 18.5 \text{ kg/m}^2$ , not low BMI:  $BMI \geq 18.5 \text{ kg/m}^2$  as measured by weight in kg/height in meter squared(50).

**perceived stress:** Low to average: score from 0-15 and high perceived stress score  $\geq 16$  (51).

**Social support:** poor: score 3-8, Moderate: Score 9-11 and Strong : Score 12-14 (13).

**Anxiety and Depression:** Score of  $\geq 8$  on separated HAD-A subscale and HAD-D was considered as probable case of anxiety and depression respectively(47).

**Perceived TB stigma:** For the study purpose the response dichotomized into Yes and No and the mean stigma score of the population was used to classify participants into No perceived stigma: if scored below the Mean stigma score of the study population and have perceived stigma: if scored above or equal to the mean stigma score(52,53).

#### **4.9. Data Quality Assurance**

To assure the quality of data, All instruments was translated to Afaan Oromo and Amharic language and pretest was performed on 20(5%) of TB patients on follow up at Shenen gibe hospital and bachobore health center in Jimma town which was not part of the study population before the actual data collection and some modification was made accordingly. Training on data collection instrument was provided to data collectors and supervisors. The collected data was reviewed and checked for completeness and relevance on a regular basis by supervisor and principal investigator.

#### **4.10. Data Processing and Analyses**

The collected data was coded, edited, cleaned, and entered in to Epi data v3.1 and was analyzed by using SPSS v23. Bivariate binary logistic regression was performed to explore the association of each independent variable with the outcome variable. Hosmer-Lemeshow goodness-of-fit test was used to check whether the necessary assumptions for the application of multiple logistic regressions are fulfilled. Multicollinearity was checked by variance inflation factor. Explanatory variables with p-value of  $\leq 0.25$  in the bivariate analysis were candidate for multivariate binary logistic regression. Multivariate binary logistic regression model was done and adjusted odd ratio with 95% CI was calculated to identify the independent association of each variable with the outcome variables. Finally A p-value of less than 0.05 was considered statistically significant. Descriptive result was presented by using frequency and percentage through narration, table and graphs.

#### **4.11. Ethical Consideration**

Ethical clearance was obtained from the Research and Ethics Review Committee of Jimma University Institute of health science. Letter of permission was obtained from Jimma zone health department, Jimma town health bureau and relevant woreda health bureau and submitted to each selected health facilities. Written informed consent was obtained from each respondent and the respondents were informed about their rights to interrupt the interview at any time. Participants name was not written on the questionnaire and Confidentiality was maintained at all levels of the study. PTB patients who were found to have moderate to severe depression and anxiety were suggested to visit psychiatry clinics for further investigations.

#### **4.12. Dissemination plan**

The findings of the study will be disseminated to the institute of health faculty of medical science department of psychiatry.

The hard copy will be submitted to Jimma zone health department.

Effort will be made to present on various seminars and workshops, and for publication in national or international journals.

## CHAPTER FIVE RESULT

### 5.1 Socio-demographic characteristics of the study participants

A total of 410 participants were enrolled in the study resulted in an overall response rate of 99.03%. Two hundred eleven (51.5%) were males. The mean age of the respondent was 31.85 (SD=12.42) years. Majority 215(52.4%) were married. Regarding the religion majority 257 (62.7%) were Muslims. About 214 (52.2%) were from urban areas concerning to their place of residence. (Table 1)

**Table 1** Socio-demographic characteristics distribution of PTB on follow up treatment at selected health facilities in Jimma Zone, Southwest Ethiopia, 2019 (N= 410)

Variables	Category	Frequency (N)	Percent (%)
<b>Sex</b>	Male	211	51.5
	Female	199	48.5
<b>Age in years</b>	18-24	132	32.2
	25-34	145	35.4
	35-44	57	13.9
	45-54	46	11.2
	≥ 55	30	7.3
<b>Marital status</b>	Single	149	36.3
	Married	215	52.4
	Divorced	31	7.6
	Widowed	15	3.7
<b>Place of residence</b>	Rural	196	47.8
	Urban	214	52.2
<b>religion</b>	Muslim	257	62.7
	Orthodox	113	27.6
	Protestant	40	9.8
<b>Educational status</b>	No formal education	90	22.00
	Primary (1-8)	147	35.9

	Secondary(9-12)	109	26.6
	College and above	64	15.6
<b>occupation</b>	Daily laborer	56	13.7
	Farmer	87	21.2
	Government employed	53	12.9
	Merchant	38	9.3
	Student	59	14.4
	Housewife	69	16.8
	NGO or private employed	48	11.7
	<b>average monthly Income</b>	< 735 ETB	159
735-1200 ETB		99	24.1
>1200 ETB		152	37.1
<b>Household family size</b>	≤5	358	87.3
	>5	52	12.7

## 5.2 Clinical, psychosocial and substance use related characteristics

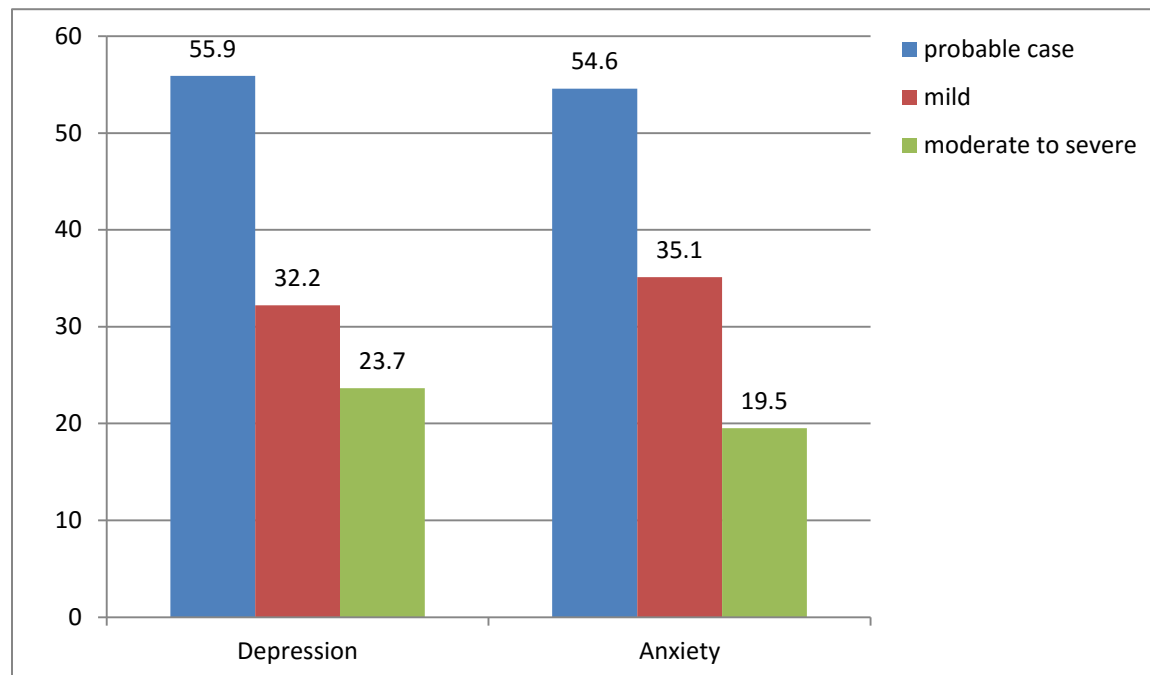
Majority 379(92.4 %) were in new TB treatment category. Two hundred twenty two (54.1 %) were in intensive phase of TB treatment. Over half 234 (57.1%) had perceived TB stigma. Majority 223(54.4%) reported high perceived stress. More than half 217(52.9%) had risk related to chat. Majority 392(95.6%), 389(94.9%) and 320(78.0%) respectively had no risk related to cannabis, tobacco and alcohol use in their life. (**Table 2**)

**Table 2** Clinical, psychosocial and substance use related characteristics distribution of PTB patients on follow up at selected health facilities in Jimma Zone, Southwest Ethiopia, 2019 (N=410)

<b>Variable</b>	<b>Category</b>	<b>Frequency(N)</b>	<b>Percent (%)</b>	
<b>Phase of treatment</b>	intensive	222	54.1	
	continuation	188	45.9	
<b>Category of treatment</b>	new	379	92.4	
	Return after default	10	2.4	
	Relapse/retreatment	21	5.1	
<b>Duration of illness</b>	≤ 4 weeks	279	68.0	
	> 4weeks	131	32.0	
<b>Duration of treatment</b>	< 2 month	199	48.5	
	2-4 month	137	33.4	
	> 4 month	74	18.0	
<b>Comorbid chronic illness</b>	HIV-AIDS	yes	86	21.0
		no	324	79.0
	Other	yes	26	6.3
		No	384	93.7
<b>family history of mental illness</b>	yes	87	21.2	
	no	323	78.8	
<b>BMI</b>	Low BMI	182	44.4	
	Not low BMI	228	55.6	
<b>Social support</b>	poor	171	41.7	
	moderate	168	41.0	
	strong	71	17.3	
<b>Perceived TB stigma</b>	yes	234	57.1	
	no	176	42.9	
<b>Perceived stress</b>	Low to average	187	45.6	
	high	223	54.4	
<b>Tobacco risk</b>	no risk	389	94.9	
	Risk exist	21	5.1	
<b>Alcohol risk</b>	no risk	320	78.0	
	Risk exist	90	22.0	
<b>Cannabis risk</b>	No risk	392	95.6	
	Risk exist	18	4.4	
<b>Chat risk</b>	no risk	193	47.1	
	low	60	14.6	
	Moderate to high	157	38.3	

### 5.3 Prevalence of depression and anxiety among PTB patients

The prevalence of depression and anxiety among PTB patients were 55.9 % (95% CI 51.0, 60.7) and 54.6 % (95%CI 50.0, 59.5) respectively. More female 132(66.3%) than male 97(46.0%), widowed 14 (93.3%) than married 129(60.0%) were found to be depressed. Depression observed to be higher among those who had poor social support 135 (78.9%) and perceived TB stigma 194 (82.9%) than their reverses. Similar to depression prevalence of anxiety was higher among female 137 (68.8%), those who had perceived TB stigma 180 (76.9%) and poor social support 130 (76.0%) than their counterparts.



**Figure 3** Magnitude and severity of depression and anxiety among PTB patients on follow up treatment in selected health facilities in Jimma Zone, Southwest Ethiopia, 2019

### 5.4 Factors associated with depression among PTB patients

In bivariate logistic regression: Sex, Age, Marital status, Residence place, Religion, educational status, Occupation, level of social support, Phase of TB treatment, Duration of illness, Treatment duration, Comorbid chronic illness, Family history of mental illness, Body mass index, Perceived TB stigma, Perceived stress level, Risk for chat, tobacco, alcohol and cannabis were variables associated with depression.

After adjusted for confounding the odds of having depression was 3.6 times higher among PTB who had high perceived stress [AOR= 3.60 95%CI (1.94, 6.56)] than those who had low to average perceived stress. Depression was 2.76 times higher among PTB patients in intensive phase of treatment [AOR= 2.76 95% CI (1.48, 5.13)].

It was found that depression was 4 times higher among those with family history of mental illness [AOR= 4.03 95% CI (1.59, 10.23)] than their counterpart. Perceived TB stigma [AOR= 9.31 95%CI (5.02, 17.26)] and Low body mass index [AOR=2.01 95% CI (1.08, 3.73)] had significant association with depression. Strong social support [AOR= 0.22 95% CI (0.08, 0.54)] found to be a protective factor. **(Table 3)**

**Table 3** Bivariate and multivariate logistic regression analysis of factors associated with depression among PTB patients in Jimma Zone, Southwest Ethiopia, 2019 (N=410)

Variables	Category	Depression		COR,95%(CI)	AOR,95%(CI)	P-value
		Yes N (%)	No N (%)			
<b>Sex</b>	male	97(46.0)	114(54.0)	1	1	
	female	132(66.3)	67(33.7)	2.31 (1.55 , 3.45)*	1.36(0.66, 2.77)	.397
<b>Age</b>	18-24	60(45.5)	72(54.5)	1	1	
	25-34	81(55.9)	64(44.1)	1.52 (0.94, 2.44)*	1.57 (0.66, 3.75)	.301
	35-44	37(64.9)	20(35.1)	2.22 (1.17, 4.22)*	1.59 (0.48, 5.23)	.438
	45-54	32(69.6)	14(30.4)	2.74 (1.34, 5.61)*	1.26 (0.36, 4.32)	.714
	≥ 55	19(63.3)	11(36.7)	2.07 (0.91, 4.69)*	0.40 (0.09, 1.69)	.215
<b>Marital status</b>	married	129(60.0)	86(40.0)	1	1	
	single	62(41.6)	87(58.4)	0.47 (0.31, 0.73)*	1.34 (0.64, 2.79)	.431
	divorced	24(77.4)	7	2.28 (0.94 , 5.54)*	0.45(0.12, 1.73)	.244
	widowed	14(93.3)	1	9.33 (1.20, 72.28)*	7.22(0.32, 164)	.215
<b>Residence</b>	rural	119(60.7)	77(39.3)	1.46 (0.98 , 2.16)*	1.68 (0.86, 3.31)	.130
	urban	110(51.4)	104(48.6)	1	1	
<b>Religion</b>	Muslim	155(60.3)	102(39.7)	1	1	
	Orthodox	55(48.7)	58(51.3)	0.62 (0.40 , 0.97)*	0.76(0.34,1.70 )	.516
	Protestant	19(47.5)	21(52.5)	0.59 (0.30, 1.16)*	0.66 (0.22, 1.97)	.464
<b>Educational status</b>	<b>No formal education</b>	<b>70(77.8)</b>	<b>20(22.2)</b>	<b>5.83 (2.87, 11.85)</b>	<b>2.94(1.06, 8.13)**</b>	<b>.037</b>



