DEPRESSION AND ASSOCIATED FACTORS AMONG CONFIRMED PREGNANT WOMEN ATTENDING ANTENATAL CLINIC AND UNCONFIRMED PREGNANT WOMEN WHO ARE VISITORS OF INPATIENTS AT JIMMA UNIVERSITY MEDICAL CENTER, SOUTHWEST ETHIOPIA, 2018:

AN INSTITUTIONAL BASED COMPARATIVE CROSS SECTIONAL STUDY

INSTITUTE OF HEALTH FACULTY OF MEDICAL SCIENCE

DEPARTMENT OF PSYCHIATRY

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A RESEARCH THESIS TO BE 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.

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JIMMA, ETHIOPIA

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Abstract

Background: *Depression is a leading cause of global disability and the second leading cause of global disease burden among people 15–44 years of age. Depression is also the most common mental health disorder affecting women of childbearing age. Depression in pregnancy has adverse health outcomes for mothers and children. The magnitude and risk factors of maternal depression among confirmed pregnant in comparison to unconfirmed pregnant women is not known in developing countries, especially in Ethiopia.*

Objectives: *This study aimed to assess the prevalence of depression and its associated factors among confirmed pregnant women attending antenatal clinic and unconfirmed pregnant women who are visitors of inpatients at Jimma University Medical Center, Southwest Ethiopia, 2018.* ***Methods:*** *An institutional based comparative cross-sectional study was conducted at Jimma University Medical Center among 119 confirmed pregnant and 119 unconfirmed pregnant women selected by consecutive sampling technique from June 1- 30, 2018. The data was collected by a face to face interview using Beck Depression Inventory Scale, Oslo Social Support-3 Scale and Alcohol Smoking and Substance Involvement Screening Test. The data was checked, coded and entered by using Epi data version 3.1 and exported to SPSS version 20.0 for analysis. Descriptive statistics, binary and multivariate logistic regression analysis were done. AOR with 95% CI was calculated to determine independent variables associated with Depression. Statistical significance was set at $p < 0.05$ in the final multiple logistic regression model.* ***Result:*** *The prevalence of depression was 30.3% among confirmed pregnant women and 15.1% among unconfirmed pregnant women. After controlling all confounging variables in confirmed pregnant women, family history of mental illness(AOR=5.175,95%CI=1.647,16.263), unwanted pregnancy (AOR=3.173, 95%CI=1.102,9.132), marital conflict (AOR=4.149, 95%CI=1.432,12.022), intimate partner violence (AOR=3.528, 95%CI=1.093,11391) and poor social support (AOR=4.636, 95%CI=1.499,14.337) had significant association with depression while in unconfirmed pregnant women marital conflict(AOR=4.360, 95%CI=1.003,18.955), family history of mental illness (AOR=5.315, 95%CI=1.069,26.425) and having moderate risk for khat use(AOR=4.746, 95%CI=1,086,20.744) had significant association with depression.*

Conclusion and recommendation: *This study provides evidence that confirmed pregnant women suffer significantly more depressed than unconfirmed pregnant women. Thus, screening activities of depression in antenatal care services should be emphasized with more concern to confirmed pregnant women who have family history of mental illness, marital conflict, unwanted pregnancy, intimate partner violence and poor social support and unconfirmed pregnant women who have family history of mental illness and marital conflict and moderate risk of khat use were the most important associated factors for depression.*

Key words: *Depression, confirmed regnant women, Jimma, Ethiopia*

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List of Acronyms and abbreviations:

ANC	Anti Natal Clinic
AND	Antenatal Depression
AOR	Adjusted Odd Ratios
ASSIST	Alcohol, Smoking and Substance Involvement Screening Test
BDI	Beck Depression Inventory
CES-D	Center for Epidemiological Studies Depression Scale
CI	Confidence Interval
COD	Crude Odd Ratio
EPDS	Edinburgh Postnatal Depression Scale
HIV	Human Immune Virus
ICCMH	Integrated Clinical and Community Mental Health
JUMC	Jimma University Medical Center
LAMICs	Low and Middle Income Countries
MPH	Master of Public Health
MSc	Master of Science
OSS	Oslo Social Support
PDSS	Postnatal Depression Screen Scale
SPSS	Statistical Package for Social Science Studies (applied for any research)
WHO	World Health Organization
YLD	Years Lived with Disability

Chapter one: Introduction

1.1 Background

Pregnancy is often considered as the golden period in woman's life. There are physical as well as mental challenges faced by them during that period, while apparent physical problems are often diagnosed but the challenges related to mental health often go undiagnosed[1].

Depression is defined as a disturbance in pervasive and sustained emotion or feeling tone that influences a person's behavior and colors his or her perception of being in the world[2].

Depression is one of the most common complications during pregnancy. A major depressive disorder is prevalent in 12.7% of pregnant women[3]. It has been estimated that the prevalence of both major and minor depression ranges from 8.5 % to 11 % at different times during pregnancy through the use of self-reported screening instruments, including the Edinburgh Postnatal Depression Scale (EPDS), Beck Depression Inventory (BDI), and Center for Epidemiological Studies Depression Scale (CES-D), [3,4].

Depression during pregnancy is a form of clinical depression that affects women during pregnancy[5,6]. It is increasingly recognized as a worldwide public health issue. Approximately, 10-20% of women experience depression during pregnancy[7]. Even if there is some study in low- and lower-middle-income countries, antenatal depression is more prevalent, particularly among poorer women with gender-based risks or a psychiatric history[8].

It is caused by different factors such as low socio economical status, younger age, being unmarried and unemployed, having lower educational level and larger number of family size, unintended or unplanned pregnancy, pregnancy complications, lacking intimate partner empathy and support, insufficient emotional and practical support, intimate partner violence/domestic violence, marital conflict, using chat, alcohol, cigarette and other substances and HIV status, previous history of depression, Marital relationship (unsupportive, polygamous), previous stillbirth or repeated miscarriage, null parity, lack of practical support, pregnancy as a result of rape, difficult relationship with in-laws[6,9–13].

1.2 Statement of the problem

Pregnant women who confirmed their pregnancy might be more vulnerable to biological, psychological and social situation than pregnant women who diddn't confirm their pregnany. These factors may lead to be depressed[20,32].

The most common mental health disorder affecting women of childbearing age prenatally, postnatally as well as women in general worldwide is depression[7]. Depression is a leading cause of global disability and the second leading cause of global disease burden among people 15–44 years of age[13].

Depression is very common during pregnancy in all parts of the world. One in three to one in five women in developing countries, and about one in ten in developed countries, have a significant depression during pregnancy[14].

Strong evidence from LAMICs, using culturally-validated measures, indicated depression in pregnancy is more prevalent than high income countries, the prevalence of maternal depression in LAMICs is estimated to be between 15% and 57%, respectively. Antenatal clinics can expect at least one in four pregnant women to experienced antepartum depression [15,16].

Despite its huge burden, Antenatal depression in low-income and middle-income countries(LAMICs) remains under-recognized and undertreated, making a substantial contribution to maternal and infant morbidity and mortality[13,15].

In South Africa there are high rates of both alcohols abuse and antenatal depression a significant association between depression, substance use and alcohol abuse that many women using alcohol and/or substances stop use once they discover they are pregnant[17]. Early identification and management of substance use disorders among pregnant women with depression is important since it has long term adverse effects on the infant, such as fetal alcohol syndrome[18].

Depression in pregnancy has negative consequences and adverse health outcomes for mothers and children also. The disability associated with depression in pregnancy is likely to interfere with many essential functions or loss of functioning (inability to perform everyday tasks or social roles), loss of interest in self-care and child care, inadequate prenatal care, behavior that affects other health conditions or poor adherence to antiretroviral treatment for HIV, risk of suicide or self-harm, serious health risks, alcohol use, poorer weight gain in pregnancy related to mother[13,16].

It can also lead to increasing the risk for costly complications during birth, prolonged labor and causing long-lasting or even permanent effects on child development and well-being[16]. It also adversely affects the unborn infant, poor infant growth, serious health risks like higher risk for diarrhea and delayed initiation of breast-feeding[13,15,16,18]. It has also leads to develop mental health problems in more than 90% of children with histories of significant prenatal alcohol exposure[5].

Antenatal depression is one of the major contributors of pregnancy-related morbidity and mortality[15]. It is one of the health problems frequently happens or the most prevalent mental illness among pregnant women and should be carefully dealt with, diagnosed early and treated soon since it has an adverse effect on the wellness of the pregnant women, also the infant, paves the way for postpartum depression[11,19].

Antenatal depression has received less attention than postnatal depression although its prevalence is at as high, ranging from 12% to 25%. The high prevalence of antenatal depression and the potential existence of continuities between the emotional state during pregnancy and after birth stress the importance of screening for depression during pregnancy[11].

Even if there is a desire consequences related to antenatal depression, the magnitude and risk factors is less known in developing countries including Ethiopia[17]. Evidence from Southwestern Ethiopia indicates about one in five pregnant women have symptoms of antenatal depression[10]. Even if the picture is this, still there is a need to examine this issue among antenatal women attending JUMC, ANC to see whether there is a better service or not.

In Ethiopia, despite there were the recommended interventions from some studies like promotion of family planning, male involvement in maternal health especially during pregnancy and integration of mental health service with existing maternal health care as well as strengthening the referral system among public health centers. But, it is not applied too[18,20].

One quarter of the pregnant women attending Addis Ababa Public Health Centers ANC clinic were depressed[20].

There are gaps on the study of comparing depression among confirmed pregnany and unconfirmed pregnancy. To the investigator's knowledge in Ethiopia, no study has yet been done to compare and

identify different associated factors with depression among confirmed pregnany and unconfirmed pregnancy following comparative cross sectional study design.

Therefore, assessing the prevalence of depression and associated factors among confirmed pregnant attending ANC and unconfirmed pregnant women at JUMC might help in designing of intervention of strategies towards the problem by making integration or link between psychiatric clinic and antenatal clinic(ANC) at least its coverage regions.

1.3 Significance of the study

This study was try to estimate the frequency of occurrence and potential associated factors for depression during pregnancy among confirmed pregnant women attended Antenatal Clinic with compared to unconfirmed pregnant women who are visitors for inpatient at JUMC in Jimma and its surrounding regions since there was no published comparative study conducted in depression among confirmed pregnant and unconfirmed pregnant women in Ethiopia.

This study finding will also helpful for researchers to do more by using this finding as a source for their study. The result of this study was also helpful for policy makers and health planners to contribute or to add some information related to prevention of depression and to reduce the burden of depression among confirmed pregnant women.

This finding will detect depression in the early prenatal care of pregnant women and for the identification of associated factors during their pregnancy. Thus, it assists healthcare professionals in ANC to identify antenatal depression early and to improve health outcomes associated with obstetrical complications and other difficulties for pregnant women who are attending ANC clinic at JUMC and to link women who didn’t start ANC follow up to ANC clinic.

Therefore, the information that are generated from this research will be useful for all concerned organizations, policy makers, researchers, institutions including JUMC and ANC Clinicians for linking Antenatal clinic with psychiatric clinic.

Chapter two: Literature Review

2.1 Prevalence of depression among confirmed pregnant women

About 10% of pregnant women experience a mental disorder, primarily depression in worldwide. In developing countries this is even higher, that is 15.6% during pregnancy[19]. A meta analysis observational studies conducted in low-income and middle-income countries in 2016 on 48,904 pregnant women showed that the pooled prevalence of antepartum depression by using different screening tools was 25.3% [15].

A cross sectional survey conducted in USA from 2005-2009 on 375 pregnant and 8,657 non-pregnant women by using DSM-IV indicated that the prevalence of depression was 65.9% & 58.6% respectively[21].

A cohort study conducted in Australia in 2017 showed that among 17,564 pregnant women by using Edinburgh Postnatal Depression Scale (EPDS) the prevalence of antenatal depression was 7.0%[11]. A population-based cohort study conducted in Southern Brazilian in 2017 on 4130 pregnant women showed that by using EPDS the prevalence of AND was 16% [22].

A cross sectional study conducted in 2016 on 842 Chinese pregnant women, showed that the prevalence of depression during antenatal period by using Postpartum Depression Screen Scale(PDSS) 8.3%[23]. A cross sectional study conducted in Northern Tanzania in 2015 concluded that from 397 pregnant women by using Edinburgh Postnatal Depression Scale(EPDS) and a structured questionnaire 33.8 % had antenatal depression [24].

A cross sectional study conducted in Pakistan in 2017 revealed that the prevalence of depression among 300 pregnant women by using Hamilton Rating Scale was 81%[25]. A descriptive cross sectional study done in Sri Lanka in 2013 on 376 pregnant women showed that by using EPDS the prevalence of antenatal depression was 16.2%[26]. A descriptive cross sectional study conducted in Turkey in 2015 on 266 pregnant women showed that by using BDI 18.8% had depression[27]. A population based cross sectional study done in Rural Bangladesh in 2011 on 720 pregnant women revealed that by using EPDS the prevalence of ANDs is 18%[28].

A prospective self-report study conducted in South Africa in 2012 showed that among 323 pregnant women 36.8% smoked, 20.2% used alcohol and 4% used substances. Using EPDS cut-off scores of 12 and 15, respectively, 48.9% and 33.6% of the sample had scores consistent with major depression[17].

A cross sectional study among prenatal HIV-positive women in Mpumalanga province, Rural South Africa in 2016 among 663 HIV-positive prenatal women that 48.7% of women during the prenatal period reported depression with Edinburgh Postnatal Depression Scale score of ≥13[9].

A cross sectional study conducted in KwaZulu-Natal, Durban, South Africa in 2012 revealed that among 387 pregnant women 38.5% suffered from depression by using EPDS[12]. A hospital based cross sectional study conducted in Sudan in 2015 concluded that among 1000 pregnant women 13.4% had antenatal depression by using Beck Inventory Depression(BDI) Scale[29].

A descriptive cross-sectional survey in Nigeria in 2016 concluded that the prevalence of antenatal depression is 24.5% and information was collected by using structured questionnaire and Edinburgh Postnatal Depression Scale(EPDS)[30]. A population based cohort study conducted in Ghana in 2014 concluded that the prevalence of AND was 9.9% by using Patient Health Questionnaire-9(PHQ-9)[31].

A community based cohort study conducted in Rural Southwestern Ethiopia in 2013 showed that the prevalence of depressive symptoms during pregnancy by using EPDS was 19.9% [10]. A community based cross sectional study done in Addis Ababa in 2015 among 393 pregnat women revealed that prevalence of antenatal depression was 24.94 % by using Edinburgh Postnatal Depression Scale(EPDS)[20].

A community based cross-sectional study conducted in Debre tabor in 2016 on 527 pregnant women showed that the prevalence of antenatal depression by using the Edinburgh Postnatal Depression Scale (EPDS) was found to be 11.8% [32].

An institutional based cross sectional study conducted in Gondar in 2016 on 388 pregnant women revealed that depression among by using Beck Inventory Depression Scale(BDI) was found to be 23%[33]. A population-based cross-sectional survey done in Sodo district, Gurage Zone in 2016 on 1311 pregnant women revealed that the prevalence of depressive symptoms by using PHQ-9 was 29.5 %[34].

A facility based cross sectional study conducted in Maichew in 2017 on 196 pregnant women showed that the prevalence of depression by using Beck Inventory Depression(BDI) scale was 31.1% [35].

An institutional based cross-sectional study conducted in Adama, 2017 on 231 pregnant women showed that the prevalence of antenatal depressive disorders by using Beck Inventory Depression Scale was found to be 31.2% [18]. A cross sectional study conducted in Shashemenie in 2014 on 660 pregnant women showed that the prevalence of antenatal depression was 25.6 % by using Edinburgh Postnatal Depression Scale[36].

2.2. Prevalence of depression among unconfirmed pregnant women

A comparative cross sectional study conducted at USA in 2015 showed that > 1 in 10 reproductive-aged women had depression representing approximately 1.2 million U.S. women. A study was conducted by using DSM IV criteria among 375 pregnant and 8657 non- pregnant with a prevalence of 65.9% and 58.6% respectively[37].

National Epidemiologic Survey conducted at US in 2009 revealed that a higher prevalence of major depressive disorder in non-pregnant women was 8.1% [38]. A surveillance system conducted in USA in 2008 revealed that the prevalence of depression among reproductive age group was more than 14%[39].

A descriptive study conducted in Lahore in 2008 among 186 women showed that the prevalence of depression among women in the reproductive age group by using BDI was 25% [40]. A cross sectional study conducted in pakistan in 2018 revealed that the prevalence of depression among 100 reproductive age group women was 66% by using self-reporting questionnaire (SRQ-20) [41].

An observational cross-sectional study conducted at Uberaba, state of Minas Geraisin in 2017 revealed that among 280 women the prevalence of depression of child bearing age by using Beck's Depression Inventory was 18.2%[42].

A community based cross sectional study conducted in Rural China in 2015 on 1058 women in the reproductive age group showed that the prevalence of depression by using Center for Epidemiologic Studies Depression Scale (CES-D), a self-reporting depression scale was 30.7% [43].

A cross sectional study conducted in Rural Bangladesh in 2016 revealed that Edinburgh Postpartum Depression Scale-Bangladesh Version (EPDS-B) of 4430 women 30.8% of reproductive age group women experienced deression [44].

A cross sectional study conducted in Durban, South Africa in 2018 revealed that among 680 women the prevalence of depression by using Center for Epidimiological Studies Depression(CES-D) was 45.3% [45].

2.3 Factors associated with depression among confirmed pregnant & unconfirmed pregnant women

There are many factors which are associated with depression. These are sociodemographic factors, genetic factors, obstetric related factors, psychological factors, social factors and substance related factors as evidenced by many research findings.

2.2.1 Sociodemographic and economic factors

Studies have shown many socio demographic and economic factors which were related to antenatal depression. A surveillance system conducted in USA revealed that older age, less education, being unmarried, inability to work/unemployed and low income were associated with depression among reproductive age group [39].

A descriptive study conducted in Lahore among age group > 30 years, uneducated and 3-4 children had association with depression in reproductive age group[40]. A cross sectional study among prenatal HIV-positive pregnant women in Rural South Africa indicate that not being employed was associated with antenatal depression[9].

A cross sectional study conducted in pakistan showed that personal income was associated with depression among reproductive age group women [41]. A study conducted in Gondar and Maichew showed that house wives had strong association with depression [33,35].

A Population-based cohort study conducted in Southern Brazilian and cross sectional study in China, Rural Bangladesh and Nigeria showed that AND was most strongly associated with lower level of maternal education[22,23,28,30]. But, a study conducted in Addis Ababa showed it was not significantly associated with antenatal depression[20].

A study conducted in Australia, Northern Tanzania, , Rural Bangladesh and Turkeyshowed that pregnant women with low/moderate socio-economic status had the high significant association with antenatal depression [11,24,29,27]. Studies conducted in Ethiopia like Adama, Gondar and Maichew also support this [18,33,35]. A study conducted in Shashemenie revealed that monthly income of above 1000 Eth. Birr are less likely to experience depression than those earning below 500 Eth. Birr [36]. But, a study conducted in Sri Lanka showed that none of the socio-demographic factors were associated with antenatal depression [26].

A study conducted in Pakistan, Turkey and Nigeria showed that the factors that increase depression risk during pregnancy is younger ages of mothers [25,27,30]. A study conducted in KwaZulu-Natal, Durban,Turkey and Nigeria showed that single marital status or living alone or unmarried was associated with AND [12,27,30]. Studies in Ethiopia(Gondar and Maichew, Shashemenie also support this [33,35,36]. A study in Turkey and Nigeria showed that there were significant associations with large family size and large number of children [27,30].

2.2.2 Genetic factors

A study conducted in Sudan and Lahore Hospital, Pakistan finds significant statistical association between Antenatal depression and family history of psychiatric disorders [29,46].

2.2.3 Obstetric related factors

A study conducted in Australia shows that significant risk factors of AND was highly associated with a gestational age at birth of <37weeks[11]. A study conducted in South Africa revealed that no association was observed between antenatal depression and preterm birth. But, strong associations were observed with low SES, and recent stressful life events[47].

A Study conducted in Pittsburgh revealed that the odds of developing depression were three times greater for those with a family history of mental illness than for those without a family history [48].

Acommunity based cross sectional study done in Addis Abeba and Debre tabor showed that presence of a complication in the current pregnancy was factor significantly associated with antenatal depression[20,32]. A cross sectional study conducted in Addis Abeba and Gondar revealed that never

given birth before, having previous pregnancy history and being second and third trimesters of pregnancy[20,33].

A Population-based cohort study done in Southern Brazilian concluded that AND was most strongly associated with high parity (≥2 children vs.1 child)[22]. A study conducted in Sudan found significant statistical association between depression and number of pregnancy[29]. But, a study conducted in Pakistan has found that, it is more prevalent in women who have less number of parity & gravida[25].

A population based cohort study conducted in Ghana concluded that AND was associated with previous obstetric complications[31,33]. But, a study conducted in Shashemenie showed that those who hadn't negative obstetric history were less likely to have depressive symptom[36].

A study showed that conducted in KwaZulu-Natal, Durban, South Africa and Debre Tabore unplanned pregnancy were associated with AND[12,32]. A study in Addis Ababa showed that those pregnant women having unplanned pregnancy were nearly three times at higher odds to develop depression as compared to pregnant women whose pregnancy was planned[20].

A study conducted in Gondar showed that depression was significantly associated with previous ANC follow up pattern (irregular), and no follow up[33]. A population based cross sectional survey done Sodo district, Gurage Zone showed that pregnant women with depression had an increased risk of having more non-scheduled ANC visits. However,it was not significantly associated with initiation of ANC[34].

A study conducted in Turkey, Rural Bangladesh, Rural South Africa and revealed that unwanted pregnancy were found to have strong association with depressive disorders[9,27,28]. Which was also supported by different studies in Ethiopia like Southwestern Ethiopia, Adama and Maichew [10,18,35].

2.2.4 Psychological factors

An other national survey conducted in USA revealed that marital conflict directly led to increases in depression among midlife and adults women[49]. A cross sectional study in urban tertiary care hospital in Lahore, Pakistan showed that fear of childbirth and separation from husband were identified as significant risk factors for development of antenatal depression. But, domestic violence was not found to be significant risk factors[46].

As the cross sectional study done in Turkey, Rural Bangladesh, Rural South Africa, Southwestern Ethiopia, Shashemenie, and Sweden amon pregnant women showed that forced sex and being exposed to physical violence by spouse or intimate partner before and during pregnancy was associated with AND [9,10,27,28,36,50,51].

A cross sectional study conducted in Rural Bangladesh in 2016 revealed that depression among women of reproductive age group was independently associated with intimate partner violence [44]. A cross sectional study conducted in Durban, South Africa in 2018 revealed that intimate partner violence was independently associated with depression among non-pregnant women[45].

A study done in Northern Tanzania, Turkey, Rural Bangladesh, Adama, Maichew & Shashemenie, revealed that marital conflict were significantly associated with antenatal depression [18,24,27,28,35,36].

2.2.5 Social factors

A study conducted in Australia, Turkey, Sudan and Shashemenieshowed that significant risk factors of AND were low/lack of social support. But, a study done in Southwestern Ethiopia showed that women who reported moderate and high support during pregnancy were significantly less likely to report depressive symptoms[11,27,29,36].

2.2.6 Substance related factors

Pregnant women had significantly lower rates of alcohol use disorders, and any substance use, except illicit drug use, than non-pregnant women[38].

A prospective self-report study done in South Africa shows that as it was significantly associated with substance use[17].

In Ethiopia, there is no conducted comparative study about magnitude and associated factors among confirmed pregnancy and unconfirmed pregnancy. However, there was a study conducted in Adama about depression among pregnant women i.e 31.2% and since there was no conducted study among unconfirmed pregnancy the magnitude was 50%.

Conceptual frame work

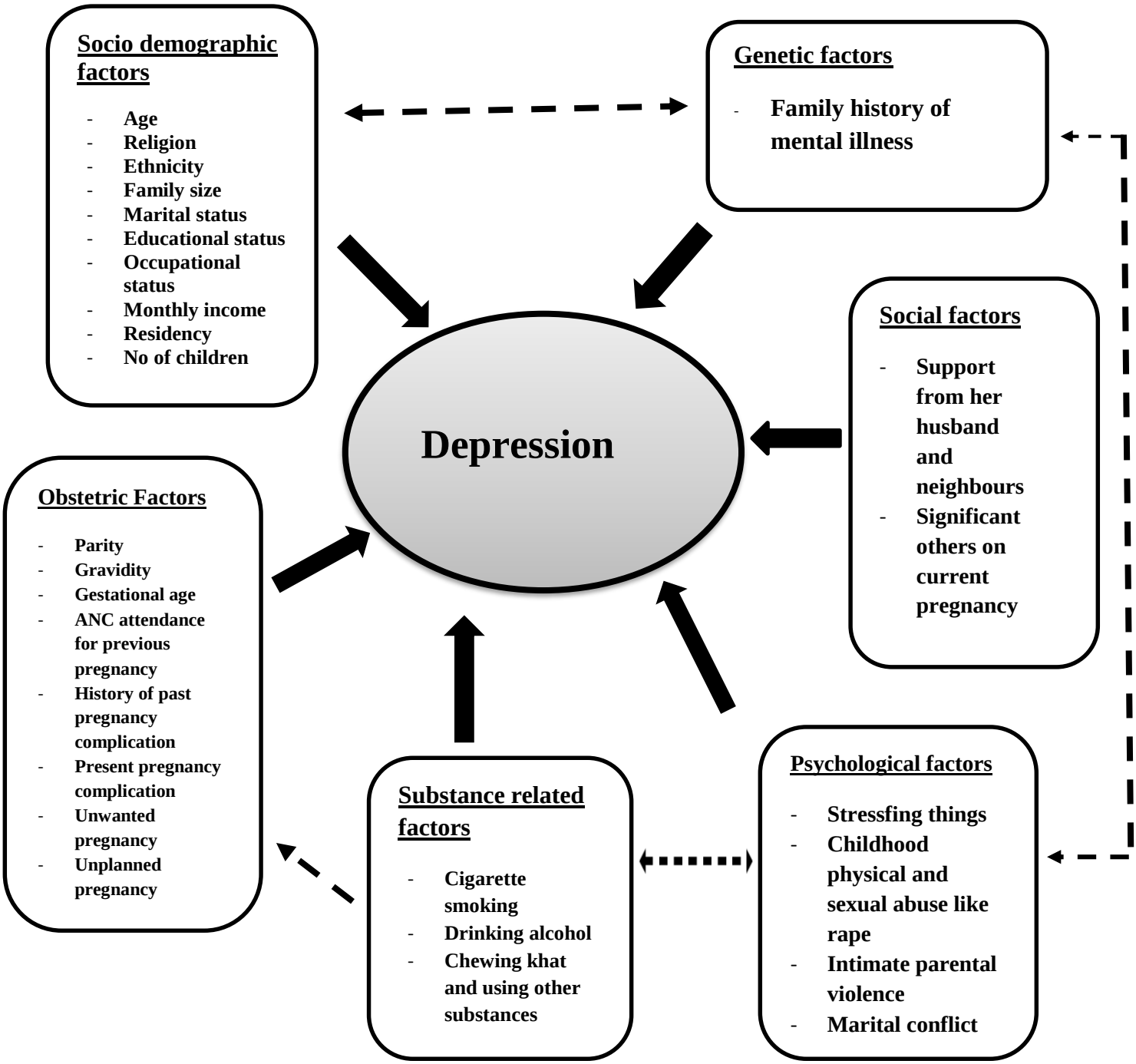

Figure 1: Conceptual framework for depression and associated factors among confirmed pregnant and unconfirmed pregnant women at JUMC 2018 developed after reviewing different literatures.

Chapter three: Objectives

3.1 General objective

- ✓ To assess the prevalence of depression and its associated factors among confirmed pregnant women attending Antenatal Clinic and unconfirmed pregnant women who are visitors of inpatient in Jimma University Medical Center, Jimma, South West Ethiopia, 2018.