	Primary	92(62.6)	55(37.4)	2.78 (1.52, 5.11)*	1.64 (0.68, 3.94)	.268	
	Secondary	43(39.4)	66(60.6)	1.08 (0.57, 2.05)	0.68 (0.26, 1.78)	.438	
	College and above	24(37.5)	40(62.5)	1	1		
<b>Social support</b>	Poor	135(78.9)	36(21.1)	1	1		
	Moderate	79(47.0)	89(53.0)	0.24 (0.15, 0.38)*	0.75 (0.37, 1.48)	.410	
	<b>strong</b>	<b>15(21.1)</b>	<b>56(78.9)</b>	<b>0.07 (0.03, 0.14)</b>	<b>0.22(0.08, 0.54)**</b>	<b>.001</b>	
<b>Treatment Phase</b>	<b>Intensive</b>	<b>172(77.5)</b>	<b>50(22.5)</b>	<b>7.90 (5.08, 12.31)</b>	<b>2.76 (1.48 , 5.13)**</b>	<b>.001</b>	
	Continuation	57(30.3)	131(69.7)	1	1		
<b>Duration of illness</b>	≤ 4 weeks	139(49.8)	140(50.2)	1	1		
	> 4 weeks	90(68.7)	41(31.3)	2.21 (1.43, 3.42)*	1.10 (0.52, 2.32)	.801	
<b>Treatment Duration</b>	< 2 month	150(75.4)	49(24.6)	9.52 (5.12,17.73)*	0.40 (0.04, 4.41)	.455	
	2-4 month	61(44.5)	76(55.5)	2.49 (1.33, 4.68)*	1.47 (0.53, 4.06)	.457	
	>4 month	18(24.3)	56(75.7)	1	1		
<b>Comorbid chronic illness</b>	HIV	Yes	70(81.4)	16(18.6)	4.54 (2.53, 8.15)*	1.03 (0.41, 2.57)	.950
		No	159(49.1)	165(50.9)	1	1	
	Other	Yes	21(80.8)	5(19.2)	3.55 ( 1.31, 9.62)*	0.61 (0.14, 2.68)	.518
		No	208(54.2)	176(45.8)	1	1	
<b>Family history of mental illness</b>	<b>Yes</b>	<b>80(92.0)</b>	<b>7</b>	<b>13.34(5.98 , 29.79)</b>	<b>4.03 (1.59,10.23)**</b>	<b>.003</b>	
	No	149(46.1)	174(53.9)	1	1		
<b>BMI</b>	<b>Low BMI</b>	<b>133(73.1)</b>	<b>49(26.9)</b>	<b>3.73 (2.45, 5.68)</b>	<b>2.01 (1.08, 3.73)**</b>	<b>.026</b>	
	Not low BMI	96(42.1)	132(57.9)	1	1		
<b>Perceived stigma</b>	No	35(19.9)	141(80.1)	1	1	<b>.000</b>	
	<b>Yes</b>	<b>194(82.9)</b>	<b>40(17.1)</b>	<b>19.54(11.82, 32.30)</b>	<b>9.31(5.02, 17.26)**</b>		
<b>Perceived stress</b>	Low to average	57(30.5)	130(69.5)	1	1	<b>.000</b>	
	<b>High</b>	<b>172(77.1)</b>	<b>51(22.9)</b>	<b>7.69 (4.95, 11.96)</b>	<b>3.60(1.97, 6.56)**</b>		
<b>Tobacco risk</b>	No risk	212(54.5)	177(45.5)	1	1		
	Risk exist	17(81.0)	4(19.0)	3.55(1.17, 10.74)*	3.17(0.63, 16.09)	.163	
<b>Alcohol risk</b>	No risk	172(53.8)	148(46.3)	1	1		
	Risk exist	57(63.3)	33(36.7)	1.48(0.92 ,2.40)*	1.04 (0.37, 2.90)	.947	
<b>Cannabis risk</b>	No risk	216(55.1)	176(44.9)	1	1		
	Risk exist	13(72.2)	5(27.8)	2.12 (0.74, 6.06)*	2.21 (0.40, 12.17)	.362	

<b>Chat risk</b>	No risk	95(49.2)	98(50.8)	1	1	
	Low	26(43.3)	34(56.7)	0.79 (0.44, 1.41)	0.42 (0.16, 1.15)	.093
	Moderate to high	108(68.8)	49(31.2)	2.27 (1.46, 3.53)*	1.08 (0.55, 2.13)	.822

\*Significant on bivariate analysis at p-value  $\leq 0.25$  \*\*statistically significant at p- value  $< 0.05$

Other chronic illness: hypertension, diabetes, asthma and epilepsy

COR: Crude odd ratio AOR: Adjusted odd ratio 1= reference category

### 5.5 Factors associated with anxiety among PTB patients

Bivariate binary logistic regression analysis revealed that Sex, Age, Marital status, Residence place, Religion, Educational status, Occupation, Perceived level of social support, Phase of treatment, duration of illness, Treatment duration, Comorbid chronic illness, Family history of mental illness, Body mass index, Perceived TB stigma, Perceived stress level, Risk for chat and alcohol had association with anxiety.

After adjusted for confounding on multivariate logistic regression analysis the odds of having anxiety among female were 2.36 times higher [AOR =2.36 95% CI (1.35, 4.13)] than male. Having high perceived stress were 4.5 times more likely [AOR =4.51 95%CI (2.57, 7.91)] to be associated with anxiety compared to low to average perceived stress. Anxiety were 3.84 times higher [AOR= 3.84 95%CI: (2.14, 6.90)] among PTB patients who had perceived TB stigma than their counterparts.

It was found that PTB patients with positive family history of mental illness were 2.57 times more likely [AOR= 2.57 95%CI (1.16, 5.74)] to have anxiety than their counterparts. Low body mass index [AOR =1.86 95% CI (1.04, 3.35)] and TB treatment duration  $< 2$  month [AOR= 4.16 95% CI (1.81, 9.54)] were significantly associated with anxiety. Strong social support [AOR= 0.29 95% CI (0.12, 0.69)] was inversely related with anxiety. **(Table 4)**

**Table 4** Bivariate and multivariate logistic regression analysis of factors associated with Anxiety among PTB patients in Jimma Zone, Southwest Ethiopia, 2019 (N =410)

variables	category	Anxiety		COR,95%(CI)	AOR,95%(CI)	P-value
		Yes N (%)	No N (%)			
Sex	Male	87(41.2)	124(58.8)	1	1	<b>.002</b>
	<b>Female</b>	<b>137(68.8)</b>	<b>62(31.2)</b>	<b>3.15 (2.09 , 4.73)</b>	<b>2.36 (1.35 , 4.13)**</b>	
Age	18-24	59(44.7)	73(55.3)	1	1	
	25-34	80(55.2)	65(44.8)	1.52 (0.95, 2.45)*	1.35 (0.65, 2.81)	.420
	35-44	38(66.7)	19(33.3)	2.47 (1.29, 4.73)*	1.54 (0.55, 4.34)	.408
	45-54	28(60.9)	18(39.1)	1.92 (0.97, 3.82)*	0.65 (0.23, 1.82)	.413
	≥55	19(63.3)	11(36.7)	2.14 (0.94, 4.84)*	0.73 (0.22, 2.44)	.608
Marital status	Married	128(59.5)	87(40.5)	1	1	
	Single	57(38.3)	92(61.7)	0.42 (0.27, 0.65)*	0.94 (0.42, 2.10)	1.876
	divorced	26(83.9)	5	3.53 (1.31, 9.56)*	1.48 (0.36, 6.08)	.583
	widowed	13(86.7)	2	4.42 (0.97, 20.07)*	2.37(0.31, 18.09)	.404
Residence	<b>Rural</b>	<b>118(60.2)</b>	<b>78(39.8)</b>	<b>1.54 (1.04, 2.28)</b>	<b>1.83 (1.02, 3.28)</b>	<b>.044</b>
	Urban	106(49.5)	108(50.5)	1	1	
Religion	Muslim	145(56.4)	112(43.6)	1	1	
	Orthodox	61(54.0)	52(46.0)	0.90 (0.58, 1.41)	1.77 (0.87, 3.59)	.114
	Protestant	18(45.0)	22(55.0)	0.63 (0.32,1.23)	0.82 (0.31, 2.17)	.685
Educational status	No formal education	67(74.4)	23(25.6)	4.85 (2.43, 9.71)	1.23 (0.44, 3.41)	.695
	Primary	92(62.6)	55(37.4)	2.78 (1.52, 5.11)*	1.15 (0.48, 2.74)	.752
	Secondary	41(37.6)	68(62.4)	1.00 (0.53 , 1.90)	0.52(0.21 , 1.33)	.177
	College and above	24(37.5)	40(62.5)	1	1	
Social support	Poor	130(76.0)	41(24.0)	1	1	
	Moderate	77(45.8)	91(54.2)	0.26 (0.17, 0.42)*	0.65 (0.35, 1.22)	.184
	<b>Strong</b>	<b>17(23.9)</b>	<b>54(76.1)</b>	<b>0.09 (0.05, 0.19)*</b>	<b>0.29 (0.13, 0.69)**</b>	<b>.005</b>
Phase of treatment	Intensive	168(75.7)	54(24.3)	7.33 (4.73, 11.36)*	0.98(0.26, 3.66)	.975
	Continuation	56(29.8)	132(70.2)	1	1	
Duration of illness	≤ 4 weeks	132(47.3)	147(52.7)	1	1	
	> 4 weeks	92(70.2)	39(29.8)	2.63 (1.68, 4.10)*	1.83 (0.97, 3.47)	.063

<b>treatment</b>	<b>&lt; 2month</b>		<b>151(75.9)</b>	<b>48(24.1)</b>	<b>10.55(5.61, 19.83)</b>	<b>4.16 (1.81, 9.54)**</b>	<b>.001</b>
<b>Duration</b>	2-4 month		56(40.9)	81(59.1)	2.32 (1.22 ,4.39)*	1.53(0.65, 3.56)	0.330
	> 4 month		17(23.0)	57(77.0)	1	1	
<b>Comorbid chronic illness</b>	HIV	Yes	66(76.7)	20(23.3)	3.47 (2.01, 5.98)*	0.98 (0.432.24)	.966
		No	158(48.8)	166(51.2)	1	1	
	Other	Yes	19(73.1)	7	2.37 (0.97 , 5.77)*	0.46(0.14, 1.48)	.192
		No	205(53.4)	179(46.6)	1	1	
<b>Family history of mental illness</b>	<b>Yes</b>		<b>76(87.4)</b>	<b>11(12.6)</b>	<b>8.17 (4.18, 15.95)</b>	<b>2.58 (1.16, 5.74)**</b>	<b>.020</b>
	No		148(45.8)	175(54.2)	1	1	
<b>BMI</b>	<b>Low BMI</b>		<b>132(72.5)</b>	<b>50(27.5)</b>	<b>3.90 (2.56 , 5.94 )</b>	<b>1.86 (1.04 , 3.35)**</b>	<b>.037</b>
	Not low BMI		92(40.4)	136(59.6)	1	1	
<b>Perceived stigma</b>	No		44(25.0)	132(75.0)	1	1	
	<b>Yes</b>		<b>180(76.9)</b>	<b>54(23.1)</b>	<b>10.0 (6.33, 15.79)</b>	<b>3.84 (2.14, 6.90)**</b>	<b>.000</b>
<b>Perceived stress</b>	Low to average		52(27.8)	135(72.2)	1	1	
	<b>High</b>		<b>172(77.1)</b>	<b>51(22.9)</b>	<b>8.75 (5.59 , 13.69)</b>	<b>4.51 (2.57 ,7.91)**</b>	<b>.000</b>
<b>Alcohol risk</b>	No risk		168(52.5)	152(47.5)	1	1	
	Risk exist		56(62.2)	34(37.8)	1.49(0.92, 2.41)*	1.36 (0.61,3.07)	.450
<b>Chat risk</b>	No risk		98(50.8)	95(49.2)	1	1	
	Low risk		26(43.3)	34(56.7)	0.74 (0.41, 1.33)	0.52(0.20, 1.37)	.190
	Moderate to high		100(63.7)	57(36.3)	1.70(1.10, 2.62)*	0.89 (0.44, 1.83)	.763

\*Significant at p value  $\leq 0.25$  \*\*statistically significant at p value  $< 0.05$

Other chronic illness: hypertension, diabetes, asthma and epilepsy.

## CHAPTER SIX DISCUSSION

The finding revealed that a high proportion of PTB patients on follow up treatment have probable depression. Similar finding was reported from previous studies carried out in southern 54% and Eastern Ethiopia 51.9% (13,14), In southwest Cameroon 61.1% (40), Angola 49.4% (38), Tanzania 46.9% (39), In Pakistan 56% (5), west Bengal 62% (32) and turkey 60.5% (10).

Higher proportion of depression than the current was reported from studies carried out in Pakistan 72.2%, 80%, 80% (6,35,37). The discrepancy might in part due to difference with the study setting and population studied. One study(37) included samples from hospitalized patients which may consist of severely ill patients with added significant stress from being hospitalized. Other study(6) included sample from only newly diagnosed PTB which may accounted for the difference. Furthermore other study (35) included only smear positive PTB patients. Two of the studies(35,37) were used screening instrument different from the present study which may be the other possible explanation for the discrepancy.

On the other hand this finding was higher than study done in Walaita Sodo 43.4%, Jimma 19.8% and Addis Ababa 31.1% Ethiopia (11,12,15), Lesotho 29.8% (43), Uganda 34.4% (44), China 18.13% (23), Manila Philippines 16.8% (36) and India 35%, 39.5% (9,29). Possible reason for the discrepancy may be explained in part due to the difference in the screening instrument used and the difference in the population studied. Only two from the above studies(11,23) have used the same screening instrument with the same cutoff point with the present study. The discrepancy in prevalence with one of the above study (11) may be because of types of TB patients addressed. Unlike that of previous study the current study included only patients with PTB, the one known to be contagious and life threatening. Being affected by PTB is a painful experience and the evolving stress contributes to greater risk of emotional problem(10). The variation may also be related to the study setting which unlike the current, previous study(11) enrolled patient from urban only which may have better access to healthcare resource.

Socio-economic and cultural differences (awareness level, educational status, economic status and the like differences between two settings) may contribute for difference compared to study in china(23).

The current study also shows that a higher proportion of PTB patients on follow up treatment suffered from probable anxiety. Similar finding was reported from studies carried out in Pakistan 65%,47% (5,33), India 54% (7), Romania 43% (8) and Greece 40.67% (26). Siddiqua Amir and Aisha (6) found even a higher prevalence rate 72.2% than the current study. This may be attributed to the difference with patient studied. Unlike the current; previous study included Patients with MDR-TB (more stigmatized condition associated with poorer prognosis) and newly diagnosed PTB patients only.

On the other hand lower prevalence rate than the current study reported from walaita sodo Ethiopia 41.5% (11) despite the same tool with same cut off point used. The variation may be due to the difference in the patient studied and setting of the study. Previous study had male predominance and comprised only sample from urban areas which may have better access to health service resource.

Lower prevalence rate than the current study also reported from Angola 38.3% (38), India 39%, 17.1% (9,31), China 18.37 % (23), Brazil 38.4 % (22) and Turkey 26% (10). Study from Angola also used HADS cut off point  $\geq 8$  as too the current study, difference in population studied in terms of age may contribute for the discrepancy. Furthermore study in china also used HADS cut off point  $\geq 8$ ; the discrepancy may be attributed to socio-economic and cultural factors. Differences with cutoff point used HADS  $\geq 10$  (10) and HADS  $\geq 8$  for current may account for the difference when compared to study in turkey. for the two Indian studies (9,31) the possible explanation for the discrepancy may be due to data collection instrument used which was HARS and MINI plus.

Study revealed that depression was about 78 % less likely among PTB patients who had strong social support compared to those who had poor social support. the finding is in line with previous studies carried out in Ethiopia (11,13,15). Poor social support gives patients a feeling of being neglected, isolated and worthless, and in contrast strong social support is vital for prevention of such feeling (9). Being in intensive phase of TB treatment were significantly associated with depression, the finding is in line with other studies (39,44). This might be related with severity of illness. Symptoms of TB tend to be more prominent during intensive phase and likely to improve overtime during continuation phase (17,44).

In agreement with other studies(11,15,25) PTB patients who had perceived TB stigma were about 9 times more likely to be depressed than their counterparts. This might be related to the fact that social acceptance of the PTB patient may be compromised mostly and further negative reactions from others may interfere with the person sense of self confidence which later end up in depression(10,11).

In line with Studies carried out in Ethiopia(13), Manila Philippines(36),Taiwan(25) and China(23) low body mass index was significantly associated with depression. This may be because of under nutrition weakens the immune system; the ability of the individual to fight infection and to control disease progression will be compromised. Nutrition is important for all aspects of health including emotion(54).

In agreement with southwest Cameroon study (40)It was found that the odds of having depression were four times higher among those who had family history of mental illness than their counterparts. This could be attributed to the association of biological factors like genetics with mood disorder that numerous family, adoption, and twin studies have long documented the heritability of mood disorders(2).

Furthermore, in agreement with the finding from study in northeast Ethiopia (55) which was found no formal education had significant association with common mental disorder, having no formal education was found to have significant association with depression in the current study. This could be explained in part by having no formal education may prevents individual accessing most professional jobs, prevent from visiting healthcare facilities and contributes to a persistently low social resources. Contrast to this higher level of education leads to better income, proper adaptation to treatment and access to a wide range of health services(9,13,55).

High perceived stress was significantly associated with depression. This may be explained in part by having high Perceived stress may also lead to negative coping behaviors such as substance use and unhealthy dieting(56).

However no statistically significant association of depression was observed with respect to comorbidities, gender, substance use and ages in this study. Contrast to some studies (13,38,40) and in agreement with these studies (35–37,42,57) gender had no significant association with depression.

Even though young and older age had been reported to have significant association with depression(12–14,32,34,42), no statistically significant association observed between depression and age in this study. This finding was also supported by other studies(11,35).

Contrast to previous studies (11,40) no statistically significant association of comorbidities with depression observed in the current study. This finding is in line with other studies(14,15,25). Consistent with the current study finding, studies in walaita sodo Ethiopia (11) and brazil(58) has also found no significant association between substance use and depression.

In agreement with other study(11) being female were 2.36 times more likely to be associated with anxiety. Biological factors like hormonal fluctuation with pregnancy and menstruation and social factors like burden of household responsibilities and limited activities outside the home environment may be contributed to the higher prevalence of anxiety among female than male(5,7,55).

Being in treatment duration less than two month was 4 times more likely to have significant association with anxiety compared to being on treatment for greater than four month. It can be said that patients recently diagnosed with TB might have anxiety immediately upon learning their diagnosis(9), and symptoms related to TB disease tend to be prominent and are less likely to decrease within 1-2 month of treatment initiation(12,17). Similar finding was also reported from previous study(11).

Consistent with previous study(11) anxiety were 3.84 times higher among PTB patients who had perceived stigma than those who had no perceived stigma. A number of Studies has demonstrated that presence of perceived stigma is highly associated with psychological distress. TB patients who had perceived stigma may be socially isolated because of fear of transmitting disease and may have a low self-image, this may predispose them to anxiety(10,11,16,24,25,59).

The study demonstrated that PTB with family history of mental illness were 2.58 times more likely to have anxiety than their counterparts. Although not able to find a satisfactorily similar study to compare to the findings on the association between family history of mental illness and anxiety among PTB, previously reported studies showed an association between family history of mental illness and common mental disorder(55,60). This could be attributed to biological factors like genetics with anxiety disorders. Genetic studies have made strong evidence that genetic component contributes to the development of anxiety disorders(2).



Anxiety was significantly lower among patients who had strong social support than patients who had poor social support. Similar finding was reported from previous study(11). this may be related to fact that Poor social support system gives patients a feeling of being neglected, isolated and worthless, and in contrast strong social support is vital for prevention of such feeling(9).

Study revealed that high perceived stress was significantly associated with anxiety. This could be related to the fact that stress is known to cause dysregulation of the hypothalamic-pituitary-adrenal axis which may lead to changes in cortisol levels, immune system response and cortical reactivity(56).

In the present study rural residence were found to be significantly associated with anxiety. This may be related to the poor healthcare seeking behavior of rural community .previous study from the same setting found that majority of TB patients from rural area did not seek help for their illness and consider their illness to be less severe(52).

### **Strength and limitation of the study**

Standard tool used to assess the associated variable; perceived stress level, perceived level of social support, substance use and perceived TB stigma. Given that there is overlap between somatic symptom of depression and TB symptom a validated tool which exclude somatic symptom was utilized in this study. In addition this study addressed potential confounding variable like perceived stress level which was not covered by other previous studies. Furthermore the study has sufficient sample size and included sample from multiple sites (rural & urban) the result can be generalized for PTB on follow up in Jimma zone.

However the study has some limitation: only probable prevalence of anxiety and depression was assessed as screening rather than diagnostic tool was utilized. Since the study was conducted using face-to-face interviews, there is a possibility of misclassification of variables like substance use status due to social desirability bias. Possibility of Recall bias for factors such as family history of mental illness and duration of illness may be the other limitation of this study. Important factors such as perceived severity of TB symptom, medication adherence and side effect of anti-TB medication are not addressed in this study. These factors were reported to be related to psychological distress among TB patients.

## **CHAPTER SEVEN CONCLUSIONS AND RECOMMENDATION**

### **7.1 Conclusion**

More than half of the study participants were found to have probable depression and anxiety. Perceived TB stigma, high perceived stress, low BMI and family history of mental illness were significantly associated with both depression and anxiety. Strong social support was found to be a protective factor for both depression and anxiety. Having no formal education and being in intensive phase of TB treatment had statistically significant association with depression only, while being female and rural residence were associated only with anxiety.

### **7.2 Recommendation**

#### **For professional running TB clinic in Jimma zone**

Routine screening of depression and anxiety with particular attention given to patient with identified risk factors; Family history of mental illness, in the first two months of TB treatment Perceived TB stigma and perceived stress has of paramount importance.

#### **For Jimma zone health department**

Community health education or mental health outreach service may be of great potential to lower patient perceived TB stigma and the level of distress among patients with TB if considered.

#### **For researcher**

Further studies which assess psychosocial risk factors for depression and anxiety among PTB patients are needed to strengthen and broaden the current findings. Multicenter longitudinal studies that utilize diagnostic tool are recommended in the future.

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## **Annexes**

### **Informed consent form**

JIMMA UNIVERSITY

INSTITUTE OF HEALTH FACULTY OF MEDICAL SCIENCE

DEPARTMENT OF PSYCHIATRY

My name is \_\_\_\_\_ I am collecting this data on behalf of the student of Jimma University Department of psychiatry. The student is doing this study for the partial fulfillment of the requirements for a Master's of Science in Integrated Clinical and Community Mental Health. The objective of this study is to assess the prevalence and associated factors of depression and anxiety among PTB patients on follow up treatment in Jimma zone, South West Ethiopia, in 2019 G.C.

Your cooperation and honest participation in the study will provide the investigator valid result and show your real status and help to make intervention; hence I request you to participate honestly. Your participation in the interview and every aspect of the study is completely voluntarily. Your name will not be written in this form and all information that you give me will be kept confidential. You may leave the Interview at any time you want, skip any question that you prefer not to answer, You may also ask me to clarify questions if you don't understand it .Your responses to questions are identified only by number, never by name.

Do you agree to participate in this study?

1. Yes
2. No

Thank you for your cooperation!!!



**የፍቃደኝነት መጠቀያ ቅፅ**

በጅማ ዩኒቨርሲቲ ጤና ኢኒስትትዩት ሕክምና ሳይንስ ፋካልቲ የአእምሮ ህክምና ት/ት ከፍል

በድብርት እና የጭንቀት አእምሮ ህመም ዙሪያ የሳምባ ነቀርሳ ህመም ያለባቸውን ተመላላሽ ታካምዎችን ለማጥናት የተዘጋጀ ቃለ መጠይቅ። የጥናቱ በታ ጅማ ዞን ውስጥ የሚገኙ የመንግስት ጤና ተቋማት

ስሜ.....እባላለዉ :: እዚህ የተገኘሁት ሁለተኛ ድግሪ ተማሪ ሙስጠፋ ሙሐመድን ወክዬ ነዉ። የጥናቱ አላማ የድብርትንና የጭንቀትን መጠን እና ተያያዥ ነገሮች በሳንባ ነቀርሳ ተመላላሽ ታካሚ ህመምተኞች ምን ያህል እንደሆነ ለማጥናት ነዉ። ድብርት እና ጭንቀት በሳንባ ነቀርሳ ና ሌሎች ለረጅም ጊዜ የሚቆዩ ህመም ያለባቸዉ ሰዎች ላይ በብዛት ይታያል። እርስዎ የሚሰጡን መረጃ በጣም ተቃሚ ነዉ። ጥናቱ ላይ የሚሳተፉት በፍቃደኝነት ነዉ። ጥናቱ ላይ ሲሳተፉ የሚደርስበት ጉዳት የለም። ጥናቱ ላይ ለመሳተፍ ፍቃደኛ ባለመሆኖም የሚቀርብዎት ጥቅም የለም። ቃለ መጠይቁን በፈለጉት ሰዓት አቋርጠው መሄድ ይችላሉ። ከእርሶ የምንወስደዉ መረጃ በሚስጥር እንይዛለን። ያለእርሶ ወይም ያለ ህጋዊ አካል ፍቃድ ለሰሰተኛ ወገን በፍፁም አይተላለፍም። ቃለ መጠይቁ ከ ሀያ አስከ ሰላሳ ደቂቃ ሊፈጅ ይችላል።

ጥናቱ ላይ ለመሳተፍ ፍቃደኛ ነዎት?                      1. አዎ    2. አይደለሁም

የተሳታፊው ፊርማ \_\_\_\_\_ ስለተሳተፉ እናመሰግናለን!!