3.2 Specific objectives

- ✓ To determine the prevalence of depression among confirmed pregnant and unconfirmed pregnant women at Jimma University Medical Center.
- ✓ To identify associated factors for depression among confirmed pregnant women and unconfirmed pregnant women at Jimma University Medical Center.
- ✓ To compare the prevalence and associated factors of depression among confirmed pregnant and unconfirmed pregnant women at Jimma University Medical Center.

Chapter four: Methods and Materials

4.1 Study Area and study period

This study was conduct at Jimma University Medical Center which is found in Jimma town and located at 352 Km Southwest of Addis Ababa. Jimma University Medical Center is one of the oldest hospitals in the country and provides services for 160, 000 out-patients and 45, 000 in-patients per year and serving a catchment population of about 15 million people. There were four major wards and three minor wards, totally there were 600 beds at JUMC. But, unconfirmed pregnant women were taken from visitors of inpatients in medical, surgical, obstetric & gynecology wards and pediatric ward. Confirmed pregnant women was taken from ANC clinic which has 3 OPDs for follow up service. The study was conducted from June 1 - 30, 2018.

4.2 Study Design

Institutional based comparative cross-sectional study design was conducted.

4.3 Population

4.3.1 Source Population

- All confirmed pregnant women attending Antenatal Clinic and all unconfirmed pregnant women who were visitors of inpatients at JUMC in Jimma town, Jimma zone, Oromia, Ethiopia.

4.3.2 Study Population

- Confirmed pregnant women attending Antenatal Clinic and unconfirmed pregnant women who were visitors of inpatients at JUMC available during data collection period.

4.4. Inclusion and exclusion criteria

4.4.1 Inclusion criteria:

- Both Confirmed pregnant and unconfirmed pregnant women between the age range of 15-49 years old.
- Unconfirmed pregnant women who were visitors of inpatients within the study period.

4.4.1 Exclusion criteria:

- Confirmed pregnant and unconfirmed pregnant women who couldn't able to respond the questionnaires due to their illness at the time of data collection period.
- Unconfirmed pregnant women who were attendants for the patient

4.5 Sample Size and Sampling procedure

4.5.1 Sample Size

In this study, sample size was determined by using analytical study sample size calculation formula, two-sided confidence level of 95%, a power of 80% with double proportion formula.

$$n = \left[\frac{r+1}{r} \right] \frac{pxq\,(Z\alpha + Z\beta)^2}{d^2}$$

Where

n = sample size required in each group

$Z_{\alpha/2}$ = critical value at 95% confidence level of certainty (1.96) (α constant).

Z_{β} = This depends on power, for 80% this is .84

P1=Proportion of depression among confirmed pregnant women=0.312[18]

P2= Proportion of depression among unconfirmed pregnant women=0.5

p = average percentage between two groups=(p1+p2)/2= (0.312+0.5)/2=0.406

q = 1−p=1-0.406=0.594

d = clinically meaningful difference between two groups (p1-p2) = 0.312-0.5=-0.188

r= ratio of confirmed pregnant to unconfirmed pregnant=1

Based on the previous study conducted in Adama hospital, Ethiopia[18], the prevalence of depression in confirmed pregnant women was 31.2% and the prevalence for depression for unconfirmed pregnant women 50% since there was no study conducted in Ethiopia to obtain the maximum sample size at 95% and 84% certainty respectively and an additional non-response rate 10 % was added to the sample size as a contingency to increase power.

$n(each) = [(2)\ (0.406)\ (0.594)\ (1.96+0.84)^2\ ]\ /(-\ 0.188)^2 = 108$

The value 108 was for one group and it was multiplied by two gives total of 216 study participants. By adding 10%(22) of the non- response rate the total sample size could be 238 for both confirmed pregnant and unconfirmed pregnant groups or 119 for each group.

4.5.2 Sampling procedure

Consecutive sampling technique was used to select both confirmed pregnant and unconfirmed pregnant women study groups that attends during data collection period.

4.6 Data collection tools and procedure

4.6.1 Data collection tool/instrument

A self-administered structured questionnaire was used to collect data. Questionnaires about demographic, socio-economic and social demographic factors were developed after extensive review of literatures. Beck Depression Inventory (BDI-II) was used to screen the presence and the severity of depressive symptoms. The BDI-II was developed in 1996 and was derived from the BDI. It is a 21 item questionare which is scored on a 4- point scale indicates degree of severity. Each item is rated from 0(not at all) to 3(exreme form of each symptom). The BDI time frame extends for 2 weeks to correspond with DSM-IV criteria for diagnosing depressive disorders and includes items measuring cognitive, affective, somatic, and vegetative symptoms of depression. Total score raws ranges from 0 to 63 with a cut off point 0-13= minimal depression, 14-19= mild depression, 20- 28= moderate depression and 29- 63= sever depression and BDI scores 14 or higher was categorized as depressive for logistic regression analysis. The internal consistency was described as (Cronbach alpha =0.92 for outpatients; 0.93 for students). The sensitivity range from 0.86 to 0.92 and specificity range from 0.82 to 0.86[52]. In this study the reliability of Beck depression inventory-II was (Cronbach alpha = 0.91).

The Oslo 3-items social support scale was used to assess social support. A sum index was made by summarizing the raw scores, the sum ranging from 3 – 14, categorized as 3-8= poor support, 9-11= moderate support and 12-14= strong support[53].

ASSIST developed under the auspices of the World Health Organization (WHO) by an international group of addiction researchers. It is an 8- item questionnaire designed to be administered by a health worker to a client and takes about 5-10 minutes to administer. ASSIST was designed to screen different substances and the sum ranges from for alcohol 0-10 low risk, 11-26, moderate risk and ≥ 27= high risk and for other substances 0-3=low risk, 4-26= moderate risk and ≥ 27= high risk. The score obtained for each substance falls into a 'lower ', 'moderate' or 'high' risk category which determines the most appropriate intervention for that level of use ('no treatment', 'brief intervention' or 'referral to specialist assessment and treatment' respectively)[54].

4.6.2 Data collection procedure

Data collectors was involved to conduct face to face interview every confirmed pregnant mother attending at ANC and unconfirmed pregnant women who were visitors of inpatients consecutively at JUMC. Before interview the pregnancy status of women who were visitors of inpatients was checked by subjective report of ovulation period and confirmed pregnant women were taken from ANC clinic. Data was collected by five trained BSc psychiatric professional and supervision was taken by two 1st year master students in Integrated Clinical and Community Mental Health (ICCMH) for a period of approximately one month (June 1-30, 2018). Data collection was conducted by using structured Amharic and Affan Oromo version questionnaire by interviewing each respondent after getting or oral consent from them.

4.7 Study Variables

4.7.1 Dependent variables

- Depression(yes/no)

4.7.2 Independent variables

1. Socio-demographic (Age, religion, ethnicity, educational status, marital status occupational status, family size, monthly income and residency and no of children)
2. Genetic factors:

- ✓ Family history of mental illness

3. Obstetric related factors:
   - ✓ Parity
   - ✓ Gravidity
   - ✓ History of past pregnancy complications
   - ✓ Present pregnancy complications
   - ✓ Gestational age
   - ✓ ANC attendance for previous pregnancy
   - ✓ Unwanted pregnancy
   - ✓ Unplanned pregnancyss
4. Psychological factors:
   - ✓ Rape or sexual abuse by anyone
   - ✓ Stressing things
   - ✓ Intimate partner violence
   - ✓ Marital conflict
5. Substance related factors:
   - ✓ Chat chewing
   - ✓ Using of alcohol beverages
   - ✓ Cigarette smoking
   - ✓ Using cannabis
   - ✓ Using sedatives
   - ✓ Using other substances and other injectable drugs
6. Social factors

4.8 Operational Definitions

1. <u>Depression</u>: According to Beck's Depression Inventory-II, a score of 14 or more was considered having depressive symptoms[52].

2. <u>Substance use</u>: By using Alcohol, Smoking and Substance Involvement Screening Test (ASSIST V3.0)

I. For use alcoholic beverages, pregnant and non- pregnant women scored 0-10 were at low risk, 11-26 were moderaterisk and ≥ 27 were high risk means that they are at high risk of experiencing severe problems (health, social, financial, legal, relationship) as a result of their current pattern of use and are likely to be dependent[54].

II. For tobacco products, cannabis, cocaine, amphetamine type stimulants, inhalants, sedatives and pills, hallucinogens, opioids and other substances pregnant and non-pregnant women scored 0-3 were low risk, 4-26 were moderate risk and ≥ 27 were high risk of experiencing severe problem

(health, social, financial, legal, relationship) as a result of their current pattern of use and are likely to be dependent[54].

3. **Social support:** During interviewing by using Oslo-3 Social Support Scale (OSS-3) those pregnant and non- pregnant women who scored 3-8 had poor support, 9-11 had moderate support & 12- 14 had strong support[53].
4. **Visitors of inpatients:** women who visit their friends, relatives and collagues who were admitted in Jimma University Medical Center but didn't care or waited until the patient discharged.
5. **Intimate partner violence:** describes physical violence, sexual violence, stalking and psychological aggression (including coercive acts) by a current or former intimate partner.
6. **Marital conflict:** the state of tension or stress between marital partners as the couple try to carry out their marital roles.

4.9 Data analysis procedure

After appropriate coding, data was entered to epi-data version 3.1 and exported to SPSS (Statistical Package for Social Science) version 20 for analysis. The finding of the study was described by using frequency table, graphs, charts and texts. Bivariate analysis was used for analysis. Binary logistic regression was run to identify associated factors and factors whose $p< 0.25$ was candidate for multiple logistic regression. Chi square test was used to see the difference between depression among confirmed pregnant and unconfirmed pregnant women. Age, income and and family size among confirmed pregnant and unconfirmed pregnant women were matched by using independent sample t-test. Multiple logistic regression was used to adjust for confounding variables and to provide Adjusted Odds Ratio (AOR) with 95% CI to identify factors independently associated with depression or determine the strength of association between independent variables. Covariates which were candidate during bivariate analysis were used by backward method and those that were not statistically significant were removed from the final model. P-value of < 0.05 was considered as statically significant during multivariate logistic regression. During the analysis, the fitness and statistical assumptions of the logistic model was checked to be satisfied and Hosmer-Lemeshow statistic was used to assess the fitness of the model with P value > 0.05 was taken as the level of significance. Multicollinearity was also checked and there is no multicollinearity.

4.10 Data quality control

The data collection tool was utilized and the clarity and validity of the tool was tested before the final utilization of the questionnaire. The data was collected by five BSc psychiatry professionals who are doing in psychiatric clinic and the supervision was taken by two 1st year master students in Integrated Clinical and Community Mental Health (ICCMH). The questionnaire was developed in English and translated to Affan Oromo and Amharic and translated back to English to ensure and to check consistency of the questionnaire. Data collectors and supervisors was trained for one day about questionnaire, ethical principles and data management prior to their involvement with data collection. The questionnaire was pretested about 15% of the sample size at Shenen Gibbie Primary Hospital. During pretesting the questionnaire was checked for its clarity, simplicity, understandability, completeness, consistency and coherency. The missing data, completeness and consistency was checked by supervisor before data entry. The supervisors strictly supervised the data collection process and data collectors on daily basis. Collected information was reviewed and the possible errors was returned back to the collectors for correction of the next time, if errors would occur in recording and written. Correction was made based on the feedback.

4.11 Ethical considerations

Ethical clearance was obtained from the Institutional Review Board of JU. Then official letter was written to JUMC for permission. Written informed consent was obtained from the participants and confidentiality issues was insured by using codes to analysis the data. Before data collection principal investigator was communicated with head nurses and after permission was gained from the head nurses interview was conducted. Participants was briefly informed about the study and asked for their willingness to participate in the study. Respondents was given the right to refuse to participate at all. During data collection period, confirmed pregnant and unconfirmed pregnant women who screened for depression was linked to psychiatric clinic. To link unconfirmed pregnant women to ANC clinic for prenatal follow up.

4.12 Dissemination of the result

The research paper was prepared in copies and submitted to Jimma University Postgraduate School. The result will be communicated with the stakeholders through presentations on meeting, scientific panels and workshops after approved by Jimma university postgraduate school. Finally, to ministry of health and moreover the results was sent for publication in reputable journals.

Chapter five: Result

1. Socio- demographic and economic characteristics of study participants

A total of 238 women were interviewed for the study for both group, of which 119 women were confirmed pregnant and 119 women were unconfirmed pregnant. Participants were between 15 and 49 years old, with a mean age of 25.86 (SD ±5.325) and 27.70 (SD ±7.501) year old for confirmed pregnant and unconfirmed pregnant women respectively.

Majority of confirmed pregnant 115(96.6%) were married while 95(79.8%) unconfirmed pregnant were married. 68(57.1%) and 54(45.4%) were Muslim and 68(57.1%) & 87(73.1%) were Oromo for confirmed pregnant and confirmed pregnant women respectively.

The assessment of residency of study participants showed 106(89.1%) of confirmed pregnant women and 76(63.9%) of unconfirmed pregnant women were lived urban. Confirmed pregnant women who had monthly income of >1500 ETB were 83(69.7%) where as for unconfirmed pregnant women 74(62.2%) had monthly income of >1500 ETB. Family size of 1-3 people 69(58.0%) for confirmed pregnant and 4 & more people 62(52.1%) for unconfirmed pregnant (Table 1).

Table 1: Sociodemographic and socioeconomic characteristics of confirmed pregnant (n= 119) unconfirmed pregnant (n= 119) women who were on reproductive age group at JUMC, 2018

Variables		**Confirmed pregnant**		**Unconfirmed pregnant**	
		Frequency(n)	**Percentage(%)**	**Frequency(n)**	**Percentage(%)**
Age	15-19	13	10.9	20	16.8
	20-24	35	29.4	20	16.8
	25-29	41	34.5	33	27.7
	30-34	20	16.8	20	16.8
	35-49	10	8.4	26	21.8
Religion	Muslim	54	45.4	68	57.1
	Orthodox	44	37.0	34	28.6
	Protestant	21	17.6	17	14.3

Table 1. Sociodemographic and socioeconomic characteristics cont'd…….