የመረጃ ሰብሳቢው ስምና ፊርማ \_\_\_\_\_ ቀን \_\_\_\_\_/\_\_\_\_\_/\_\_\_\_

የተቆጣጣሪው ስምና ፊርማ.....ቀን...../...../.....

**Guca heyyemamummaa agarsiisu**

Yuunivarsiitii jimmaa inistituutii fayyaa faakaaliti saayinsii yaalaatti kutaa yaala dhibee sammuu

Maqaan koo\_\_\_\_\_ jedhama. Kanin asitti argame barataa digrii lamaffaa muummaa fayyaa sammuu kan ta'e barataa Musxafaa Muhaammad bakka bu'uudhaani. Kaayyoon qorannichaas dhibee sammuu gadda miira gad fagoo of keessaa qabu fi dhippinaa fi wantoota isaan waliin walqabatan namoota dhibee cawwee sombaa qaban kan buufatoota tajaajila fayyaa ummataa godina jimmaa keessatti deddeebi'anii Yaalamaa jiran irratti qorachuudha. Dhibeeleen kunniin namoota dhibee kana qaban keessatti ballinaan Kan muldhatuudha. Qorannoo kana keessatti hirmaachuun keessan wanta kana akka hubannuuf baayyee barbaachisaadha. Qorannoo kana irratti hirmaachuun fedha keessan irratti hundaa'a. Yoo qorannoo kana irratti hirmaachuu dhiiftan wanti miidhamtan tokkolleen hin jiru. Qorannoo kana irratti hirmaachuun keessanis

miidhaa homaattuu isin irraan hin ga’u. Waliin dubbii gochuu erga jalqabdaniis yeroo isin barbaachise Kamittuu dubbii addaan kuttanii ba’uuf mirga qabdu. Odeeffannoon isin harkaa funaannamu hundumtuu iccitiidhaan qabama. Fedha keessaniin yookiin ammoo ajaja qaama seera qabeessummaa argateen ala qaama sadaffaadhaaf gonkumaa hin darbu. Waliin dubbichi daqiiqaa diigdamaa hanga soddomaa fudhachuu danda’a.

Qorannoo kana irratti hirmaachuuf heyyemamoodhaa? Eeyyee lakkii

Ani qorannoon kun kaayyoon isaa maal akka ta’e addaan baasee hubachuudhaan isa irratti hirmaachuufis ta’ee dhiisuudhaa mirga guutuu qabaachuukoo beekuudhaan fedha kootiin qorannoo kana irratti hirmaachuuf heyyemamaa/heyymantuu ta’uukoo nan mirkaneessa

Mallattoo hirmaataa \_\_\_\_\_ guyyaa \_\_\_\_\_

Maqaafi mallattoo ogeessa odeeffannoo funaanee \_\_\_\_\_ mall \_\_\_\_\_

Maqaafi mallattoo too’ataa \_\_\_\_\_ mall. \_\_\_\_\_

## Questionnaire

### English version questionnaire

#### Part I: sociodemographic characteristics of the study participant

S.N	Variable	Category	S.N	Variable	Category
1	Sex	Male	4	Place of residence	1.rural
		Female			2.urban
2	Age in years	18-24	5	Religion	1. Muslim
		25-34			2.Orthodox
		35-44			3.Protestant
		45-54			4.Catholic
		≥55			5.Others (specify)
3	Marital status	Single	6	Occupation	1.daily laborer
		Married			2. Farmer
		divorced			3. Gov’t employed

		widowed			4. Merchant
7	Educational status	No formal education			5. Student
		Primary (1-8)			6. Housewife
		Secondary(9-12)			7. Ngo/private employed
		College and above			
8	Average monthly Income	-----in birr	9	Household family size	-----in number

### Questionnaire on perceived Social Support

S.No	Item	1	2	3	4	5
1.	How many people are so close to you that you can count on them if you have serious problem?(select only one)	None	One or two	3-5	Above 5	—
2	How much concern do people show in what you are doing?(select only one)	None	Little	Uncertain	Some	A lot
3	How easy can you get help from neighbors if you should need it?(select only one)	Very difficult	Difficult	Possible	Easy	Very easy

### *Part II: questionnaire to assess depression and anxiety*

#### *Questionnaire on anxiety (HADS-A)*

s.no	Question	response	Score
1	I feel tense or 'wound up'	Not at all	0
		From time to time (occ.)	1
		A lot of the time	2
		Most of the time	3
2	I get a sort of frightened feeling as if something awful is about to happen	Not at all	0
		A little, but it doesn't Worry me	1
		Yes, But not too badly	2
		Very Definitely and Quite badly	3
3	Worrying thoughts go through my mind	Only occasionally	0
		From time To time, but not often	1
		A lot of the time	2
		A great deal of the time	3
4	I can sit at ease and feel relaxed	Definitely	0
		Usually	1
		Not often	2
		Not at all	3

5	I get a sort of frightened feeling like 'butterflies' in my stomach	Not at all	0
		Occasionally	1
		Quite often	2
		Very often	3
6	I feel restless as if I have to be on the move	Not at all	0
		Not very much	1
		Quite a lot	2
		Very much indeed	3
7	I get sudden feelings of panic	Not at all	0
		Not very often	1
		Quite often	2
		Very often indeed	3
Questionnaire for depression HAD-D			
1	I still enjoy the things I used to enjoy	Definitely as much	0
		Not quite as much	1
		Only a little	2
		Hardly at all	3
2	I can laugh and see the funny side of things	As much as I always could	0
		Not quite so much now	1
		Definitely not so much now	2
		Not at all	3
3	I feel cheerful	Not at all	3
		Not often	2
		Sometimes	1
		Most of the time	0
4	I feel as if I am slowed down	Nearly all the time	3
		Very often	2
		Sometimes	1
		Not at all	0
5	I have lost interest in my appearance	Definitely	3
		I don't take as much care as I should	2
		I may not take quite as much care	1
		I take just as much care	0
6	I look forward with enjoyment to things	As much as I ever did	0
		Rather less than I used to	1
		Definitely less than I used to	2
		Hardly at all	3
7	I can enjoy a good book or radio or a TV program	Often	0
		Sometimes	1
		Not often	2
		Very seldom	3

**Part III: questionnaire regarding Clinical factors**

<i>s.no</i>	<i>Variable</i>	<i>category</i>
1	Phase of treatment	<i>intensive</i> <i>continuation</i>
2	Category of treatment	<i>new</i> <i>Return after default</i> <i>relapse</i>
3	How long did your TB symptoms last before your illness was diagnosed as TB?	----- <i>In weeks</i>
4	Duration of anti-TB treatment: counted from the date of starting the medications which was found from the standard TB register to the date of interview.	----- <i>In weeks/months</i>
5	Have you ever been diagnosed or told by health professionals to have chronic illnesses like hypertension, Asthma, diabetes mellitus, Epilepsy	<i>Write if any of these</i>
6	HIV status	<i>Yes</i> <i>no</i>
7	Do you have family history of mental illness	<i>yes</i> <i>no</i>
8	BMI	----- <i>kg/m<sup>2</sup></i>

**Part IV: Questionnaire on perceived stigma towards TB**

S.N	item	Strongly agree	agree	Strongly disagree	disagree
1	If you had TB, others would think less of you				
2	If you find out you had TB, you would feel ashamed and embarrassed				
3	If you find out you have TB, you would think less of you				
4	If you had TB, others would avoid you				
5	If you had TB, you would have a problem of finding a partner even after cure				
6	If you had, your partner would refuse to have sex with you				
7	If you had TB, you would be asked to stay away from a social group				
8	If you had TB, you would not disclose your status to anyone				
9	If you had TB, you would affect others by the disease				
10	If you had TB, others would think less of your family				
11	If you had TB, it would be a problem for your children				

**Part V: Questionnaire regarding perceived level of stress**

The following questions ask about your feelings and thoughts during THE PAST MONTH. In each question, you will be asked HOW OFTEN you felt or thought a certain way. There are small differences between them and you should treat each one as a separate question. The best approach is to answer fairly quickly, tell me the answer that in general seems the best.

s.n	question	Never=0	Almost Never=1	Sometimes =2	Fairly Often=3	Very Often=4
1	How often have you been upset because of something that happened Unexpectedly?					
2	How often have you felt unable to control the Important things in your life?					
3	How often have you felt nervous or stressed?					
4	How often have you felt confident about your ability to handle personal problems?					
5	How often have you felt that things were going your way?					
6	How often have you found that you could not cope with all the things you had to do?					
7	How often have you been able to control Irritations in your life?					
8	How often have you felt that you were on top of things?					
9	How often have you been angry because of things that happened that were outside of your control?					
10	How often have you felt that difficulties were piling up so high that you could not Overcome them?					

**Part VI: Questionnaire on substance use ASSIST version 3.1**

The following questions ask about your experience of using alcohol, tobacco products and other Drugs across your lifetime and in the past three months. I will not record medications that are used as prescribed by your doctor. However, if you have taken such medications for reasons other than prescription, or taken them more frequently or at higher doses than prescribed, please let me know. Please be assured that information on use of illicit drug will be treated as strictly confidential.

Question 1: In your life, which of the following substances have you <i>ever used</i> ? (Non-medical use only)?	No	Yes
Tobacco products (cigarettes, chewing tobacco, cigars, etc.)	0	3
Alcoholic beverages (beer, wine, spirits, etc.)	0	3
Cannabis (marijuana, pot, grass, hash, etc.)	0	3
khat	0	3
Inhalants (nitrous, glue, petrol, paint thinner, etc.)	0	3
Sedatives or sleeping pills (diazepam, alprazolam, etc.)	0	3

Probe if all answers are negative: “Not even when you were in school?”

If “No” to all items, stop interview.

If “Yes” to any of these items, ask Q2 for each substance ever used

<b>Qn 2. In the past three months, how often have you used the substances you mentioned</b>	never	Once or twice	Monthly	weekly	Daily or almost daily
Tobacco products	0	2	3	4	6
Alcoholic beverages	0	2	3	4	6
Cannabis (marijuana, pot, grass, hash, etc.)	0	2	3	4	6
khat	0	2	3	4	6
Inhalants (nitrous, glue, petrol, paint thinner)	0	2	3	4	6
Sedatives or sleeping pills (diazepam)	0	2	3	4	6

*NB.*: If Never to all items in Q2, skip to Q6.

If any substances in Q2 were used in the previous three months, continue with Questions 3, 4 & 5 for each substance used. Ask question 6 & 7 for all substances ever used endorsed in Qn 1

<b>Qn 3. During the past three months, how often have you had a strong desire or urge to use?</b>	never	Once or twice	Monthly	weekly	Daily or almost daily
Tobacco products (cigarettes, chewing tobacco)	0	3	4	5	6
Alcoholic beverages (beer, wine, spirits, etc.)	0	3	4	5	6
Cannabis (marijuana, pot, grass, hash, etc.)	0	3	4	5	6
Khat	0	3	4	5	6
Inhalants (nitrous, glue, petrol, paint thinner, etc.)	0	3	4	5	6

Sedatives or sleeping pills (diazepam,)	0	3	4	5	6
<b>Qn 4. During the past three months, how often has your use of these drugs led to health, social, legal or financial problems?</b>	never	Once or twice	Monthly	weekly	Daily or almost daily
Tobacco products (cigarettes, chewing tobacco)	0	4	5	6	7
Alcoholic beverages (beer, wine, spirits, etc.)	0	4	5	6	7
Cannabis (marijuana, pot, grass, hash, etc.)	0	4	5	6	7
Khat	0	4	5	6	7
Inhalants (nitrous, glue, petrol, paint thinner, etc.)	0	4	5	6	7
Sedatives or sleeping pills (diazepam,)	0	4	5	6	7
<b>Qn 5. During the past three months, how often have you failed to do what was normally expected of you because of your use of these drugs?</b>	never	Once or twice	Monthly	weekly	Daily or almost daily
Tobacco products (cigarettes, chewing tobacco)					
Alcoholic beverages (beer, wine, spirits, etc.)	0	5	6	7	8
Cannabis (marijuana, pot, grass, hash, etc.)	0	5	6	7	8
Khat	0	5	6	7	8
Inhalants (nitrous, glue, petrol, paint thinner, etc.)	0	5	6	7	8
Sedatives or sleeping pills (diazepam,)	0	5	6	7	8

<b>Qn .6 Has a friend or relative or anyone else ever expressed concern about your use of these drugs?</b>	No ,never	Yes, in the past 3 month	Yes, but not in the past 3 month
Tobacco products (cigarettes, chewing tobacco)	0	6	3
Alcoholic beverages (beer, wine, spirits, etc.)	0	6	3
Cannabis (marijuana, pot, grass, hash, etc.)	0	6	3
Khat	0	6	3
Inhalants (nitrous, glue, petrol, paint thinner, etc.)	0	6	3
Sedatives or sleeping pills (diazepam,)	0	6	3
<b>Qn.7 Have you ever tried to cut down on using (first Drug, second drug, etc) but failed?</b>			
Tobacco products (cigarettes, chewing tobacco)	0	6	3
Alcoholic beverages (beer, wine, spirits, etc.)	0	6	3
Cannabis (marijuana, pot, grass, hash, etc.)	0	6	3
Khat	0	6	3
Inhalants (nitrous, glue, petrol, paint thinner, etc.)	0	6	3
Sedatives or sleeping pills (diazepam,)	0	6	3