Ethnicity	Oromo	68	57.1	87	73.1
	Amhara	15	12.6	16	13.4
	Others*	36	30.3	16	13.4
Educational status	No formal education	13	10.9	34	28.6
	Primary education	26	21.8	32	26.9
	Secondary education	37	31.1	33	27.7
	Higher education	43	36.1	20	16.8
Marital status	Single	4	3.4	24	20.2
	Married	115	96.6	95	79.8
Occupational status	Housewife	47	39.5	39	32.8
	Farmer	3	2.5	26	21.8
	Private work	26	21.8	19	16.0
	Governmental	35	29.4	19	16.0
	Others**	8	6.7	16	13.4
Residency	Urban	106	89.1	76	63.9
	Rural	13	10.9	43	36.1
Monthly income	≤ 1500	36	30.3	45	37.8
	> 1500	83	69.7	74	62.2
Family size	1-3	69	58.0	57	47.9
	4 & more	50	42.0	62	52.1

*****Tigray, yam and dawuro

****** Student**,** jobless

The mean age of confirmed pregnant and unconfirmed pregnant women was 25.86(p=0.73) and 27.30(p=0.73) respectively. The mean monthly income of confirmed pregnant & unconfirmed pregnant women was ETB 3591.67(p=0.131) and ETB 3057(p=0.131) and the mean family size of confirmed pregnant & unconfirmed pregnant women was 3.34(p=0.069) and 3.71(p=0.069) respectively (Table 2).

Table 2: Comparison of socio-demographic characteristics in the study groups by independent sample t-test

	Group	N	Mean	Std. Deviation	SE of Mean	p-value * (2-tailed)	95% CI of the difference	
							Lower	Upper
Age	Confirmed pregnant	119	25.86	5.325	0.488	0.073	-3.028	0.137
	Unconfirmed pregnant	119	27.30	6.961	0.638	0.073	-3.029	0.138
Monthly Income	Confirmed pregnant	119	3591.67	2829.981	259.424	0.131	-160.306	1229.364
	Unconfirmed pregnant	119	3057.14	2606.562	238.943	0.131	-160.330	1229.389
Family Size	Confirmed pregnant	119	3.34	1.429	0.131	0.069	-0.768	0.029
	Unconfirmed pregnant	119	3.71	1.683	0.154	0.069	-0.769	0.029

*****P> 0.05 - non-significant

*Independent sample t-test

2. Obstetric related characteristics

In this study from obstetric related characterstics majority of participants among confirmed pregnant women 109(91.6%) were planned pregnancy. Among confirmed pregnant women 90(75.6%) were wanted pregnancy and 29(24.4%) were unwanted pregnancy. Among confirmed pregnant women 86(72.3%) gave birth previousely and 66(55.5%) unconfirmed pregnant gave birth on the past. 81(68.1%) confirmed pregnant women attended ANC follow up and 5(4.2%) didn't attend previous ANC follow up while 59(49.6%) unconfirmed pregnant women attended previous ANC follow up and 26(21.8%) didn't attend previous ANC follow up. 65(54.6%) confirmed pregnant women were multigravida and 54(45.4%) were primiparaous. Among confirmed pregnant women 62(52.1%) ≥ 4 ANC visit from onfirmed cpregnant women (Table 3).

Table 3: Obstetric related characteristics of confirmed pregnant (n= 119) and unconfirmed pregnant (n=119) women who were on reproductive age group at JUMC, 2018

Variables		**Confirmed pregnant**		**Unconfirmed pregnant**	
		Frequency(n)	Percentage (%)	Frequency(n)	Percentage (%)
Gave birth before	No	53	44.5	33	27.7
	Yes	66	55.5	86	72.3
Parity	Primparous	32	26.9	22	18.5
	Multiparous	26	21.8	27	22.7
	Grand multiparous	8	6.7	37	31.1
Children who are alive	0	3	2.5	17	14.3
	1 up to 3	55	46.2	53	44.5
	4 and more	8	6.7	16	13.4
Previous ANC follow up	No	7	5.9	5	4.2
	Yes	59	49.6	81	68.1
Past pregnancy complications	No	26	21.8	73	61.3
	Yes	40	33.6	13	10.9
Gestational age	First trimester	24	20.2	------	------
	Second trimester	37	31.1	------	------
	Third trimester	58	48.7	------	------
Gravida	Primigravida	54	45.4	------	------
	Multigravida	65	54.6	------	------
No. of ANC visit	1st visit	8	6.7	------	------
	2nd visit	21	17.6	------	------
	3rd visit	28	23.5	------	------
	≥ 4 visit	62	52.1	------	------
Pregnancy planned or not	No	89	74.8	------	------
	Yes	30	25.2	------	------

Table 3: Obstetric related characteristics cont'd…….

Pregnancy wanted or not	No	29	24.4	------	------
	Yes	90	75.6	------	------
Present pregnancy complications	No	79	66.4	------	------
	Yes	40	33.6	------	------
Present pregnancy problems	None	79	66.4	------	------
	Sever nausea and vomiting	14	11.8	------	------
	Others**	26	21.8	------	------

* Indicates anemia, abortion, preeclampsia, swelling

** Indicates bleeding, anemia, HIV, diabetes, preeclampsia, hepatitis, swelling and headache

-----Indicates the variables which weren't applicable for unconfirmed pregnant

3. Genetic and psychological related characteristics

Regarding genetic & psychological related characteristics, among confirmed pregnant women 24(20.2%) had family history of mental illness where as of unconfirmed pregnant women 15(12.6%) had family history of mental illness. Among confirmed pregnant women 30(25.2%) had marital conflict while of unconfirmed pregnant women 22(18.5%) had marital conflict. Among confirmed pregnant women 23(19.3%) had intimate partner violence where as 19(16.0%) of unconfirmed pregnant women had intimate partner violence (Table 4).

Table 4: Genetic and psychological related characteristics of confirmed pregnant (n=119) and unconfirmed pregnant (n=119) women who were on reproductive age group at JUMC, 2018.

Variables		**Confirmed pregnant**		**Unconfirmed pregnant**	
		Frequency (n)	Percentage (%)	Frequency (n)	Percentage (%)
Family history of mental illness	No	95	79.8	104	87.4
	Yes	24	20.2	15	12.6

Things that cause stress	Nothing right now	83	69.7	41	34.5
	Birth of my baby	19	16.0	------	------
	Being pregnant	6	5.0	------	------
	Others *	11	9.2	78	65.5
Rape	No	114	95.8	111	93.3
	Yes	5	4.2	8	6.7
Marital conflict	No	89	74.8	97	81.5
	Yes	30	25.2	22	18.5
Intimate partner violence	No	96	80.7	100	84.0
	Yes	23	19.3	19	16.0

---- didn't use in case of non-pregnant

***** Health of herself and her family and no enough money

4. Social support and substance related characteristics

In this study majority of participants (55.5% and 56.3%) had strong social support for confirmed pregnant and unconfirmed pregnant respectively. Among confirmed pregnant women, 33(27.7%) had poor support while 31(26.1%) of unconfirmed pregnant women had poor support. All participants 119(100.0%) were low risk to tobacco, alcohol beverage, cannabis, sedatives and other substances like cocaine, injectable drugs, hallucinogens and opioids for both confirmed pregnant and unconfirmed pregnant women while among unconfirmed pregnant women 100(84.0%) khat users had low risk for health and 19(16.0%) khat users had moderate risk for health (Table 5).

Table 5: Social support and substance related characteristics of confirmed pregnant (n=119) and unconfirmed pregnant (n=119) women who were on reproductive age group at JUMC, 2018

Variables		**Confirmed pregnant**		**Unconfirmed pregnant**	
		Frequency(n)	Percentage (%)	Frequency(n)	Percentage (%)
Social support	Poor support	33	27.7	31	26.1

	Moderate support	20	16.8	21	17.6
	Strong support	66	55.5	67	56.3
Tobacco	Low risk	119	119	119	119
Alcohol beverage use	Low risk	119	100.0	119	100.0
Cannabis	Low risk	119	100.0	100.0	100.0
Khat use	Low risk	119	100.0	100	84.0
	Moderate risk	0	0	19	16.0
Sedatives	Low risk	119	100.0	119	100.0
Other substances*	Low risk	119	100.0	119	100.0

*Injectable drugs, opoids, hallucinogens, cocaine

5. Prevalence of Depression

Nearly one third 31.1% (95% CI) (n=37) of confirmed pregnant women had depression during the current pregnancy and 15.1% (95% CI) (n=18) of unconfirmed pregnant women had depression (Figure 2).

This result has revealed that 31.1% (95% CI= 22.7 - 38.7%) of confirmed pregnant women had depression and 15.1% (95% CI=8.4 - 21.8%) of un confirmed pregnant women had depression.

6. Comparison of depression among confirmed pregnant & unconfirmed pregnant women

The prevalence of depressive symptoms was significantly higher (p-value<0.01) among confirmed pregnant women (31.1%) compared to unconfirmed pregnant women (15.1%) (figure 2).

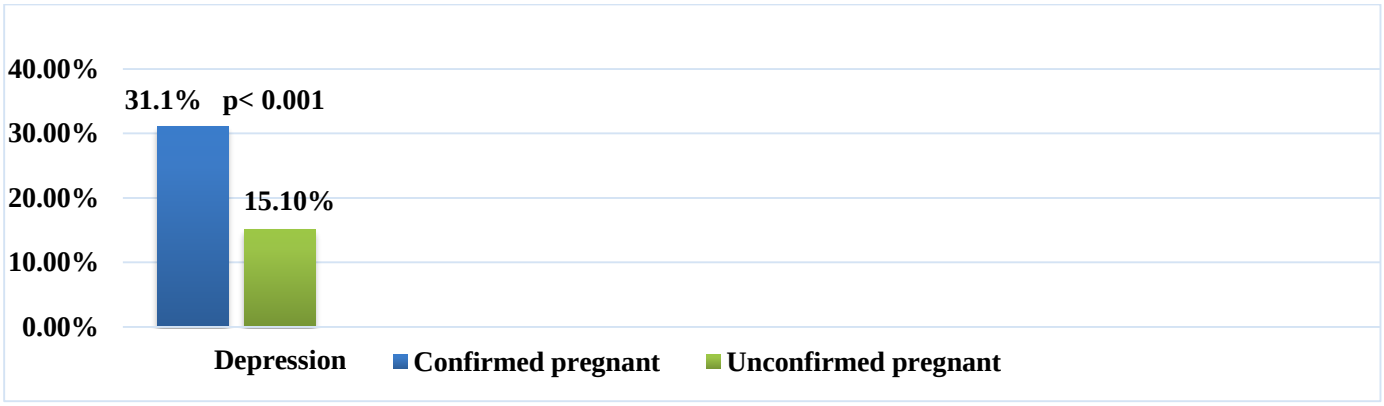

Figure 2: Comparing prevalence of depression among confirmed pregnant(n=119) and unconfirmed pregnant women (n=119) at JUMC, Jimma, Oromia, Southwest Ethiopia, 2018

7. Factors associated with depression

7.1 Bivariate analysis of different factors among confirmed pregnant (n=119) and unconfirmed pregnant women(n=119)

In bivariate analysis educational status, occupational status and monthly income were candidate for multivariable logistic regression for confirmed pregnant women and age was candidate for multivariable logistic association for unconfirmed pregnant women (Table 6).

Table 6: Bivariate analysis of socio-economic characteristics of study participant among Confirmed pregnant(n=119) and unconfirmed pregnant women (n=119) at JUMC, 2018

Variables		**Confirmed pregnant**		**COR & 95% CI**	**P-value**	**Unconfirmed pregnant**		**COR & 95% CI**	**P-value**
		Depression				**Depression**			
		No N(%)	**Yes N(%)**			**No N(%)**	**Yes N(%)**		
Age	15-19	6(7.3)	7(18.9)	1.750 (0.329,0.9298)	0.511	19(18.8)	1(5.6)	3.353 (0.318,35.364)	0.314
	20-24	26(31.7)	9(24.3)	0.519 (0.119,2.269)	0.384	17(16.8)	3(16.7)	1.226 (0.104,14.455)	0.872
	25-29	31(37.8)	10(24.4)	0.484 (0.113,2.067)	0.327	31(30.7)	2(11.1)	4.750 (0.481,46.906)	0.182*
	30-34	13(15.9)	7(18.9)	0.808 (0.169,3.858)	0.789	16(15.8)	4(22.2)	8.444 (0.958,74.443)	0.055*
	35-49	6(7.3)	4(10.8)	1	1	18(17.8)	8(44.4)	1	1
Educational Status	No formal education	8(9.8)	5(13.5)	3.214 (0.809,12.774)	0.097	30(29.7)	4(22.2)	0.756 (0.151,3.783)	0.733
	Primary education	16(19.5)	10(27.0)	3.214 (1.037,9.963)	0.043*	28(27.7)	4(22.2)	0.810 (0.161,4.065)	0.797
	Secondary education	22(26.8)	15(40.5)	3.130 (1.098,8.922)	0.033*	26(25.7)	7(38.9)	1.526 (0.346,6.731)	0.577
	Higher education	36(43.9)	7(18.9)	1	1	17(16.8)	3(16.7)	1	1
Marital Status	Single	2(2.4)	2(5.4)	2.382 (0.322,17.612)	0.395	19(18.8)	5(27.8)	1.660 (0.528,5.220)	0.386
	Married	80(97.6)	35(94.6)	1	1	82(81.2)	13(72.2)	1	1

Table 6: Bivariate analysis of socio-economic cont'd.....

Occupational Status	**House wife**	**32(39.0)**	**15(40.5)**	**1**	**1**	**34(33.7)**	**5(27.8)**	**1**	**1**
	Farmer	2(2.4)	1(2.7)	0.469 (0.103,2.134)	0.327	22(21.8)	4(22.2)	1.236 (0.299,5.115)	0.770
	Private work	16(19.5)	10(27.0)	2.000 (0.125,31.975)	0.624	15(14.9)	4(22.2)	1.813 (0.426,7.718)	0.421
	Governmental	28(34.1)	7(18.9)	0.625 (0.127,3.081)	0.564	16(15.8)	3(16.7)	1.275 (0.271,6.006)	0.759
	Others**	4(4.9)	4(10.8)	0.207 (0.040,1.068)	0.060*	14(13.9)	2(11.1)	0.971 (0.168,5.612)	0.974
Residency	Urban	72(87.8)	34(91.9)	1	1	63(62.4)	13(72.2)	1	1
	Rural	10(12.2)	3(8.1)	0.664 (0.171,2.571)	0.553	38(37.6)	5(27.8)	0.638 (0.211,1.929)	0.426
Monthly Income	≤ 1500	19(23.2)	17(45.9)	2.818 (1.235,6.434)	0.014*	35(34.7)	10(55.6)	2.357 (0.853,6.511)	0.098*
	> 1500	63(76.8)	20(54.1)	1	1	66(65.3)	8(44.4)	1	1
Family Size	1-3	48(58.5)	21(56.8)	1	1	49(48.5)	8(44.4)	1	1
	4 & more	34(41.5)	16(43.2)	1.076 (0.491,2.358)	0.856	52(51.5)	10(55.6)	1.178 (0.43,3.228)	0.750

***** factors which had P-value < 0.25

****** Student**,** jobless

In bivariate analysis gestational age and unwanted pregnancy were candidate for multivariab logistic regression for confirmed pregnant women while previous pregnancy complication was entered to multivariable logistic regression for unconfirmed pregnant women (Table 7).

Table 7: Bivariate analysis of obstetric related characteristics of study participant among confirmed Pregnant (n=119) and unconfirmed pregnant women (n=119) at JUMC, 2018

Variables		Confirmed pregnant		COR(95% CI)	P-value	Unconfirmed pregnant		COR(95% CI)	P-value
		Depression				Depression			
		No N(%)	Yes N(%)			No N(%)	Yes N(%)		
Give birth	No	38(46.3)	15(40.5)	0.718 (0.324,1.593)	0.415	26(25.7)	(38.9)	1.836 (0.644,5.323)	0.256
	Yes	44(53.7)	22(59.5)	1	1	75(74.3)	11(61.1)	1	1
Parity	Primparous	22(50.0)	10(45.5)	1	1	19(25.3)	3(27.3)	1	1
	Multiparous	18(40.9)	8(36.4)	0.978 (0.319,2.994)	0.969	24(32.0)	3(27.3)	0.792 (0.143,4.376)	0.789
	Grand multiparous	4(9.1)	4(18.2)	2.200 (0.456,10.624)	0.326	32(42.7)	5(45.5)	0.990 (0.212,4.615)	0.989
Children who are alive	0	2(4.5)	1(4.5)	1	1	15(20.0)	2(18.2)	1	1
	1 up to 3	38(86.4)	17(77.3)	0.895 (0.076,10.553)	0.930	45(60.0)	8(72.7)	1.333 (0.255,6.985)	0.733
	4 and more	4(9.1)	4(18.2)	2.000 (0.125,31.975)	0.624	15(20.0)	1(9.1)	0.500 (0.041,6.121)	0.588
Previous ANC follow up	No	5(11.4)	2(9.1)	0.780 (0.139,4.383)	0.778	4(5.3)	1(9.1)	1.775 (0.180,17.513)	0.623
	Yes	39(88.6)	20(90.9)	1	1	71(94.7)	10(90.9)	1	1
Past pregnancy complications	No	19(43.2)	7(31.8)	1	1	65(86.7)	8(72.7)	1	1
	Yes	25(56.8)	15(68.2)	1.555 (0.693,3.485)	0.284	10(13.3)	3(27.3)	5.417 (1.389,21.121)	0.015*
Gestational age	First trimester	21(25.6)	3(8.1)	1	1	-------	------	-------	------
	Second trimester	26(31.7)	11(29.7)	2.962 (0.730,12.011)	0.129*	-------	-------	-------	------
	Third trimester	35(42.7)	23(62.2)	4.600 (1.230,17.205)	0.023*	-------	------	-------	-------
Gravida	Primigravida	38(46.3)	16(43.2)	1	1	--------	-------	--------	-------
	Multigravida	44(53.7)	21(56.8)	1.241 (0.563, 2.735)	0.593	-------	-------	-------	-------

No of ANC visit on current pregnancy	1st visit	6(7.3)	2(5.4)	1	1	--------	-------	----------	--------
	2nd visit	13(15.9)	8(21.6)	0.882 (0.162,4.805)	0.885	--------	-------	---------	-------
	3rd visit	18(22.0)	10(27.0)	1.629 (0.574,4.621)	0.359	--------	-------	--------	------
	≥ 4 visit	45(54.9)	17(45.9)	1.471 (0.567,3.815)	0.428	--------	-------	------	-------
The current pregnancy planned or not	No	61(74.4)	28(75.7)	1.071 (0.435,2.634)	0.881	-------	-------	-------	------
	Yes	21(25.6)	9(24.3)	1	1	--------	-------	-------	------
The pregnancy is wanted or not	No	13(15.9)	16(43.2)	4.044 (1.678,9.748)	0.002*	--------	-------	-------	-------
	Yes	69(84.1)	21(56.8)	1	1	--------	-------	-------	-------
Present pregnancy complication	No	57(69.5)	22(59.5)	1.212 (0.421,3.484)	0.722	-------	-------	-------	------
	Yes	25(30.5)	15(40.5)	1	1	-------	-------	-------	------
Problems of present pregnancy complication	None	57(69.5)	22(59.5)	1	1	-------	------	-------	------
	Severe Nausea/Vomiting	9(11.0)	5(13.5)	1.439 (0.434,4.773)	0.552	---------	-------	-------	-----
	Others*	16(19.5)	10(27.0)	1.619 (0.638,4.107)	0.310	--------	------	------	------

*Bleeding**,** anemia**,** preeclampsia, abortion

“----“variables didn’t use in case of confirmed pregnant

From those factors related to genetic, social support and substance related characteristics, in confirmed pregnant women having family history of mental illness, rape or physical abuse by anyone, social support, marital conflict and intimate partner violence while in unconfirmed pregnant women family history of mental illness, social support, marital conflict, intimate partner violence and khat use were candidate (p-value <0.25) for multivariable logistic regression analysis (Table 8).

Table 8: Bivariate analysis of genetic, social support and substance related characteristics of study participant among confirmed pregnant(n=119) and unconfirmed pregnant women (n=119) at JUMC, 2018.

Variables		Confirmed pregnant		COR & 95% CI	P-value	Unconfirmed pregnant		COR & 95% CI	P-value
		Depression				Depression			
		No N(%)	Yes N(%)			No N(%)	Yes N(%)		
Family history of mental illness	No	72(87.8)	23(62.2)	1	1	92(91.1)	12(66.7)	1	1
	Yes	10(12.2)	14(37.8)	4.383 (1.716,11.191)	0.002*	9(8.9)	6(33.3)	5.111 (1.547,16.891)	0.007*
Rape or physical abuse	No	80(97.6)	34(91.9)	1	1	94(93.1)	17(94.4)	1	1
	Yes	2(2.4)	3(8.1)	3.529 (0.564,22.082)	0.178*	7(6.9)	1(5.6)	0.790 (0.091,6.836)	0.830
Marital conflict	No	71(86.6)	18(48.6)	1	1	87(86.1)	10(55.6)	1	1
	Yes	11(13.4)	19(51.4)	6.813 (2.756,16.841)	0.000*	14(13.9)	8(44.4)	4.971 (1.675,14.751)	0.004*
Intimate partner violence	No	73(89.0)	23(62.2)	1	1	87(86.1)	13(72.2)	1	1
	Yes	9(11.0)	14(37.8)	4.937 (1.891,12.890)	0.001*	14(13.9)	5(27.8)	2.390 (0.738,7.745)	0.146*
Social support	Poor support	17(20.7)	16(43.2)	3.200 (1.310,7.816)	0.011*	24(23.8)	7(38.9)	3.617 (1.046,12.505)	0.042*
	Moderate support	14(17.1)	6(16.2)	1.457 (0.477,4.449)	0.509*	15(14.9)	6(33.3)	4.960 (1.333,18.456)	0.017*
	Strong support	51(62.2)	15(40.5)	1	1	62(61.4)	5(27.8)	1	1
Khat use	Low risk	-----	-----	-----	-----	88(87.1)	12(66.7)	1	1
	Moderate risk	------	------	-----	-----	13(12.9)	6(33.3)	3.385 (1.083,10.583)	0.036*

7.2 Multivariate analysis of different factors among confirmed pregnant & unconfirmed pregnant women

The final multivariable logistic regression analysis found important statistically significant associated factors for depression from both confirmed pregnant and unconfirmed pregnant women.

Multivariate logistic regression analysis revealed that family history of mental illness, unwanted pregnancy, marital conflict, intimate partner violence and poor social support had significant association with depression among confirmed pregnant women. Where as in unconfirmed pregnant women having family history of mental illness, marital conflict and having moderate risk for khat use were significantly associated with depression.

The odds of developing depression among confirmed pregnant women who had marital conflict was 4 times (AOR=4.149, 95% CI=1.432,12.022) higher than confirmed pregnant women who had no marital conflict and the odds of developing depression among unconfirmed pregnant women who had marital conflict was 4.360 times (AOR=4.360, 95%CI=1.003,18.955) higher than those women who had no marital conflict.

The odds of developing depression among confirmed pregnant women who had family history of mental illness were about 5.2 times (AOR=5.175, 95%CI=1.647,16.263) higher than the counter part. Where as it was about 5.3 times (AOR=5.315, 95%CI=1.069,26.425) higher for unconfirmed pregnant who had family history of mental illness as compared to those women who had no family history of mental illness.

The odds of developing depression among confirmed pregnant women who had unwanted pregnancy were three times (AOR= 3.173, 95%CI=1.102,9.132) higher as compared to unconfirmed pregnant women whose pregnancy was wanted. The odds of developing depression among confirmed pregnant women who had intimate partner violence were 3.5 times (AOR=3.528, 95%CI=1.093,11.391) higher as compared to confirmed pregnant women who had no intimate partner violence. Confirmed pregnant women who had poor social support were 4.6 times (AOR=4.636,95%CI=1.499,14.337) more likely to develop depression than confirmed pregnant women who had strong social support. Unconfirmed pregnant women who were moderate risk to khat use were 4.7 times (AOR=4.746, 95%CI=1.086,20.744) more likely to develop depression than those women who were low risk to khat use (Table 9).

Table 9: Multivariate analysis of factors associated with depression among confirmed pregnant and unconfirmed pregnant women at JUMC, 2018.

Variables		Confirmed pregnant				Unconfirmed pregnant			
		Depression		COR	AOR	Depression		COR	AOR
		No N(%)	Yes N (%)			No N(%)	Yes N(%)		
Intimate parental violence	No	71(86.6)	18(48.6)	1	**1**	87(86.1)	13(72.2)	1	
	Yes	11(13.4)	19(51.4)	**6.813 (2.756,16.841)**	**3.528 (1.093,11.391)***	14(13.9)	5(27.8)	**2.390 (0.738,7.745)**	
Marital conflict	No	71(86.6)	18(48.6)	1	1	87(86.1)	10(55.6)	1	1
	Yes	11(13.4)	19(51.4)	**4.937 (1.891,12.890)**	**4.149 (1.432,12.022)***	14(13.9)	8(44.4)	**4.971 (1.675,14.751)**	**4.360 (1.003,18.955)***
Family history of mental illness	No	72(87.8)	23(62.2)	1	1	92(91.1)	12(66.7)	1	1
	Yes	10(12.2)	14(37.8)	**4.383(1.716,11. 191)**	**5.175 (1.647,16.263)***	9(8.9)	6(33.3)	**5.111 (1.547,16.891)**	**5.315 (1.069,26.425)***
Pregnancy is wanted or not	No	69(84.1)	21(56.8)	**4.044 (1.678,9.748)**	**3.173 (1.102,9.132)***				
	Yes	62(75.6)	17(45.9)	1	1				
Social support	Poor support	17(20.7)	16(43.2)	**3.200 (1.310,7.816)**	**4.636 (1.499,14.337)***	24(23.8)	7(38.9)	**3.617(1.046,12.05)**	
	Moder ate support	14(17.1)	6(16.2)	1.457 (0.477,4.449)	4.550 (0.497,41.637)	15(14.9)	6(33.3)	**4.960 (1.333,18. 56)**	
	Strong support	51(62.2)	15(40.5)	1	1	62(61.4)	5(27.8)	1	
Level of risk of khat use	Low risk					88(87.1)	12(66.7)	1	1
	Moder ate risk					13(12.9)	6(33.3)	**3.385(1.083, 10.583)**	**4.746 (1.086,20.744)***

*Variables with significant association

Chapter six: Discussion

This study revealed that confirmed pregnant women had a higher prevalence of depression (31.1%) than unconfirmed pregnant women (15.1%). Confirmed pregnant women might be more biologically vulnerable due to the hormonal changes. The hormonal changes together with their psychological and social situation will increase their vulnerability to depression[20,32].

This result was different from the study done in USA 65.9% in pregnant women and 58.6% among non pregnant women[21]. This might be due to the fact that difference in cultural, sociodemographic, large sample size (375 pregnant and 8,657 non- pregnant), long study period (2005-2009) and also awareness.

This study finding was in line with other studies like low-income and middle-income countries 25.3% [15], Northern Tanzania 33.8%[24], Kwazulu (South Africa) 38.5%[12] and Nigeria 24.5%[30] and also in line with different studies findings carried out in Ethiopia such as Addis Ababa 24.94%[20], Adama 31.2%[18], Maichew 31.1[35], Gurage 29.5% [34], Gondar 23%[33] and Shashemenie 25.6%[36].

On the other hand, this study finding among confirmed pregnant women was higher than other studies conducted in Australia 7.0%[11], Southern Brazilia 16.0%[22], China 8.3%[23], Sri Lanka 6.9%[26], Rural Bangladish 18%[28], Turkey 18.8%[27], Ghana 9.9%[31], Rural Southwest Ethiopia 19.9%[10] and Debre tabore 11.8%[32]. The first probable reason for the different prevalence rate might be due to the use of different assessment tools in which the previous studies like Australia, Southern Brazilian, Sri Lanka, Rural Bangladish, Nigeria, Rural South western Ethiopia and Debre Tabour used EPDS, Ghana used PHQ-9 and China used Postpartum Depression Screen Scale while the current study used BDI-II. The second reason could be cultural difference between the current study and the previous studies. The other reason might be difference in study participants which had different sociodemographic and economic characteristics.