**Amharic version questionnaire**

**ክፍል 1: የመሀበራዊ ና የግል አናኗርን በተመለከተ ቃለ መጠይቅ**

ተ.ቁ	መጠይቅ	ምላሾች
001	ጾታ	0. ወንድ 1. ሴት
002	እድሜ በ አመት	.....
003	የጋብቻ ሁኔታ	1. ያላገባ/ች 2. ያገባ/ች 3. የፈታ/ች 4. የሞተበት/ችበት
004	የመኖሪያ ቦታ	1. ገጠር 2. ከተማ
005	ሀይማኖት	1. ሙስሊም 2. ኦርቶዶክስ 3. ፕሮቴስታንት 4. ካቶልክ 5. ሌላ(ይጠቀስ).....
006	የትምህርት ደረጃ	1. መደበኛ ትምህርት ያልገባ/ች 2. መጀመርያ ደረጃ (1-4) 3. መጀመርያ ደረጃ (5-8) 4. ሁለተኛ ደረጃ (9-12) 5. ከሌጅ እና ከዛ በላይ
007	ስራ	1. የቀን ሰራተኛ 2. ገበሬ 3. የመንግስት ሰራተኛ 4. ነጋዴ 5. ተማሪ 6. የቤት እመቤት 7. የግል ወይም የመንግስት ያልሆነ ድርጅት ስራ 8. ሌላ (.....)
008	የወር ገቢ በአማካይ	_____ ብር
009.	በቤት ውስጥ አብሮዎት የሚኖሩ ሰው ብዛት	-----በቁጥር

**ክፍል 2: መሀበራዊ ድጋፍ መጠንን በተመለከተ ቃለ መጠይቅ**

ተ.ቁ	መጠይቅ	አማራጮች	መልስ
201.	ከባድ ችግር ቢገጥመዎት የሚተማመኑበት ምን ያህል ሰዎች በቅርቡትህ አሉ (አንድ-ብቻ ይምረጡ)	ምንም = 1 አንድ ወይም ሁለት = 2 ከ 3-5 = 3 ከ 5 በላይ = 4	1 2 3 4
202	እርስዎ የምሰሩት ነገር ሰዎችን ምን ያህል ያሳስባችዎል / ግድ ይላቸዎል (አንድ ብቻ ይምረጡ)	ምንም = 1 ትንሽ = 2 አላወቅም = 3 የተወሰነ = 4 ብዙ = 5	1 2 3 4 5
203	ከጎረቤትዎ እርዳታ ለማግኘት ቢፈልጉ ምን ያህል ቀላል ነው (አንድ ብቻ ይምረጡ)	በጣም ከባድ=1 ከባድ=2 ይቻላል=3 ቀላል=4 በጣም ቀላል= 5	1 2 3 4 5

**ክፍል 3: የጭንቀትና ድብርት / ድባቱ መገምገሚያ መጠይቅ**

**ክፍል 3: የጭንቀትና ድብርት / ድባቱ መገምገሚያ መጠይቅ**

ስነልቦና ብዙ በሽታዎች ላይ የራሱ የሆነ ሚና እንዳለው ይታወቃል እናም ሀኪምዎ የሚሰማዎትን ስሜት ካወቁ በደንብ ሊረዱዎት ይችላሉ። ባለፈው ሳምንት የተሰማዎት ትክክለኛ ስሜት መሠረት በማድረግ የጤና ባለሙያዎ ቀጥሎ ለሚጠይቅዎት ጥያቄ ተገቢውን መልስ ይስጡ። በተቻለ መጠን ስመልሱ ብዙ ጊዜ አይወሰዱ፤ ምናልባትም እንደተጠየቁ ወድያውኑ የመጣልዎት መልስ ትክክለኛ ስሜትዎን ሊገልፅ ይችላል

ተ.ቁ	መጠይቆች	አማራጮች	መልስ
301.	የመጨነቅ ወይም የመወጠር ስሜት ምን ያህል ይሰማዎታል?	በጣም ብዙ ጊዜ = 3	0
		ብዙ ጊዜ = 2	1
		አልፎ አልፎ = 1	2
		ምንም አይሰማኝም = 0	3
302.	ቀደም ሲል ያስደስቱዎት የነበሩ ነገሮች አሁን ምን ያህል ያስደስቱዎታል?	አሁንም እንደድሮው ያስደስቱኛል = 0	0
		ከድሮው ትንሽ ቀንሰዋል = 1	1
		በጥቂቱ ያስደስቱኛል = 2	2
		ጭራሽ አያስደስቱኝም = 3	3
303.	አንድ መጥፎ ነገር ሊያጋጥምዎት የተቃረበ የሚመስል የፍርሃት ስሜት ይሰማዎታል?	እጅግ በጣም ይሰማኛል = 3	0
		በጣም ይሰማኛል = 2	1
		በጥቂቱ ይሰማኛል = 1	2
		ምንም አይሰማኝም = 0	3
304.	መሳቅና የነገሮችን አስቂኝ ጎን ማየት ይችላሉ?	አብዛኛውን ጊዜ እችላለሁ = 0	0
		እንደድሮው ባይሆንም እችላለሁ = 1	1
		በጥቂቱ እችላለሁ = 2	2
		ምንም አልችልም = 3	3
305.	ጭንቀትን የሚያጭሩ ሀሳቦች በአእምሮዎ ምን ያህል ይመላለሳሉ?	በጣም ብዙ ጊዜ = 3	0
		ብዙ ጊዜ = 2	1
		አብዛኛውን ጊዜ ባይሆንም አልፎ አልፎ = 1	2
		አንድ አንዴ ብቻ = 0	3
306.	ደስተኛ ነዎት?	ምንም ደስተኛ አይደለሁም = 3	0
		ብዙ ጊዜ ደስተኛ አይደለሁም = 2	1
		ብዙም ባይሆን ደስተኛ ነኝ = 1	2
		አብዛኛውን ጊዜ ስተኛ ነኝ = 0	3
307.	ተረጋግተው መቀመጥ እና ዘና ማለት ይችላሉ?	ሁሌም እችላለሁ = 0	0
		አብዛኛውን ጊዜ እችላለሁ = 1	1
		ብዙውን ጊዜ አልችልም = 2	2
		ምንም አልችልም = 3	3
308.	ስራዎን ስያከናውኑ ወዘተ ፍጥነትዎ	እጅግ በጣም ብዙ ጊዜ = 3	0

	ምን ያህል የቀነሰ ይመስልዎታል ?	በጣም ብዙ ጊዜ = 2	1
		አልፎ አልፎ = 1	2
		ምንም አልቀነሰም = 0	3
309.	ሆድ አከባቢ የሚሰማ የመደንገጥ ወይም የመሸበር ስሜት ይሰማዎታል ?	ምንም አይሰማኝም = 0	0
		አልፎ አልፎ = 1	1
		ብዙ ጊዜ = 2	2
		በጣም ብዙ ጊዜ = 3	3
310.	ለአለባበስዎ ትኩረትን መስጠት አቁመዎል ?	አዎን ምንም ትኩረት እየሰጠዉ አይደለም = 3	0
		የምፈልገዉን ያህል ትኩረት እየሰጠዉ አይደለም = 2	1
		ድሮ ከምሰጠዉ ትኩረት በጥቂቱ ያነሰ ትኩረትን እሰጣለሁ = 1	2
		ሁሌም የምሰጠዉን ትኩረት እሰጣለሁ = 0	3
311.	አንድ ቦታ መሄድ ያለብዎ ይመስል ተረጋግተዉ መቀመጥ ይቸግረዎታል ?	በጣም ብዙ ጊዜ ይቸግረኛል = 3	0
		ብዙ ጊዜ ይቸግረኛል = 2	1
		ብዙም አይቸግረኝም = 1	2
		ምንም አይቸግረኝም = 0	3
312.	መጪ ነገሮችን በደስታ ይጠብቃሉ ?	አዎ ሁሌም በተለመደዉ ወይም በድሮዉ መጠን እጠብቃለሁ = 0	0
		ከድሮዉ ወይም ከተለመደዉ በጥቂቱ ባነሰ መጠን እጠብቃለሁ = 1	1
		ከድሮዉ ወይም ከተለመደዉ ባነሰ መጠን እጠብቃለሁ = 2	2
		ምንም በደስታ አልጠብቅም = 3	3
313.	በድንገት የመደንገጥ ወይም የመሸበር ስሜት ይሰማዎታል ?	በጣም ብዙ ጊዜ ይሰማኛል = 3	0
		ብዙ ጊዜ ይሰማኛል = 2	1
		አልፎ አልፎ ይሰማኛል = 1	2
		ምንም አይሰማኝም = 0	3
314.	በራዲዮ ወይም በቴሌቪዥን ፕሮግራሞች ራስዎን ያስደስታሉ ?	አዎን ብዙ ጊዜ = 0	0
		ብዙም ባይሆን አዎ = 1	1
		አልፎ አልፎ = 2	2
		በጣም አልፎ አልፎ = 3	3

**ክፍል 4 : ከሳምባ ነቀርሳ ህመም ጋር የተያያዘ ቃለ መጠይቅ**

ተ.ቁ	መጠይቅ	ምድብ
401	የህክምናዉ የግዜ መደብ	1. እንቴንስቸ 2. ቀጣይነት
402	የህክምና ምድብ	1. አዲስ 2. ህክምናዉ ከተቋረጠ ቡቃላ የተመለሰ 3. ያገረሻ
403	የህመም ቆይታ: ህመምህ ሳምባ ነቀርሳ መሆኑን ሳይታወቅ የ ነቀርሳ ምልክቶች ምን ያህል ጊዜ ቆዩ?	----- በሳምንታት
404	የሳምባ ነቀርሳ መድሃኒት ህክምና ቆይታ: የሳምባ ነቀርሳ መድሃኒት ከተጀመረበት ቀንጀምሮ እስከ ቃለ መጠይቅ ድረስ ያለዉ ይቆጠራል (ከ መዝገብ ይገኛል)	_____ በሳምንታት / በወር
405	የመድሃኒት የጎረቤት ጉዳት: ( መዝገብ በማየት ወይም በመጠየቅ	1. አለ

	የሚሞላ)	2. የለም
406	ሌላ ለረዥም ጊዜ የሚቆይ ህመም: እንደ ደም ግፊት፣አስም ስኳር ህመም ፣ የሚጥል ህመም ና የመሳሰሉት እንዳለዎት የተረጋገጠ የሚታወቅ ወይም በጤና ባለሙያ የተነገርዎት ነገር ነበረ ?	ካለ ይፃፉ
407	HIV/AIDS	1. አለ 2. የለም
408	ከቤተሰብ ዉስጥ አእምሮ ህመም ያለበት ሰዉ አለ ?	1. አዎ 2. አይደለም
409	BMI ( body mass index)	_____ kg/m <sup>2</sup>

**ክፍል 5 : የመገለል ስሜት መጠን መለኪያ ቃለ መጠይቅ**

ተ.ቁ	መጠይቅ	በጣም እስማማለዉ	እስማማለዉ	በጣም አልስማማም	አልስማማም	remark	
						yes	no
501	ነቀርሳ ካለበዎት ሌሎች ሰዎች ለእርሳ ዝቅ ያለ ግምት አላቸዉ						
502	እርስዎ ነቀርሳ እንዳለበዎት ቢያዉቁ የመሸማቀቅና የሀፍረት ስሜት ይሰማዎታል						
503	እርስዎ ነቀርሳ እንዳለበዎት ስያዉቁ ለራስዎት ዝቅ ያለ ግምት ይሰጣሉ						
504	ነቀርሳ ካለበዎት ሌሎች ሰዎች ሊያገልጉዎት ይችላሉ						
505	ነቀርሳ ቢኖርበዎት ከዳኑ በኋላ ቢሆን እንከን ጎደኛ ለማግኘት ሊችገሩ ይችላሉ						
506	ነቀርሳ ቢኖርበዎት የፍቅር / የትዳር አጋርዎት ወሲባዊ ጊንኑነት ለማድረግ ፍቃደኛ ላትሆን ትችላላች						
507	ነቀርሳ ቢኖርበዎት ከተለያዩ ማህበራዊ ቡድኖች እንድርቁ ሊጠየቁ / ሊደረጉ ይችላሉ						
508	ነቀርሳ ካለበዎት ስላለበዎት የህመም ሁኔታ ለማንም አይናገሩም / ላለመናገርን ይመርጣሉ						
509	ነቀርሳ ካለበዎት ሌሎችን በህመም ልያጠቁ ይችላሉ / ያጠቃሉ						
510	ነቀርሳ ካለበዎት ሌሎች ሰዎች ስለ እርስዎ ቤተሰብ ዝቅ ያለ ግምት አላቸዉ						
511	ነቀርሳ ካለበዎት ለልጆችዎ ችግር ልሆን ይችላል						

**ክፍል 6: የዉጥረት መጠን መለኪያ ቃለ መጠይቅ**

መግለጫ: ከታች የተዘረዘሩ ጥያቄዎች ባለፉት 30 ከናት ዉስጥ በምን ሁኔታ ስየስቡ ና ምን አይነት ስሜት ስሰማቸዉ እንደ ነበረ ይጠይቀዎታል። እያንዳንዱ ጥያቄ መካከል የተወሰነ ልዩነት ስላለ በተናጥል / ለይቶ እንድያዩ እንፈልጋለን። በተቻለ መጠን በፍጥነት ይመልሱ