This study finding among confirmed pregnant women was lower than the study carried out in Pakistan 81%[25] and Mpumalanga province, Rural South Africa 48.7%[9]. The variation might be due to the difference in data collection tool in which previous studies like Pakistan used Hamliton Depression Scale and Mpumalanga province, Rural South Africa used EPDS. The other reason might be difference in study participants which had different sociodemographic and economic characteristics.

The prevalence of this study finding among unconfirmed pregnant women was in line with the previous studies in USA(14%)[39] and Uberaba(18.2%)[42]. This study finding among unconfirmed pregnant women

was lower than the previous study findings in Lahore(25%)[40], Rural china(30.7%)[43], Rural Bangladish(30.8%)[44], Pakistan(66%)[41] and South Africa(45.3%)[45]. The first reason might be due to difference in tool used Rural china & South Africa used Center for Epidemiologic Studies Depression Scale (CES-D), Rural Bangladish used EPDS-Bangladesh version, Pakistan used SRQ-20 and Uberaba & Lahore used BDI but cut off point was differed from the current study. The second one was having larger sample size (Rural Bangladish on 4430 women, South Africa on 680 women, Rural China on 1058 women and Lohore on 186 women) in the previous studies and the other one was due to the difference in sociodemographic characterstics.

In this study, family history of mental illness was found to be highly associated with depression among both confirmed pregnant and unconfirmed pregnant women. The odds of developing depression were 5.2 times higher in those confirmed pregnant women who had family history of mental illness than those women who had no family history of mental illness. Similar findings were reported in previous studies done in Pakistan[46] and Sudan[29]. While the odds of developing depression were 5.3 times higher in those unconfirmed pregnant women who had family history of mental illness than those women who had no family history of mental illness. Similar findings were reported in previous study done in Pittsburgh[48]. This might be explained by the fact that mental illness has genetic base, families are stigmatized and there are a lot of burden on the family members regarding financial expense and giving care for the patient[2].

In this study, the odds of developing depression were 3.2 times higher in those unconfirmed pregnant women whose pregnancy was unwanted than wanted. Similar results were shown in studies done among a study conducted in Turkey[27], Rural Bangladesh[28], Rural South Africa[9] and Southwestern Ethiopia[10], Adama[18] and Maichew[35]. This might be due to unwanted pregnancy might lead individual to develop short term and longterm psychological damage and adopt behavioural risk factors which inturn lead to depression.

In this study marital conflict and depression were found to have strong association on both confirmed pregnant and unconfirmed pregnant women. The odds of developing depression were 4 times higher in those confirmed pregnant women who had marital conflict than those women who had no marital conflict which is similar with study findings in Northern Tanzania[24], Rural Bangladesh[28], Turkey[27], Adama[18], Maichew[35] and Shashemenie[36]. This is due to the fact that marital conflict leads to pregnant women to develop depression. And the odds of developing depression were 4.4 times higher in unconfirmed pregnant women who had marital conflict than those women who had no marital conflict which is similar with study finding

in conducted in USA[49]. This might be the fact that psychological factor is one of the factor which lead to develop depression[2].

In this study the odds of developing depression were 3.5 times higher in confirmed pregnant women who had intimate partner violence than those women who had no this events. This study is inline with studies conducted in South Western Ethiopia[10], Shashemenie[36], Sweden[50] and Bangladish[51]. But, there is no association between intimate partner violence and depression among unconfirmed pregnant women which were different from the study findings carried out in Rural Bangladesh[44] and South Africa[45]. This might be due to larger sample size in the previous studies and sociodemographic characterstics.

In confirmed pregnant women, the odds of developing depression were more than 4.6 times higher in those women who had poor social support than strong social support. This study finding was in line with other studies done in Australia[11], Turkey[27], Sudan[29] and Shashemenie[36]. This study also supported by a study done in Southwestern Ethiopia showed that women who reported moderate and high support during pregnancy were significantly less likely to report depressive symptoms[10]. This is the reason why social factors are more contributing to develop depression[2].

In unconfirmed pregnant women who had moderate risk for khat use showed a significant association with depression. The odds of unconfirmed pregnant women who were moderate risk for khat use were 4.7 times higher than those who were low risk for khat use. This study was in line with the study conducted in US[38].

Chapter seven: Strength and limitation of the study

7.1 Strength

Strength of this study were it employed by standardized and internationally well recognized tools Beck Depression Inventory sacle, Oslo Social Support-3(OSS-3) Scale, Alcohol, Smoking and Substance Involvement Screening Test (ASSIST).

7.2 Limitation

The assessment tool BDI is not validated in Ethiopia and pregnancy test wasn't done for non-pregnant test.

Chapter eight: Conclusions and recommendations about the study

8.1 Conclusion

A high prevalence of depressive symptoms among confirmed pregnant women was found than unconfirmed pregnant women. That is prevalence of depression among confirmed pregnant women was two times higher than unconfirmed pregnant women.

Regarding factors affecting prevalence of depression the current study revealed that intimate partner violence, family history of mental illness, unwanted pregnancy, marital conflict and poor social support had significant association with depression among confirmed pregnant women where as family history of depression, marital conflict and moderate risk for khat use had significant association with depression among unconfirmed pregnant women.

8.2 Recommendation

Based on the findings,

To policy makers

Policy makers are recommended to add intervention strategies about depression

To Ministry of Health

Recommendations made to Ministry of Health to design a screening program of depression to be carried out as part of the antenatal period.

To Jimma University Medical Center

Recommendations made to amend continuous awareness, information, advocacy and access to all pregnant women about the main associated factors that expose them to be depressed. Psychosocial care should be integrated to the ANC clinic

Health professional who are working at ANC

Recommendations goes to health professional who are working at ANC to screen depressive symptoms and associated factors that lead them to be depressed and link to mental health professionals and to strengthen the link between ANC clinic and psychiatry clinic.

To future researchers

Large sample size study is recommended future researchers to determine the impact of depression on quality of life of pregnant women.

To Non governmental organizations (NGO)

Recommmendations goes to NGO to work on reproductive health and mental health to rearrange additional orientations and trainings about depression related to reproductive age group.

To psychiatry department

Recommendations goes to psychiatrydepartment to give Mental Health Gap Action (MH- gap) training to non mental health specialists to screen depressive symptoms early.

To Jimma university mental health professional

Recommendations goes to prepare workshop focused on type of stressful life events like marital conflict and how to cope with this problem.

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ANNEX: QUESTIONNAIRES **CODE NO._____**

JIMMA UNIVERSITY

INSTITUTE OF HEALTH FACALITY OF MEDICAL SCIENCE

DEPARTMENT OF PSYCHIATRY

Annex 1: Structured English version Questionnaire

English version interview consent form

Dear Madam!

My name is_____

I am Master's Degree student in the field of psychiatry at Jimma University. As part of my academic requirements, I am expected to conduct research thesis and I am going to conduct a study in ANC clinic and inpatient wards in Jimma University Medical Center(JUMC) and design possible intervention strategies to tackle them. The aim of this study is to estimate the existing prevalence (magnitude) of depression and associated factors among confirmed pregnant who had ANC follow up and unconfirmed pregnant women who were visitors of inpatients at JUMC and it is founded to be evidence based. Thus, this interview is prepared for this purpose to get appropriate information on confirmed pregnant and unconfirmed pregnant women and you are chosen to participate in this study.

The information that I will obtain using this interview will be used only for research purpose and also I need to assure you that confidentiality is my main quality.

Therefore; I politely request your cooperation to participate in this interview. You do have the right not to respond at all or to withdraw in the meantime, but your input has great value for the success of my objective.

Did you agree? 1. Yes

2. No

Thank you for your cooperation!!!

PART I: SOCIO- DEMOGRAPHIC AND ECONOMIC DATA; IT SHOULD BE FILLED BY INTERVIEWER

Age:

_____

2. Religion:
1. Muslim
2. Orthodox
3. Protestant
4. Catholic
5. Other ___

3. Ethnicity:
1. Oromo
2. Amhara
3. Tigray
4. Yam
5. other ___

4. Educational status:
1. No formal education
2. Primary education
3. Secondary education
4. Higher education
5. Other_____

5. Marital status:
1. Single
2. Married
3. Divorced
4. Widowed
5. Separated

SE6: Occupational status
1. House wife
2. Farmer
3. Private work
4. Governmental
5. Student
6. Other ____

107	Where are you living?	1. Urban 2. Rural
108	How many members in the family are living?	_____
109	Monthly income(Birr)	_____

PART II: OBSTETRIC RELATED QUESTIONS

PAST HISTORY OF PREGNANCY/BIRTH			
201	Did you have given birth on the past?	1. Yes 2. No	
202	If your ans. for que. no. **201** is yes, how many times do you have given birth with a gestational age of 28 weeks or more, regardless of whether the child was born alive or stillbirth?	1. 1 2. 2 3. 3 4. ≥ 4x	
203	From Q202, how many children are alive?	1. 0 2. 1, 2 or 3 3. ≥ 4	
204	Did you have ANC follow up for previous pregnancy?	1. Yes 2. No	
205	Is there any pregnancy complications in the past?	1. Yes 2. No	
206	If yes to Que 205, Which problems have you experienced?	1. Severe Nausea/Vomiting 2. Bleeding 3. Heart Disease 4. Anemia 5. HIV	7. Allergies 8. Preeclampsia/ hypertension 9. Hepatitis 10. Swelling 11. Abortion (<28 weeks)

		6. Diabetes	12. Other_____
PRESENT PREGNANCY(PASS IT FOR UNCONFIRMED PREGNANT WOMEN)			
207	Gestational age(week or month)	1.1st trimester 2. 2nd trimester 3. 3rd trimester	
208	Is the current pregnancy(gravida):	1. 1st 2. 2nd 3. 3rd 4. Other_____	
209	No. of ANC visit?	_____	
210	Did you plan this pregnancy?	1. Yes 2. No	
211	When you got pregnant, did you want to get pregnant at that time?	1. Yes 2. No	
212	Is there any of the following? (**please check and circle**)	None Severe Nausea/Vomiting Bleeding Heart Disease Anemia HIV Diabetes	Allergies Preeclampsia/ hypertension Hepatitis Swelling Abortion (<28 weeks) Other_____

PART III. MENTAL/EMOTIONAL/PSYCHOLOGICAL AND GENETIC RELATED QUETIONS

301	Do you have history of depression on your family?	1. Yes 2. No
302	What things are causing you the most stress right now?	1. Nothing right now 5. Where I live 2. Birth of my baby 6. Not enough money 3. Being pregnant 7. Health of herself/family 4. Partner relationship 9. Other_____ 8. Fear of previous pregnancy complications
303	Has anyone touched you against your will, raped you?	1. Yes 2. No
304	Were there times on which you had conflict with your husband?	1. Yes 2. No
305	Do you have a history of intimate partner violence(e.g. verbal, sexual and physical)?	1. Yes 2. No

PART IV: OSLO SOCIAL SUPPORT QUESTIONs

401	How easy can you get help from neighbors if you should need it?	1. Very easy 2. Easy 3. Possible 4. Difficult 5. Very difficult

402	How many people are so close to you that you can count on them if you have serious problems?	1. None 2. 1-2 3. 3-5 4. 5+
403	How much concern do people show in what you are doing?	1. A lot 2. Some 3. Uncertain 4. Little 5. No

PART V: ALCOHOL, SMOKING AND SUBSTANCE INVOLVEMENT SCREENING TEST (ASSIST V 3.0)

SUBSTANCE HISTORY							
501	In your life, which of the following substances have you ever used? (NON-MEDICAL USE ONLY)	No	Yes				
	1. Tobacco products (cigarettes, chewing tobacco, cigars, etc.)	0	3				
	2. Alcoholic beverages (beer, wine, spirits, etc.)	0	3				
	3. Cannabis (marijuana, pot, grass, hash, etc.)	0	3				
	4. Amphetamine type stimulants (khat, diet pills, etc.)	0	3				
	5. Sedatives or Sleeping Pills (Diazepam , etc.)	0	3				
	6. Other - specify:	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 Question 502 for each substance ever used.							
502	In the past three months, how often have you used the substances you mentioned (FIRST DRUG, SECOND DRUG, ETC)?	Never	Once or Twice	Monthly	Weekly	Daily or Almost Daily	
	1. Tobacco products (cigarettes, chewing tobacco, cigars, etc.)	0	2	3	4	6	
	2. Alcoholic beverages (beer, wine, spirits, etc.)	0	2	3	4	6	
	3. Cannabis (marijuana, pot, grass, hash, etc.)	0	2	3	4	6	
	4. Amphetamine type stimulants (khat, diet pills, etc.)	0	2	3	4	6	
	5. Sedatives or Sleeping Pills (Valium, etc.)	0	2	3	4	6	
	6. Other - specify:	0	2	3	4	6	
If "Never" to all items in Question 502, skip to Question 506. If any substances in Question 502 were used in the previous three months, continue with Questions 503, 504 & 505 for each substance used.							