ተ.ቁ	መጠይቅ	አማራጮች	መልስ
601	ባለፉት 30 ቀናት ውስጥ ያላሰቡት ነገር በመከሰቱ ምን ያህል ጊዜ ተበሳጭቶ ያወቃል?	በፍሱም=0 በፍፁም ማለት ይቻላል=1 አንዳንዴ=2 ብዙ ጊዜ በሚባል ደረጃ=3 ብዙ ጊዜ=4	0 1 2 3 4
602	ባለፉት 30 ቀናት ውስጥ ለህይወትዎ አስፈላጊ የሆኑ ነገሮች መቆጣጠር እንዳልቻሉ ምን ያህል ጊዜ ይሰማዎታል?	በፍሱም=0 በፍፁም ማለት ይቻላል=1 አንዳንዴ=2 ብዙ ጊዜ በምባል ደረጃ=3 ብዙ ጊዜ=4	0 1 2 3 4
603	ባለፉት 30 ቀናት ውስጥ የመበሳጫት ወይም የዉጥረት ስሜት ምን ያህል ጊዜ ተሰምተዎታል?	በፍሱም=0 በፍፁም ማለት ይቻላል=1 አንዳንዴ=2 ብዙ ጊዜ በሚባል ደረጃ=3 ብዙ ጊዜ=4	0 1 2 3 4
604	ባለፉት 30 ቀናት ውስጥ የራስዎን ችግር በራስ ለመፍታት በራስዎት የመተማመን ምን ያህል ይሰማዎታል?	በፍሱም=0 በፍፁም ማለት ይቻላል=1 አንዳንዴ=2 ብዙ ጊዜ በሚባል ደረጃ=3 ብዙ ጊዜ=4	0 1 2 3 4
605	ባለፉት 30 ቀናት ውስጥ ነገሮች እርሶ በምፈልጉት መንገድ እየሄዱ ነዉ የምል ምን ያህል ይሰማዎታል?	በፍሱም=0 በፍፁም ማለት ይቻላል=1 አንዳንዴ=2 ብዙ ጊዜ በሚባል ደረጃ=3 ብዙ ጊዜ=4	0 1 2 3 4
606	ባለፉት 30 ቀናት ውስጥ ነገሮችን ለመፍታት ማድረግ ያለብዎትን ነገር ሳያደርጉ ቀርቶ ራስዎን ምን ያህል ጊዜ አግኝተዎታል?	በፍሱም=0 በፍፁም ማለት ይቻላል=1 አንዳንዴ=2 ብዙ ጊዜ በሚባል ደረጃ=3 ብዙ ጊዜ=4	0 1 2 3 4
607	ባለፉት 30 ቀናት በህይወትዎ የምያበሳጩ ነገሮች ምን ያህል መቆጣጠር ችለውዋል?	በፍሱም=0 በፍፁም ማለት ይቻላል=1 አንዳንዴ=2 ብዙ ጊዜ በሚባል ደረጃ=3 ብዙ ጊዜ=4	0 1 2 3 4
608	ባለፉት 30 ቀናት ውስጥ ነገሮች ከቁጡጥርዎት ዉጪ እንደሆነ ምን ያህል ይሰማዎት ነበረ?	በፍሱም=0 በፍፁም ማለት ይቻላል=1 አንዳንዴ=2 ብዙ ጊዜ በሚባል ደረጃ=3 ብዙ ጊዜ=4	0 1 2 3 4
609	ባለፉት 30 ቀናት ውስጥ ነገሮች ከቁጡጥርዎት ዉጪ በመሆናቸዉ ምክንያት የመበሳጫት ወይም የመናደድ ስሜት ምን ያህል ጊዜ ይሰማዎት ነበረ?	በፍሱም=0 በፍፁም ማለት ይቻላል=1 አንዳንዴ=2 ብዙ ጊዜ በሚባል ደረጃ=3 ብዙ ጊዜ=4	0 1 2 3 4
610	ባለፉት 30 ቀናት ውስጥ ነገሮች ከባድ ናቸዉ መቆጣጠር አይቻልም የሚል ስሜት ምን ያህል ይሰማዎት ነበረ ?	በፍሱም=0 በፍፁም ማለት ይቻላል=1 አንዳንዴ=2 ብዙ ጊዜ በሚባል ደረጃ=3 ብዙ ጊዜ=4	0 1 2 3 4

**ክፍል 7: የተለያዩ አደንዛዥ ወይም አነቃቂ እፅዎች አጠቃቀም በተመለከተ ቃለ መጠይቅ**

መግቢያ: በህይወት ዘመንዎ እና ባለፉት ሶስት ወራት ውስጥ እነዚህ እፅዎች ስለመጠቀምዎ ልምድ ጥያቄዎችን እጠይቀዎታለሁ። በሃኪም የታዘዘዉን መድሃኒት አንመዘግብም፤ ይሁን እንጂ ከታዘዘለዎት ምክንያት ዉጪ ና ከትእዛዝ በተለየ ድግግሞሽ ወይም መጠን ወስዶ ከሆነ ያሳወቁን። ህጋዊ ያልሆኑ እፅዎች አጠቃቀም በተመለከተ ብናወቅም በጥብቅ ምስጥራዊ እንደምንዝ እባክዎት እርግጠኛ ይሁኑ።

**መመሪያ: መልሱን በትክክል ያክብቡ**

**መግለጫ: ከ 702- 705 ላሉት መጠይቆች**

Never (በፍጹም): ማለት ባለፉት 3 ወራት ውስጥ በጭራሽ አልተጠቀመም/ ተጠቅሞ አያዉቁም ማለት ነዉ

Once or twice (አንዴ ወይም ሁለቴ)=ባለፉት 3 ወራት ውስጥ ከ 1- 2 ጊዜ ከተቀመ/ከተጠቀመች

Monthly (በየወሩ):ባለፉት 3 ወራት ውስጥ በወር ከ 1-3 ጊዜ ከተጠቀመ/ች

Weekly (በየሳምንቱ):ባለፉት 3 ወራት ውስጥ በሳምንት ከ 1-4 ጊዜ ከተጠቀመ/ች

Daily or almost daily (በየቀኑ ወይም በየቀኑ በሚባል ደረጃ):ባለፉት 3 ወራት ውስጥ በሳምንት ከ 5-7 ቀን ከተጠቀመ/ች

መ.ቁ 701: በህይወት ዘመንዎ፣ ከሚከተሉት አደንዛዥ/ አነቃቂ ዕቃዎች መካከል የትኞቹን ተጠቅመዋል? (ለእክምና ከሚሰጡ ውጪ ያሉትን)	መልስ				
	አዎ (3)	አይደለም (0)			
የትንባሆ ምርቶች (ስጋራ...)	3	0			
አልኮሆል መጠጦች (ቢራ፣ጠጅ፣ጠላውዘተ)	3	0			
ካናቢስ (ማርወና፣ሀሺሽ፣ጋንጃ)	3	0			
ጫት	3	0			
የእንቅልፍ ክኒን (ድያዜ፣ፓም...)	3	0			
ሌላ ከላ ይጠቀስ ( ለምሳሌ እንደ አሲኖች).....	3	0			
<b>ማሳሰቢያ: ለሁሉም የተጠቀሱት እፅዎች መልሱ አይደለም ከሆነ በደንብ ያረጋግጡ: “ት/ት ቤት እያለእንክዋን?”</b> • የ701 መጠይቅ መልስ ተጠቅሞ የማያውቅ ከሆነ መጠይቁን ያቁሙ • የ701 መጠይቅ መልሱ አዎ ከሆነ መጠይቅ 702 ይቀጥሉ					
<b>መ.ቁ 702. ባለፉት 3 ወራት ውስጥ ከታች የተዘረዘሩትን እፅዎች በምን ያህል ድግግሞሽ ተጠቅመዋል?</b>	በፍጹም=0	አንዴ ወይም ሁለት=2	በየወሩ=3	በየሳምንቱ=4	በየቀኑ ወይም በየቀኑ በሚባል ደረጃ=6
የትንባሆ ምርቶች (ስጋራ...)	0	2	3	4	6
አልኮሆል መጠጦች (ቢራ፣ጠጅ፣ጠላውዘተ)	0	2	3	4	6
ካናቢስ (ማርወና፣ሀሺሽ፣ጋንጃ)	0	2	3	4	6
ጫት	0	2	3	4	6
የእንቅልፍ ክኒን(ድያዜ፣ፓም)	0	2	3	4	6
ሌላ ካለ ይጠቀሱ ( ለምሳሌ እንደ አሲኖች).....	0	2	3	4	6
<b>ማሳሰቢያ:መጠይቅ ቀጡር 702 ስር ለተዘረዘሩት ሁሉ መልሱ በፍጹም ከሆነ ወደ ጥያቄ ቁጥረ 6 ይለፉ</b> • ለጥያቄ ቁጥር 702 ባለፉት 3 ወራት ውስጥ ከተጠቀመ/ች መጠይቅ ቁጥር 703፣704 እና 705 ይቀጥሉ። • መጠይቅ ቁጥር 701 ስር ለተጠቀሱት ተጠያቂ አዎ ለመለስ ሁሉ 706 እና 707 ይጠይቁ					
<b>መ.ቁ 703. ባለፉት 3 ወራት እነዚህ እቃዎች ለመጠቀም ምን ያህል ጉጉት/ ጠንካራ ፍላጎት ነበርዎት?</b>	በፍጹም=0	አንዴ ወይም ሁለት=3	በየወሩ=4	በየሳምንቱ=5	በየቀኑ ወይም በየቀኑ በሚባል ደረጃ=6
የትንባሆ ምርቶች (ስጋራ...)	0	3	4	5	6
አልኮሆል መጠጦች(ቢራ፣ጠጅ፣ጠላውዘተ)	0	3	4	5	6

ካናቢስ (ማርወና፣ሀሺሽ፣ጋንጃ)	0	3	4	5	6
ጫት	0	3	4	5	6
የእንቅልፍ ክኒን(ድያዜጋም)	0	3	4	5	6
ሌላ ካለ ይጠቀስ( ለምሳሌ እንደ አሲኖች).....	0	3	4	5	6
<b>ሙ.ቁ 704. ባለፉት 3 ወራት እነዚህ እቃዎች መጠቀምህ ምን ያህል ለጤና፣ለመሀበራዊ ፤ እኮኖምያዊና ለወንጀል ችግሮች አጋልጠሁዋል / ዳርጎታል?</b>	በፍጹም=0	አንዴ ወይም ሁለት=4	በየወሩ=5	በየሳምንቱ=6	በየቀኑ ወይም በየቀኑ በሚባል ደረጃ=7
የትንባሆ ምርቶች (ስጋራ...)	0	4	5	6	7
አልኮሆል መጠጦች(ቢራ፣ጠጅ፣ጠላወዘተ)	0	4	5	6	7
ካናቢስ (ማርወና፣ሀሺሽ፣ጋንጃ)	0	4	5	6	7
ጫት	0	4	5	6	7
የእንቅልፍ ክኒን(ድያዜጋም)	0	4	5	6	7
ሌላ ካለ ይጠቀስ ( ለምሳሌ እንደ አሲኖች).....	0	4	5	6	7
<b>ሙ.ቁ 705. ባለፉት 3 ወራት ዉስጥ በሚጠቀሙት አደንዛዥ/ አነቃቂ እፅ ምክንያት ይጠበቅቦት የነበረውን ሀላፊነት እንዳይወጡ በምን ያህል ጊዜ መጠን ጫና አሳድሮታል?</b>	በፍጹም=0	አንዴ ወይም ሁለት=5	በየወሩ=6	በየሳምንቱ=7	በየቀኑ ወይም በየቀኑ በሚባል ደረጃ=8
የትንባሆ ምርቶች (ስጋራ...)	0	5	6	7	8
አልኮሆል መጠጦች(ቢራ፣ጠጅ፣ጠላወዘተ)	0	5	6	7	8
ካናቢስ (ማርወና፣ሀሺሽ፣ጋንጃ)	0	5	6	7	8
ጫት	0	5	6	7	8
የእንቅልፍ ክኒን(ድያዜጋም)	0	5	6	7	8
ሌላ ካለ ይጠቀስ ( ለምሳሌ እንደ አሲኖች).....	0	5	6	7	8
<b>ሙ. ቁ 706፡ ጎደኛዎ፣ ዘመድዎት ወይም ሌላ ሰዉ የእርስዎ እነዚህ እፅዎች መጠቀምን በተመለከተ እንዳሳሰባችዉ ነግረዎት ያውቃሉ?</b>	አይ በፍጹም=0		አዎ ባለፈዉ 3 ወራት ዉስጥ=6	አዎ ነገር ግን ባለፉት 3 ወራት ዉስጥ አይደለም=3	
ትንባሆ ምርቶች (ስጋራ...)	0		6		3
አልኮሆል መጠጦች(ቢራ፣ጠጅ፣ጠላወዘተ)	0		6		3
ካናቢስ (ማርወና፣ሀሺሽ፣ጋንጃ)	0		6		3
ጫት	0		6		3
የእንቅልፍ ክኒን(ድያዜጋም)	0		6		3
ሌላ ካለ ይጠቀስ ( ለምሳሌ እንደ አሲኖች).....	0		6		3

ሙ. ቁ 707 የሚጠቀሙትን አደንዛዥ ወይም አጎቃቂ እጅ ለማቆም ወይም ለማቋረጥ ሞክረው ሳይሳካሉት ቀርቶ ያውቃሉ?	አይበፍዱም=0	አዎ ባለፈው 3 ወራት ውስጥ=6	አዎ ነገር ግን ባለፉት 3 ወራት ውስጥ አይደለም=3
ትንባሆ ምርቶች (ስጋራ...)	0	6	3
አልኮሆል መጠጦች(ቢራ፣ጠጅ፣ጠላወዘተ)	0	6	3
ካናቢስ (ማርወና፣ሀሺሽ፣ጋንጃ)	0	6	3
ጫት	0	6	3
የእንቅልፍ ክኒን(ድያኬፖ ም)	0	6	3
ሌላ ካለ ይጠቀስ ( ለምሳሌ እንደ አሲኖች).....	0	6	3
ሙ. ቁ 708 በመርፌ የሚሰጡ መድኃኒቶችን ተጠቅመው ያውቃሉ ? (ለእኩምና ከሚሰጡ ውጪ ያሉትን)	አይ=0	አዎ, ባለፉት ሦስት ወራት ውስጥ=2	አዎ, ግን ባለፉት 3 ወራት ውስጥ አይደለም=1

**Afaan Oromo version questionnaire**

Gaaffilee qorannoo dhibee sammuu gadda miira gad fagoo of keessa qabu, dhippinaa fi wantoota isaaniin walqabatan namoota dhibee cawwee sombaa qaban Kan deddebi’anii yaalaman qorachuudhaaf qophaa’e

Qajeelfama: gaafiin Kun kutaa torbatti qoodamee kan qophaa’e yommuu ta’u xumuruuf daqqiqa 20-30 isinitti fudhachuu danda’a

kutaa 1ffaa: gaaffilee waa’ee odeeffannoo dhuunfaafi maatii

T.la	Gaaffilee	filannoowwan
001	saala	0. Dhiira 1. Dhalaa
002	Umriin keessan meeqa? Waggaadhaan	-----
003	Haala fuudhaaf heerumaa	1. Kan hin fuudhin/kan hin heerumin 2. kan fuudhe/kan heerumte 3. kan hiike /kan hiikte 4. kan jalaa duute/kan irraa du’e
004	Bakka jireenyaa	1. Baadiyyaa 2. Magaalaa
005	Amantaan keessan maali?	1. Musliima 2. Ortoodoksii 3. Protestaantii 4. Kaatoolikii 5. kan biraa caqasaa-----



006	Sadarkaa barnootaa	1. Barnoota idilee kan hin qabne 2. Sadarkaa jalqabaa(1-4) 3. Sadarkaa jalqabaa(5-8) 4. Sadarkaa 2ffaa( 9-12) 5. kollejjiiifi achii ol
007	Hojiin keessan maali?	1. Hojjataa guyya guyyaa 2. qotee bulaa 3. Hojjataa mootummaa 4. Daldalaa 5. barataa 6. Haadha manaa 7. hojii dhuunfaa/ miti mootummaa
008	Ji'atti giddu galeessaan galiin keessan birrii itiyoophiyaatti meeqa ta'a	Birrii.....
009	Mana keessa baayinna nama wajjiin jiraattanii	-----Lakkoofsaan

### KUTAA 2 GAAFILEE GARGAARSA HAWAASUMMAA ILAALCHISEE

T.lak	gaafilee	Filannowwan	deebii
201	Yeroo rakkoon cimaan isin qunnamutti na cinaa dhaabbachuu danda'an jettee kan itti abdattu/ kan lakkaawwattu namoota hangamtu jiru? (tokko filadhu)	Homaa = 1 Tokko ykn lama = 2 3-5 = 3 5 oli = 4	1 2 3 4
202	namoonni waan isin hojjattaniif xiyyeeffannoo hangamii kennuu? (tokko filadhu)	Homaa = 1 xinnoo = 2 Na mamsiisa = 3 Hamma ta'e = 4 Baay'ee = 5	1 2 3 4 5
203	yeroo barbaaddanitti gargaarsa ollaa irraa argachuuf hangam isiniif salphaadha?( tokko filadhu)	Baay'ee ulfaataadha = 1 ulfaataadha = 2 Ni danda'ama = 3 Salphaa = 4 Baay'ee salphaa = 5	1 2 3 4 5

### KUTAA 3: GAAFILEE MIIRA GADDA GAD FAGOO FI DHIPHINA ILAALCHISEE

Hub: Torbaan darbe keessa waan isinitti dhagahame bu'uura godhachuun gaafilee armaan gaditti ogeessi isin gaafatuuf deebii sirrii kennaa. Akkuma gaafatamtaaniin deebiin isinii dhufe waan keessatti isinitti dhagahamu sirritti ibsuu waan danda'uuf hamma danda'ameen saffisaan deebisaa

T.la	gaafii	Filannoowwan	deebii
301	<i>Cinqiin ykn tasgabii dhabuun sitti dhagahamaa turee?</i>	<i>Gonkumaa natti hin dhagahamne</i>	0
		<i>Darbee darbee natti dhagahama ture</i>	1
		<i>Yeroo baay'ee natti dhagahama ture</i>	2
		<i>Harka irra caalu/ caalmaatti natti dhagahama</i>	3
302	<i>Asiin dura wanti si gammachiisu amma si</i>	<i>Eeyyee sirriitti na gammachiisa</i>	0

	<i>gammachiisaa?</i>	<i>Hammas baay'ee nan gammahiisu</i>	<i>1</i>
		<i>Xinnooshee qofa na gammachiisa</i>	<i>2</i>
		<i>Goonkumaa nan gammachiisu</i>	<i>3</i>
<i>303</i>	<i>Wanti ajaan /yaraan akka waan si qunnamuuf jedhuutti/deemuutti miirri sodaa sitti dhagahamaa?</i>	<i>Goonkumaa natti hin dhagahamu</i>	<i>0</i>
		<i>Xinnooshee, garuu na hin yaaddessu</i>	<i>1</i>
		<i>Eeyyen, garuu hammas na hin yaaddessu</i>	<i>2</i>
		<i>Baay'ee baay'ee natti dhagahamaa ture</i>	<i>3</i>
<i>304</i>	<i>Wantoota gara garaa irraa kutaalee nama gammachiisan ilaaluu fi ittiin gammaduu ni dandeessaa?</i>	<i>Eeyyee akkuma dura yeroo hunda turetti</i>	<i>0</i>
		<i>Eeyyen, garuu amma hammas miti</i>	<i>1</i>
		<i>dhugumatti amma baay'ee hin danda'u</i>	<i>2</i>
		<i>Goonkumaa hin danda'u</i>	<i>3</i>
<i>305</i>	<i>Yaadonni nama yaaddessan sammuu kee keessa hammam deddeebi'u ture</i>	<i>Altokko tokko qofa</i>	<i>0</i>
		<i>yeroo baay'ee ta'uu baatus yeroo gara yerootti/ darbee darbee</i>	<i>1</i>
		<i>yeroo baay'ee</i>	<i>2</i>
		<i>Baay'isee yeroo baay'ee</i>	<i>3</i>
<i>306</i>	<i>Gammachuun sitti dhagahamaa?</i>	<i>yeroo baay'ee natti dhagahama</i>	<i>0</i>
		<i>altokko tokko natti dhagahama</i>	<i>1</i>
		<i>yeroo baay'ee natti hin dhagahamu</i>	<i>2</i>
		<i>Goonkumaa natti hin dhagahamu</i>	<i>3</i>
<i>307</i>	<i>Tasgabbooftee taa'uu fi miirri boqonnaa sitti dhagahamaa turee?</i>	<i>Sirriitti/guutumatti natti dhagahama ture</i>	<i>0</i>
		<i>yeroo baay'ee natti dhagahama ture</i>	<i>1</i>
		<i>Yeroo baay'ee natti hin dhagahamu</i>	<i>2</i>
		<i>Gonkumaa natti hin dhagahamu</i>	<i>3</i>
<i>308</i>	<i>Hojii yeroo hojjattanii fi wantoota biraa kana fakkaatan keessatti saffisni kankee hammamiin akka waan hirdhateetti sitti dhagahama?</i>	<i>guutummaatti jechuun hamma danda'amutti</i>	<i>3</i>
		<i>baay'isee yeroo baay'ee</i>	<i>2</i>
		<i>altokko tokko</i>	<i>1</i>
		<i>Goonkumaa</i>	<i>0</i>
<i>309</i>	<i>Garaacha kee keessa akka waan billaachi jiruutti miirri sodaa fi rifannaa sitti dhagahamaa</i>	<i>gonkumaa</i>	<i>0</i>
		<i>darbee darbee</i>	<i>1</i>
		<i>baay'ee</i>	<i>2</i>
		<i>baay'isee baay'isee</i>	<i>3</i>
<i>310</i>	<i>Haala uffannaa keetiif xiyyeeffannaa kennuu keessatti fedhii dhabdee turtee?</i>	<i>sirriitti/guutumatti fedhii dhabeera</i>	<i>3</i>
		<i>hamma dura xiyyeeffannaa kennuuf irraa baay'ee kan gad bu'e ture</i>	<i>2</i>
		<i>akka duraanii miti hamma ta'e gad bu'eera</i>	<i>1</i>
		<i>akkuma duraatti xiyyeeffannaa kennaaf</i>	<i>0</i>
<i>311</i>	<i>Iddoo ta'e deemu akka waan qabduutti /sirraa eegamuutti miira tasgabbii dhabdee turtee?</i>	<i>baay'isee yeroo baay'ee tasgabbii dhaba</i>	<i>3</i>
		<i>baay'ee na rakkisa</i>	<i>2</i>
		<i>baay'ee nan rakkisu</i>	<i>1</i>
		<i>Gonkumaa nan rakkisu</i>	<i>0</i>
<i>312</i>	<i>Wantoota gara fuulduraatti dhufan/jiran gammachuun simachuu/eeguu dandeessa turtee?</i>	<i>eeyyen akkuma asiin duraatti</i>	<i>0</i>
		<i>eeyyen garuu akka asiin duraarraa kan gad bu'eedha</i>	<i>1</i>
		<i>sirriitti / guutumatti kan asiin duraa irraa haala gad bu'een</i>	<i>2</i>
		<i>Gonkumaa gammachuun simachuu hin</i>	<i>3</i>

		<i>dandeenye</i>	
313	<i>Torban darbe keessa Tasuma miirri sodaa sitti dhagahamaa turee?</i>	<i>gonkumaa</i>	0
		<i>Eeyyen, garuu yeroo baay'ee miti</i>	1
		<i>yeroo baay'ee</i>	2
		<i>baay'ee baay'ee</i>	3
314	<i>kitaabaan ykn sagantaa raadiyoo/televijiiniitiin of gammachiisuu ni dandeettaa</i>	<i>yeroo baay'ee</i>	0
		<i>altokko tokko</i>	1
		<i>yeroo baay'ee miti</i>	2
		<i>baay'ee yeroo muraasa</i>	3

**Kutaa 4: Gaafilee haala yaala cawwee /daranyoo sombaa ilaalchisee**

<i>T.la</i>	<i>gaafiilee</i>	<i>deebii</i>
401	Yeroo yaalaa dhukkubsataan keessatti argamu	1. <i>Yeroo ciminaa/jabeenya keessa</i> 2. <i>Yeroo Itti fufiinsaa keessa</i>
402	Ramaddii yaalaa	1. <i>haarawa</i> 2. <i>Addaan kutee kan eegale</i> 3. <i>Kan irra deebiin yaalamaa jiru</i>
403	Turtii dhukkubaa: Dhukkubni kankee cawwee sombaa akka ta'e osoo hin beekin dura mallattoon dhukkubichaa hammam sirra ture?	----- <i>Torbeedhaan</i>
404	Turtii qoricha yaala cawwee: guyyaa qorichi eegalame irraa kaasee hanga guyyaa gaafiif deebiin kun taasifameetti lakkaayama( galmee irraa argama)	----- <i>Torbeedhaan/ji'aan</i>
405	Miidhaa cinaa qorichaa / side effect of anti- TB : Gaafachuun ykn galmee ilaaluun guutama	1. <i>Eeyyen</i> 2. <i>Lakki hin jiru</i>
406	Dhukkuba biraa kan yeroo dheeraaf turu: asiin dura dhukkuba yeroo dheeraaf turu kan akka dhiibbaa dhiigaa, asmii, dhibee sukkaaraa, gaggabdo akka qabdu sitti himamee ykn sirratti argamee beekaa?	<i>Yoo jiraate barreessi</i>
407	HIV/AIDS galmee ilaaluun guutama	1. <i>Eeyyen</i> 2. <i>Lakki</i>
408	Maatii kee keessa namni dhukkuba sammuu qabu jiraa?	1. <i>Eeyyen</i> 2. <i>Miti</i>
409	BMI (body mass index)	_____ $kg/m^2$

**KUTAA 5: Gaafilee Looga Dhukkuba Cawween/ Daranyoon Wal Qabatu Ilaalchisee. HUB:** akka himaatti erga dubbifameen booda eeyyen ykn lakki/miti jechuun akka deebisan gaafatamtoota hubachiisaa