503	During the past three months, how often have you had a strong desire or urge to use (FIRST DRUG, SECOND DRUG, ETC)?	Never	Once or Twice	Monthly	Weekly	Daily or Almost Daily	
	1. Tobacco products (cigarettes, chewing tobacco, cigars, etc.)	0	3	4	5	6	
	2. Alcoholic beverages (beer, wine, spirits, etc.)	0	3	4	5	6	
	3. Cannabis (marijuana, pot, grass, hash, etc.)	0	3	4	5	6	
	4. Amphetamine type stimulants (khat, diet pills, etc.)	0	3	4	5	6	
	5. Sedatives or Sleeping Pills (Diazepam , etc.)	0	3	4	5	6	
	6. Other - specify:	0	3	4	5	6	
504	During the past three months, how often has your use of (FIRST DRUG, SECOND DRUG, ETC) led to health, social, legal or financial problems?	Never	Once or Twice	Monthly	Weekly	Daily or Almost Daily	
	1. Tobacco products (cigarettes, chewing tobacco, cigars, etc.)	0	4	5	6	7	
	2. Alcoholic beverages (beer, wine, spirits, etc.)	0	4	5	6	7	
	3. Cannabis (marijuana, pot, grass, hash, etc.)	0	4	5	6	7	
	4. Amphetamine type stimulants (khat, diet pills, etc.)	0	4	5	6	7	
	5. Sedatives or Sleeping Pills (Diazepam , etc.)	0	4	5	6	7	
	6. Other - specify:	0	4	5	6	7	
505	During the past three months, how often have you failed to do what was normally expected of you because of your use of (FIRST DRUG, SECOND DRUG, ETC)?	Never	Once or Twice	Monthly	Weekly	Daily or Almost Daily	
	1. Tobacco products						
	2. Alcoholic beverages (beer, wine, spirits, etc.)	0	5	6	7	8	
	3. Cannabis (marijuana, pot, grass, hash, etc.)	0	5	6	7	8	
	4. Amphetamine type stimulants (khat, diet pills, etc.)	0	5	6	7	8	
	5. Sedatives or Sleeping Pills (Diazepam , etc.)	0	5	6	7	8	
	6. Other - specify:	0	5	6	7	8	
506	Has a friend or relative or anyone else ever expressed concern about your use of (FIRST DRUG, SECOND DRUG, ETC.)?	No, Never	Yes, in the past 3 months	Yes, but not in the past 3 months			
	1. Tobacco products (cigarettes, chewing tobacco, cigars, etc.)	0	6	3			

	1. Alcoholic beverages (beer, wine, spirits, etc.)	0 6 3
	2. Cannabis (marijuana, pot, grass, hash, etc.)	0 6 3
	3. Amphetamine type stimulants (khat, diet pills, etc.)	0 6 3
	4. Sedatives or Sleeping Pills (Diazepam , etc.)	0 6 3
	5. Other – specify:	0 6 3
507	Have you ever tried and failed to control, cut down or stop using? (FIRST DRUG, SECOND DRUG, ETC.)?	No, Never / Yes, in the past 3 months / Yes, but not in the past 3 months
	1. Tobacco products (cigarettes, chewing tobacco, cigars, etc.)	0 6 3
	2. Alcoholic beverages (beer, wine, spirits, etc.)	0 6 3
	3. Cannabis (marijuana, pot, grass, hash, etc.)	0 6 3
	4. Amphetamine type stimulants (khat, diet pills, etc.)	0 6 3
	5. Sedatives or Sleeping Pills (Diazepam , etc.)	0 6 3
	6. Other – specify:	0 6 3
		No, Never / Yes, in the past 3 months / Yes, but not in the past 3 months
508	Have you ever used any drug by injection?(NON-MEDICAL USE ONLY)	0 2 1

PART VI: BECK DEPRESSION INVENTORY(BDI) SCALE

Sr.no.	Questions	Response
601	Sadness:	0 I do not feel sad. 1 I feel sad 2 I am sad all the time. 3 I am so sad or unhappy that I can't stand it.
602	Pessimism:	0 I am not discouraged about my future. 1 I feel more discouraged about my future than I used to be. 2 I do not expect things to work out for me. 3 I feel my future is hopeless and will only get worse.
603	Past failure: .	0 I do not feel like a failure. 1 I have failed more than I should have.

		2 As I look back, I see a lot of failures. 3 I feel I am a total failure as a person
604	Loss of pleasure:	0 I get as much pleasure as I over did from the things I enjoy. 1 I don't enjoy things as much as I used to. 2 I get very little pleasure from the things I used to enjoy. 3 I can't get any pleasure from the things I used to enjoy.
605	Guilt feelings:	0 I don't feel particularly guilty 1 I feel guilty over many things I have done or should have done. 2 I feel quite guilty most of the time. 3 I feel guilty all of the time.
606	Punishment Feelings:	0 I don't feel I am being punished. 1 I feel I may be punished. 2 I expect to be punished. 3 I feel I am being punished.
607	Self -Dislike:	0 I feel the same about myself as over. 1 I have lost confidence in myself. 2 I am disappointed myself. 3 I dislike myself.
608	Self- Criticalness:	0 I don't criticize or blame myself more than usual. 1 I am critical of myself than I used to be. 2 I criticize myself for all of my faults. 3 I blame myself for everything bad that happens.
609	Suicidal thoughts or wishes: .	0 I don't have any thoughts of killing myself. 1 I have thoughts of killing myself, but I would not carry them out. 2 I would like to kill myself. 3 I would kill myself if I had the chance
610	Crying:	0 I don't cry any more than I used to. 1 I cry more now than I used to. 2 I cry over every little thing. 3 I feel like crying, but I can't.
611	Agitation:	0 I am no more restless or wound up than usual.

	.	1 I feel more restless or wound up than usual. 2 I am so restless or more agitated that it's hard to stay still. 3 I am so restless or agitated that I have to keep moving or doing something
612	Loss of interest:	0 I have not lost interest in other people or activities. 1 I am less interested in other people or things than before. 2 I have lost most of my interest in other people or things. 3 It's hard to get interested in anything.
613	Indecisiveness:	0 I make decisions about as well as ever. 1 I find it more difficult to make decisions than usual. 2 I have much greater difficulty in making decisions than I used to. 3 I have trouble making any decisions.
614	Worthlessness:	0 I don't feel I am worthless. 1 I don't consider myself as worthwhile and useful as I used to. 2 I feel more worthless as compared to other people 3 I utterly worthless
615	Loss of energy:	0 I have as much energy as ever. 1 I have less energy than I used to have. 2 I don't have enough energy to do very much. 3 I don't have enough energy to do anything.
616	Changes in sleeping pattern:	I have not experienced any change in my sleeping pattern
		1a I sleep somewhat more than usual. 1b I sleep somewhat less than usual.
		2a I sleep a lot more than usual 2b I sleep a lot less than usual
		3a I sleep most of the day 3b I wake up 1-2 hours early and can't get back to sleep.
617	Irritability:	0 I am no more irritable than usual. 1 I am more irritable than usual. 2 I am much more irritable than usual. 3 I am irritable all the time.

618	Changes in appetite:	0 I have not experienced any change in my appetite
		1a My appetite is somewhat less than usual. 1b My appetite is somewhat greater than usual.
		2a My appetite is much less than before. 2b My appetite is much greater than usual.
		3a I have no appetite at all. 3b I crave food all the time.
619	Concentration difficulty	0 I can concentrate as well as ever. 1 I can't concentrate as well as usual. 2 It's hard to keep my mind on anything for very long. 3 I find I can't concentrate on anything.
620	Tiredness or fatigue:	0 I am no more tired or fatigued than usual. 1 I get more tired or fatigued more easily than usual. 2 I am too tired or fatigued to do a lot of the things I used to do. 3 I am too tired or fatigued to do most of the things I used to do.
621	Loss of interest in sex:	0 I have not noticed any recent change in my interest in sex. 1 I am less interested in sex than I used to be. 2 I am much less interested in sex now. 3 I have lost interest in sex completely.

Thank you for your time today!!!

ቅጽ2: አማርኛ ትርጉም መጠይቅ

የኮድ ቁጥር_____

ጅማ ዩኒቨርሲቲ

የጤና እንስትቲዩት

የአእምሮ ጤና ትምህርት ክፍል

የፍቃደኝነት እና የመረጃ ቅጽ/ገጽ

እኔ በጅማ ዩኒቨርሲቲ በአእምሮ ህክምና የድህረ ምረቃ ድግሪ ተማሪ ስሆን ለድህረ ምረቃ ዲግሪ ማሟያነት ከሚያስፈልጋቸዉ ነገሮች አንዱ የጥናት ጽሑፍ ነው። ከዚህ በተጨማሪም ጥናቱ የሚያተኩረው በድብርት ህመም የሚጠቁ እናቶች ቢኖሩ በፍጥነት አስፈላጊውን የጤና እርዳታ እንዲያገኙ ይረዳል፡፡ የዚህ ጥናት ዋና አላማ በ2010 ዓ.ም የድብርት ስርጭትና ተዛማጅ ችግሮች ጋር ያለውን ተያያዥነት በጅማ ዩኒቨርሲቲ ሜዲካል ሴንተር እርጉዝ መሆናቸው በተረጋገጠና ባልተረጋገጠ እናቶች ላይ ማወዳደር ነው፡፡ መጠይቁን ለመሙላት የሚያደርጉት ተሳትፎ ሙሉ በሙሉ በፍቃደኝነት ላይ የተመሰረተ ነው፡፡ መጠይቁን በታማኝነት በመመለስ የሚያደርጉት ትብብር ትክክለኛ ውጤት እንዳገኝ ይረዳኛል። መመለስ የማይፈልጉትን ጥያቄዎችን መዝለል/አለመመለስ ይችላሉ መጠይቁ ላይ ለመረዳት የሚከብዱ ጥያቄዎች ካሉ ግልጽ እንዲሆኑ መጠየቅ ይችላሉ፡፡ በተለያዩ ምክንያቶች የተነሳ የጥናቱ መጀመሪያ ላይ እንዲሁም መጠይቁን መመለስ ከጀመሩ በኋላ መሳተፍ ካልፈለጉ መጠይቁን መመለስ ማቋረጥ እና በጥናቱ ላይ አለመሳተፍ ይችላሉ፡፡ ነገር ግን የእርሶ በጥናቱ ላይ መሳተፍ በጣም አስፈላጊ እንደሆነ እመክራለሁ፡፡ ስሞዎት በመጠይቁ ላይ አይጻፍም/ አይጽፉም፡፡ በጥናቱ ላይ ማን እንደተሳተፈ አይታወቅም፡፡ የእርሶ ለጥያቄዎች ያደረጉት ምላሽ የሚታወቀው በተሰጠዉ መለያ መሰረት ብቻ ይሆናል፡፡ የሚሰጡኝ መረጃ ሚስጥራዊነቱ የተጠበቀ ይሆናል፣ የጥናቱም ውጤት በአጠቃላይ እንጂ በግለሰብ ደረጃ አይወጣም፡፡

በጥናቱ ለመሳተፍ ፈቃደኛ ኖዎት? ሀ. አዎ ለ. አይደለሁም

ለተሳትፎዎ እናመሰግናለን፡፡

መጠይቁን ያስሞላው ሰው ስም ----------ፊርማ----------ቀን------ወር-------ዓ. ም---

የተቆጣጣሪ ስም----------ፊርማ----------ቀን------ወር--------ዓ. ም-

ክፍል-1: የስነ ማህበራዊ ስነ ህዝብና ምጣኔ ሀብት መለያ መጠይቅ

መመሪያ፡ ይህ የስነ ማህበራዊ ስነ ህዝብና ምጣኔ ሀብት መለያ መጠይቅ ነው፡፡ እባክዎ ተሳታፊው የመለሰዉን መልስ በባዶ ቦታው ላይ ይሙሉ እንዲሁም ተሳታፊውን የሚወክለውን ምርጫ ያክብቡ::

SE1: እድሜ

_____

SE2: ሀይማኖት:

1. ሙስሊም
2. አርቶዶክስ
3. ፕሮቴስታንት
4. ካቶሊክ
5. ሌላ ካለ ይግለፁ_____

SE3. ብሔር

1. ኦሮሞ
2. አማራ
3. ትግሬ
4. የም
5. ሌላ ካለ ይግለጹ

SE4. የትምህርት ደረጃ

1. መፃፍ እና ማንበብ የማይችል
2. 1-8 ክፍል
3. 9-12 ክፍል
4. ከፍተኛ የትምህርት ተቋም

SE5. የጋብቻ ሁኔታ

1. ያላገባች
2. ያገባች
3. የፈታች
4. ባሏ የሞተባት
5. ከባሏተለይታ የምትኖር

SE6. የስራ ሁኔታ

1. የቤት እመቤት
2. ግብርና
3. የግል ስራ
4. መንግስት ሰራተኛ
5. ተማሪ
6. ሌላ ካለ ይግለፁ___

SE7	አሁን የሚኖሩበት ቦታ የት ነው ?	1. ከተማ 2.ገጠር
SE8	በአንድ ቤት ዉስጥ የሚኖር የቤተሰብ ብዛት ስንት ነው?	_____
SE9	በአመካይ የወር ገቢዎ መጠን ስንት ይሆናል ብለው ይገምታሉ?(በብር)	_____

ክፍል 2፡ ከወሊድ ጋር የተያያዘ መጠይቅ

መመሪያ፡ *ይህ መጠይቅ በእናቶች ላይ ያለውን ከወሊድ ጋር የተያያዘ የሚጠይቅ ነው ፡፡ መልሶን በክፍት ቦታ ላይ ይጻፉ ለአንዳንድ ጥያቄዎች ደግሞ መልሱን ይክበቡ ፡፡*

ካለፈዉ እርግዝና ወይም ወሊድ ጋር የተያያዘ መጠይቅ			
OB1	ከዚህ በፊት ወልደዋል?	1. አዎ 2. የለም	
OB2	የጥያቄ መልስ OB1 አዎ ከሆነ በህይወት ይኑሩም አይኑሩም ≥28 ሳምንት የሆናቸው ልጆች ስንት ወለዱ?	1. 1 2. 2 3. 3 4. ≥4	
OB3	በጥያቄ OB2 ከጠቀሷቸው መካከል ስንት ልጆች በህይወት አሉ?	1. 0 2. 1፣ 2፣ ወይም 3 3. 4 እና ከዚያ በላይ	
OB4	ባለፈው እርግዝና የቅድመ ወሊድ ክትትል አርገዋል?	1. አዎ 2. የለም	
OB5	ከእርግዝና ጋር የተያያዙ ችግሮች ነበሩ?	1. አዎ 2. የለም	
OB6	የ OB5 መልስዎ አዎ ከሆነ የትኛው ህመም ኢጋጠሞዎት ነበር?	1. ከፍተኛ የሆነ ማቅለሽለሽ/ማስታወክ 2. ደም መፍሰስ 3. የልብ በሽታ 4. ደም ማነስ 5. ኤች አይ ቪ 6. የስኳር በሽታ	7. የሰውነት አንዳንድ ነገሮችን አለመቀበል 8. ደም ግፊት(ፕሪክላምስያ) 9. የጉበት በሽታ 10. እብጠት 11. ውርጃ(< 28 ሳምንት በታች) 12. ሌላ ካለ ይግለፁ_____
ስለ አሁኑ እርግዝና መጠይቅ ***መመሪያ: ይህ መጠይቅ ለእርጉዝ ላልሆኑት አይጠየቅም***			
OB07	የእርግዝና ጊዜዎ በሳምንት ወይም በወራት ስንት ይሆናል?	1. 1ኛ ትራይሚስተር (3 ወር) 2. 2ኛ ትራይሚስተር(4- 6ወር) 3. 3ኛ ትራይሚስተር(7- 9 ወር)	
OB08	የአሁኑ እርግዝናዎ ስንትኛ ነው?	1. 1ኛ 2. 2ኛ 3. 3ኛ 4. 4ኛ	
OB09	እስከ አሁን ድረስ ስንት ጊዜ ክትትል አድርገዋል?	_____	
OB10	እርግዝናዉ የታቀደ ነው?	1. አዎ 2. አይደለም	
OB11	እርግዝናዉ የተፈለገ ነው?	1. አዎ 2. አይደለም	