T.lak	gaafilee	Sirriitti amana/f udha	Nan aman a/fud ha	Sirriitti dida/morm a	Nan dida/ morma	deebii	
						eey ye n	la kk i
501	dhibee cawwee/daranyoo yoo qabaatte namni biraa gad buusee si ilaala/ gatii xiqqaa siif kenna/si xinneessa						
502	cawwee akka qabdu yoo irra gahame/ beekte miira saalfiif qaaniitu sitti dhagahama						
503	cawwee akka qabdu yoo beekte gad buuftee of ilaalta						
504	cawwee yoo qabaatte namni biraa ofirraa si fageessa/adda si baasa						
505	cawwee yoo qabaatte erga fayyitee boodayyuu osoo ta'ee kaadhimaa argachuuf rakkachuu dandeetta						
506	cawwee yoo qabaatte kaadhimaan kankee walqunnamtii saalaa si wajjiin gochuu diduu dandeessi						
507	cawwee yoo qabaatte garee hawaasaa garaagaraa irraa akka fagaattu taasifamuu/ gaafatamuu dandeetta						
508	cawwee yoo qabaatte waa'ee isaa nama tokkoofuu hin himtu/ibsitu						
509	dhibee cawwee yoo qabaatte nama biraa kanaaf saaxiluu/ isaan miidhuu dandeetta						
510	cawwee yoo qabaatte namni biraa maatii kee gad buusee ilaala						
511	cawwee yoo qabaatte ijoollee keetiif rakkoo ta'uu danda'a						

#### KUTAA 6: GAAFILEE HAMMA CINQII/ DHIPPINAA ILAALCHISEE

Gaafileen armaan gadii kunniin ji'a darbe keessa haala ati ittiin yaadaa turtee fi waan sitti dhagahamaa ture si gaafata. Tokkoo tokkoo gaafii keessatti hammam takka haala sanaan akka yaaddeefi sitti dhagahame gaafatamta. Tokkoo tokkoo isaanii gidduu garaagarummaa xinnaan waan jiruuf adda akka ta'etti akka ati laaltu barbaadna. Hamma danda'ameen Kan irra caalaatti deebii sitti fakkaate ariitiidhaan deebisuuf yaali

lak	gaafilee	Filannoowwann	deebii	
601	guyyoota soddoman darbe keessa wanti ati hin yaadin argamuu isaatiin hammam takka miirri aarii/dallansuu sitti dhagahame?	Gonkumaa = 0      Goonkumaa jechuun hamma danda'amutti = 1      Altokko tokko = 2      Baay'ee = 3      baay'ee baay'isee = 4	0	1
602	guyyoota soddoman darbe keessa jireenya kee keessatti wanta baay'ee barbaachisaa ta'e too'achuu hin	Gonkumaa = 0      Goonkumaa jechuun hamma danda'amutti = 1      Altokko tokko = 2      Baay'ee = 3      baay'ee baay'isee = 4	0	1

	dandeenye miirri jedhu hammam sitti dhagahame?			4	
603	miirri cinqii ykn tasgabbii dhabuu hammam sitti dhagahame	Gonkumaa = 0 danda'amutti = 1 3 baay'ee baay'isee = 4	Goonkumaa jechuun hamma Altokko tokko = 2 Baay'ee = 3	0 2 4	1 3
604	rakkina dhuunfaan sirra gahu akka too'achuu dandeessu miirri ofitti amanamummaa hangam sitti dhagahama ture?	Gonkumaa = 0 danda'amutti = 1 3 baay'ee baay'isee = 4	Goonkumaa jechuun hamma Altokko tokko = 2 Baay'ee = 3	0 2 4	1 3
605	Wantootni hunduu karaa ani barbaadu irra deemaa jiru kan jedhu hammam sitti dhagahama?	Gonkumaa = 0 danda'amutti = 1 3 baay'ee baay'isee = 4	Goonkumaa jechuun hamma Altokko tokko = 2 Baay'ee = 3	0 2 4	1 3
606	yeroo hammamii Wantoota silaa too'achuu qabdu otoon too'atin haftee of argite	Gonkumaa = 0 danda'amutti = 1 3 baay'ee baay'isee = 4	Goonkumaa jechuun hamma Altokko tokko = 2 Baay'ee = 3	0 2 4	1 3
607	Aarii hammam takka too'achuu dandeessee jirta	Gonkumaa = 0 danda'amutti = 1 3 baay'ee baay'isee = 4	Goonkumaa jechuun hamma Altokko tokko = 2 Baay'ee = 3	0 2 4	1 3
608	Wantootni hundi akka waan xumura irra gahaniitti/ akka waan fiixee irra geesseetti hammam sitti dhagahame	Gonkumaa = 0 danda'amutti = 1 3 baay'ee baay'isee = 4	Goonkumaa jechuun hamma Altokko tokko = 2 Baay'ee = 3	0 2 4	1 3
609	Wantoonni ta'aa jiran too'annoo keetiin ala sababaa ta'uutiin hammam aarte ykn dallante	Gonkumaa = 0 danda'amutti = 1 3 baay'ee baay'isee = 4	Goonkumaa jechuun hamma Altokko tokko = 2 Baay'ee = 3	0 2 4	1 3
610	Muudannoon cimuu irraan kan ka'e too'achuu hin dandeenye kan jedhu hammam sitti dhagahama	Gonkumaa = 0 danda'amutti = 1 3 baay'ee baay'isee = 4	Goonkumaa jechuun hamma Altokko tokko = 2 Baay'ee = 3	0 2 4	1 3

## **KUTAA 7: Gaafilee Itti Fayyadama Wantoota Adda Addaa Araada Nama Qabsiisan Waliin Walqabate**

Hub: Armaan gaditti haala itti fayyadama wantoota garaa garaa araada Nama qabsiisan Kan jireenya kee keessatti fi ji'oota sadan darbanii si gaafata. Qorichoota mana yaalaa irraa ogeessaan ajajaman hin dabalatu. Garuu haala itti siif ajajameen ala yoo fudhattee fi sababaa siif ajajameeniin alatti fudhattee beekta yoo ta'e natti himta. Itti fayyadama qorichoota seeraan hin hayyamamnee ilaalchisee ragaan ati naaf kennitu iccitiin siif qabama.

IBSA: gaafii lakk. 702- 705 tiif hiikkaan isaa akka armaan gadiiti.

- ✚ **Never ( gonkumaa): jechuun ji'oota sadan darban keessa goonkumaa fayyadamee/tee hin beeku/tu**
- ✚ **Once/ Twice (Yeroo 1-2):- jechuun ji'oota sadan darban keessa yeroo 1-2 tti yoo fayyadame/te**

- ✚ Monthly (Ji'atti/ ji'aan ):- ji'oota sadan darban keessa ji'a keessatti yeroo 1-3 yoo fayyadame /te
- ✚ Weekly (Torbett/torbeedhaan):- ji'oota sadan darban keessa torbetti yeroo 1-4 yoo fayyadame/te
- ✚ Daily or almost daily (Guyyaa guyyaan ykn guyyaa guyyaan jechuun hamma danda'amutti):- ji'oota sadan darban keessa torbetti guyyaa 5-7tti yoo fayyadame/te

**waa'ee fayyadama wantoota araada nama qabsiisan**

701	Umrii keessan kessatti, wantoota araada nama qabsiisan kan kanatti aanan fayyadamtanii beektuu?	lakki	eeyyee
	oomishaalee tamboo (sigaaraa, tamboo alaaftamuu,.fi kkf)	0	3
	dhugaatii alkoolii (biiraa, wayinii, fi kkf.)	0	3
	kaanaabiis (maariwaana,hashishii fi kkf.)	0	3
	Caatii	0	3
	Kiniina hirribaa (diyaazepaam fi kkf.)	0	3
	kan biroo ( fkn kan fuunfatamu fi kkf).....	0	3

**Deebii kee yoo lakki ta'e gaafii fi deebii dhaabi. Yoo deebii kee eeyyee ta'e gara gaafii lakk 702 tti darbi.**

702	wantoota armaan gadii kanneen ji'oota sadan darban keessatti irra deddeebii hangamiin fayyadamtanii?	Gonkumaa	yeroo 1-2	ji'atti	torbettii	guyyaa guyyaan
	oomishaalee tamboo (sigaaraa, tamboo alanfatamu,.fi kkf)	0	2	3	4	6
	dhugaatii alkoolii (biiraa, wayinii, fi kkf.)	0	2	3	4	6
	kaanaabiis (maariwaana,hashishii fi kkf.)	0	2	3	4	6
	Caatii	0	2	3	4	6
	Kiniina hirribaa (diyaazepaam fi kkf.)	0	2	3	4	6
	kan biroo( fkn kan fuunfatamu fi kkf).....	0	2	3	4	6

**Deebii gaaffii 702 goonkumaa yoo ta'e gara gaafii lakk.706tti darbi. Wantoota gaafii lakk.702 jalatti tarreffaman keessaa ji'oota sadan darban keessatti kan fayyadaman yoo jiraate gara gaafii lakk703,704 fi 705tti darbi.**

703	Ji'oota sadan darban keessati fedhiin barbaacha fayyadama wantoota armaan gadii hangam jira turee?	Gonkumaa	yeroo 1-2	ji'atti	torbetti	guyyaa guyyaan
	oomishaalee tamboo (sigaaraa, tamboo alanfatamu fi kkf)	0	3	4	5	6
	Dhugaatii alkoolii (biiraa, wayinii fi kkf.)	0	3	4	5	6
	Kaanaabiis (maariwaanaa, hashiishii fi kkf.)	0	3	4	5	6
	Caatii	0	3	4	5	6
	Kiniina hirribaa (diyaazepaam, kkf.)	0	3	4	5	6
	kan biroo( fkn kan fuunfatamu fi kkf).....	0	3	4	5	6

70 4	Ji'oota sadan darban keessatti sababaa wantoota armaan gadii fayyadamuu keetiin rakkoo fayyaa, hawaasummaa, seeraa ykn maallaqaa hangamiif saaxilamte?	Gonkuma	yeroo 1-2	ji'atti	Torbetti	guyyaa guyyaan
	oomishaalee tamboo (sigaaraa, tamboo alanfatamu fi kkf)	0	4	5	6	7
	Dhugaatii alkoolii (biiraa, wayinii fi kkf.)	0	4	5	6	7
	Kaanaabiis (maariwaanaa, hashiishii fi kkf.)	0	4	5	6	7
	Caatii	0	4	5	6	7
	Qoricha/kiniina hiribaa (diyaazepaam, kkf.)	0	4	5	6	7
	kan biroo( fkn kan fuunfatamu fi kkf).....	0	4	5	6	7
70 5	Ji'oota sadan darban keessatti sababaa wantoota armaan gadii fayyadamuu keetiin hangam hojii sirraa eeggamu otoo hin hojjatin hafte?	gonkumaa	yeroo 1-2	ji'atti	torbettii	guyyaa guyyaan
	Oomishaalee tamboo (sigaaraa, tamboo alanfatamuu fi kkf)					
	Dhugaatii alkoolii (biiraa, wayinii fi kkf.)	0	5	6	7	8
	Kaanaabiis (maariwaanaa, hashiishii fi kkf.)	0	5	6	7	8
	caatii	0	5	6	7	8
	Kiniina hiribaa (diyaazepaam fi kkf.)	0	5	6	7	8
	kan biroo( fkn kan fuunfatamu fi kkf).....	0	5	6	7	8
70 6	Hiriyyoonni, maatii fi firoonni kee waa'ee itti fayyadama kankee ilaalchisanii yaaddoo isaanii siif ibsanii beekuu	gonkumaa	eeyyee darban kessa	ji'a 3	eeyyeen garuu ji'a 3 darban keessaa miti	
	Oomishaalee tamboo (sigaaraa, tamboo alanfatamuu, fi kkf)	0	6		3	
	Dhugaatii alkoolii (biiraa, wayinii fi kkf.)	0	6		3	
	Kaanaabiis (maariwaanaa, hashiishii fi kkf.)	0	6		3	
	Caatii	0	6		3	
	Kiniina hiribaa (diyaazepaam fi kkf.)	0	6		3	
	kan biroo( fkn kan fuunfatamu fi kkf).....	0	6		3	
70 7	Itti fayyadama wantoota armaan gadii kana dhaabuuf yaaltee garuu otoo siin milkaayin haftee beekaa?	gonkumaa	eeyyee darban keessa	ji'a 3	eeyyeen garuu ji'a 3 darban keessaa miti	
	oomishaa tamboo (sigaaraa, tamboo alanfatamuuf kkf)	0	6		3	
	Dhugaatii alkoolii (biiraa, wayinii fi kkf)	0	6		3	
	Kaanaabiis (maariwaanaa, hashiishii fi kkf.)	0	6		3	
	caatii	0	6		3	
	Kiniina hiribaa (diyaazepaam fi kkf)	0	6		3	
	kan biroo( fkn kan fuunfatamu fi kkf).....	0	6		3	
70 8	<b>Wantoota lilmoon fudhataman fudhattee beektaa?</b>	Gonkumaa= 0	eeyyee darban kessa = 2	ji'a 3	eeyyeen garu ji'a 3 darban kessaa miti = 1	