OB12	ከሚከተሉት ዉስጥ የትኛው አለ?	1. ከፍተኛ የሆነ ማቅለሽለሽ ወይም ማስታወክ 2. የታይሮይድ ሆርሞን 3. ደም መፍሰስ 4. የልብ በሽታ 5. ደም ማነስ 6. ኤች አይ ቪ	7. የሰውነት አንዳንድ ነገሮችን አለመቀበል 8. የስኳር በሽታ 9. የሚጥል በሽታ 10. የጉበት በሽታ 11. እብጠት 12. ሌላ ካለ ይግለፁ_____

ክፍል 3: ከአእምሮ ከሰነ ልቦና ከሰሜት እና ከሰነ ባህርይ ጋር የተያያዘ መመይቅ

MR1	ከቤተሰብዎ መካከል ድብርት ያለበት ሰው አለ?	1. አዎ 2. የለም
MR2	አሁን እርስዎን በጣም እያስጨነቀ ያለው ምክንያት ምንድን ነው?	1. አሁን ምንም ነገር የለም 5. የምኖርበት ቦታ 2. ህጻኑን መዉለድ 6. በቂ የሆነ ገንዘብ አለመኖር 3. እርጉዝ መሆን 7. የጤና ችግር(የራስ/የቤተሰብ) 4. ከባል ጋር ጥሩ የሆነ ግንኙነት አለመኖር 8. ያለፈውን በእርግዝና ጊዜ የተከሰተዉን ህመም አሁንም ይከሰታል ብሎ መፍራት 9. ሌላ ካለ ይግለፁ_____
MR3	ያለ እርስዎ ፈቃድ አስገድዶ የደፈርዎ ወይም ሊደፍርዎ የሞከረ ሰው ነበር?	1. አዎ 2. የለም
MR4	በትዳር ህይወትዎ ዉስጥ ከባለቤትዎ ጋር አለመግባባት አለ?	1. አዎ 2. የለም
MR5	የሚወዱት ባለቤትዎ ያደረሰብዎ ችግር ማለትም (መዛት፤ መድፈርና የአካል ጉዳት)አለ?	1. አዎ 2. የለም

ክፍል 4፡- ያለው የማህበራዊ ድጋፍ በተመለከተ መጠይቅ

OS1	የሰው ድጋፍ የሚገባዎት ከሆነ ከጎረቤትዎ እርዳታ ለማግኘት ምን ያህል ይቀላል?	1. በጣም ቀላል 2. ቀላል 3. ሊሆን የሚችል 4. ከባድ 5. በጣም ከባድ
OS2	ከፍ ያለ ችግር ቢኖርዎ ከእርስዎ ጋር በጣም በቀረበ ሁኔታ የሚገኙት ስንት ሰዎች ናቸው?	1. ምንም 2. 1 – 2 3. 3 – 5 4. 5+
OS3	እርስዎ ለሚያደርጉት ድርጊት ምን ያህል ሰዎች ያሳስባቸዋል?	1. ብዙ 2. ጥቂት 3. እርግጠኛ አይደለሁም 4. ትንሽ 5. የለም

ክፍል 5፡- ሱስን በተመለከተ መጠይቅ

መመሪያ: መልሱን በትክክል ያክብቡ

አሲስት መጠይቅ		**ትንሀሦ**	**የአልኮል መጠጦች**	**ካናቢስ**	**ጫት**	**የእንቅልፍ**	**ካለ *ሌላ ይጥቀሱ**
1. በህይወት ዘመንዎ፣ ከሚከተሉት አደንዛዥ ዕፆች መካከል የትኞቹን ተጠቅመዋል?(**ለሕክምና ከሚሰጡ ውጭ ያሉትን)**	አዎ	3	3	3	3	3	3
	የለም	0	0	0	0	0	0
ማሳሰቢያ: የ 1ኛው ጥያቄ መልስ ተጠቅሞ የማያውቅ ከሆነ መጠይቁን ያቁሙ።							
2. ባለፉት ሦስት ወራት ውስጥ፣ ከላይ የተጠቀሱት አደንዛዥ ዕፅ በምን ያህል ድግግሞሽ ተጠቅመዋል?							
በጭራሽ		0	0	0	0	0	0
አንዴ ወይም ሁለቴ		2	2	2	2	2	2
በየወሩ		3	3	3	3	3	3
በየሳምንቱ		4	4	4	4	4	4
በየቀኑ ወይም በየቀኑ በሚባል ደረጃ		6	6	6	6	6	6
ማሳሰቢያ: የ 2ኛው የሁሉም ጥያቄ መልስ በጭራሽ ከሆነ ወደ 6ኛው ጥያቄ ይሂዱ።							
3. ባለፉት ሦስት ወራት ውስጥ፣ አደንዛዥ ዕፅን ለመጠቀም ምን ያህል ጠንካራ ፍላጎት ነበረዎት?							
በጭራሽ		0	0	0	0	0	0
አንዴ ወይም ሁለቴ		3	3	3	3	3	3
በየወሩ		4	4	4	4	4	4
በየሳምንቱ		5	5	5	5	5	5
በየቀኑ ወይም በየቀኑ በሚባል ደረጃ		6	6	6	6	6	6
4. ባለፉት ሦስት ወራት ውስጥ፣ የሚጠቀሙት አደንዛዥ ዕፅ ለጤና፣ለማህበራዊ፣ለኢኮኖሚያዊ፣እና ለወንጀል ችግሮች በምን ያህል ጊዜ መጠን ደርጎዎታል ?							
በጭራሽ		0	0	0	0	0	0
አንዴ ወይም ሁለቴ		4	4	4	4	4	4
በየወሩ		5	5	5	5	5	5
በየሳምንቱ		6	6	6	6	6	6
በየቀኑ ወይም በየቀኑ በሚባል ደረጃ		7	7	7	7	7	7
5. ባለፉት ሦስት ወራት ውስጥ፣ የሚጠቀሙት አደንዛዥ ዕፅ ይጠበቅቦት የነበውን ኃላፍነት እንዳይወጡ በምን ያህል ጊዜ መጠን ጫና አሳድሮቦታል?							
በጭራሽ		0	0	0	0	0	0
አንዴ ወይም ሁለቴ		5	5	5	5	5	5
በየወሩ		6	6	6	6	6	6

በየሳምንቱ	7	7	7	7	7	7
በየቀኑ ወይም በየቀኑ በሚባል ደረጃ	8	8	8	8	8	8
6. ጎዳኛዎት፣ዘመዶት ወይም ሌላ ሰው የእርስዎ አደንዛዥ ዕፅን መጠቀም አሳስቧቸው ያውቃል?						
አይ,በጭራሽ	0	0	0	0	0	0
አዎ, ባለፉት ሦስት ወራት ዉስጥ	6	6	6	6	6	6
አዎ, ግን ባለፉት ሦስት ወራት ዉስጥ አይደለም	3	3	3	3	3	3
7. የሚጠቀሙትን አደንዛዥ ዕፅ ለማቆም ወይም ለማቋረጥ ሞክረው ሳይሳካሎት ቀርቶ ያውቃሉ?						
አይ,በጭራሽ	0	0	0	0	0	0
አዎ, ባለፉት ሦስት ወራት ዉስጥ	6	6	6	6	6	6
አዎ, ግን ባለፉት ሦስት ወራት ዉስጥ አይደለም	3	3	3	3	3	3
በመርፈ የሚሰጡ መድሓኒቶችን ተጠቅመው ያውቃሉ ? (ለሕክምና ከሚሰጡ ውጭ ያሉትን)	0=አይ በጭራሽ	2 አዎ, ባለፉት ሦስት ወራት ዉስጥ	1 አዎ, ግን ባለፉት 3 ውስጥ አይደለም			
ጠቅላላ ድምር						

ክፍል-6: ቤክ የድብርት ህመም መለያ መጠይቅ

መመሪያ **:** ይህ መጠይቅ 21 ጥያቄ የያዘ ሲሆን እያንዳንዱ መላሽ በጥንቃቄ በማንበብ በእያንዳንዱ ግሩፕ ውስጥ ካሉት ዝርዝር እርሶዎን ሊገልጽ የሚችለውን ማለትም ባለፉት ሁለት ሳምንታት የሚሰማዎትን (ዛሬን ጨምሮ) ፊት ለፊት ያለውን ቁጥር በማክበብ ይግለጹ።ሆኖም በሰንጠረዡ ውስጥ ካሉት ሁለት እና ከዚያ በላይ የሆኑ ምርጫዎች ተመሳሳይ ቢመስልዎ ከፍተኛ የሆነ ምርጫ ያለውን ቁጥር ያክብቡ:: ከ **1 በላይ** መልስ ያለመምረጥዎትን ያረጋግጡ። (ተራ ቁጥር 16ን እና 18ን ያካትታል)

ማሳሰቢያ፡-በክፍል ስድስት ላይ ያሉትን ጥያቄዎች ድምር ባለው ክፍት ቦታ ላይ ይሙሉ:: የድመሩ ውጤት ከሀያ (**20**) **በላይ** ከሆነ እና በጥያቄ ተራ ቁጥር **BD9** የመረጡት መልስ **1፣2፣3** ከሆነ የህክምና እርዳታ ስለሚያስፈልገዉ በስልክ ቁጥር 0915859249 (ሀብታም ገላዬ) ብለዉ በመደወል እርዳታ ማግኘት ይችላሉ::

ተራ ቁጥር	ቤክ ድብርት ህመም መለያ	መልስ
BD1	የሀዘን (የመከፋት) ስሜት -በማያውቁት ምክንያት	0 የሀዘን ስሜት አይሰማኝም 1 አብዛኛውን ጊዜ የሀዘን ስሜት ይሰማኛል 2 በማንኛውም ሰዓት ውስጤ ያዝናል 3 የሚሰማኝ ሀዘን መቋቋም እስከማልችለው ድረስ ነው
BD2	ጨለምተኝነት /መጥፎ ነገር ብቻ አለ ወይም ይመጣል (ይደርሳል) ብሎ ማሰብ	0 ስለወደፊቴ ተስፋ አልቆርጥም 1 ከበፊቱ ይልቅ አሁን ስለወደፊቴ ተስፋ የለኝም

		2 ነገሮች ሁሉ ለኔ ይሳኩልኛል ብዬ አልጠብቅም 3 ወደፊቴ ተስፋ እንደሌለው ይሰማኛል፣ ከአሁኑ የባሰም ይሆናል
BD3	ያለፈው ጊዜ ህይወት አለመሳካት(ውድቀት)	0 ያልተሳካለት ሰው እንደሆንኩ አይሰማኝም 1 ከሚገባው በላይ አልተሳካልኝም 2 ወደ ኋላዬ ዞሬ ሳይ ያልተሳኩልኝ ነገሮች ብዙ ናቸው 3 ምንም ነገር የማይሳካለት ሰው እንደሆንኩ ይሰማኛል
BD4	ደስታ ማጣት(የደስተኝነት ስሜት መጥፋት)	0 የሚያዝናኑኝን ነገሮች ባደረኩበት መጠን ደስታን አገኛለሁ 1 ነገሮች እንደበፊቱ አያዝናኑኝም 2 በፊት ከሚያዝናኑኝ ነገሮች አሁን ትንሽ ደስታ ብቻ ነው የማገኘው 3 በፊት የሚያዝናኑኝ ነገሮች አሁን ምንም ደስታ አይሰጡኝም
BD5	የጥፋተኝነት ስሜት (የመፀፀት ስሜት)	0 የተለየ የጥፋተኝነት ስሜት አይሰማኝም 1 በሰራኋቸው ወይም መስራት በነበረብኝ ነገሮች የጥፋተኝነት ስሜት ይሰማኛል 2 ብዙውን ጊዜ በጣም የጥፋተኝነት ስሜት ይሰማኛል 3 በማንኛውም ሰዓት የጥፋተኝነት ስሜት ይሰማኛል
BD6	የመቀጣት ስሜት (በሆነ ሀይል) (እየተቀጣሁ ያለሁ አይነት ስሜት)	0 እየተቀጣሁ ያለሁ አይነት ስሜት አይሰማኝም 1 እቀጣ ይሆናል የሚል ስሜት አለኝ 2 እንደምቀጣ እጠብቃለሁ 3 እየተቀጣሁ እንደሆነ ይሰማኛል
BD7	ራስን መጥላት	0 ስለራሴ ያለኝ ስሜት እንደበፊቱ ነው 1 በራስ መተማመኔ ጠፍቷል 2 በራሴ እበሳጫለሁ 3 እራሴን እጠላለሁ
BD8	ራስን መውቀስ ወይም መንቀፍ	0 ራሴን አልነቅፍም 1 ከበፊቱ የልቅ ራሴን እወቅሳለሁ 2 ለጥፋቶቼ ሁሉ ራሴን እወቅሳለሁ 3 ለተከሰቱት መጥፎ ነገሮች ሁሉ ራሴን እወቅሳለሁ
BD9	ራስን የማጥፋት ሀሳብ ወይም ምኞት	0 ራሴን የማጥፋት ሀሳብ የለኝም 1 ራሴን የማጥፋት ሀሳብ አለኝ ግን አላደርገውም 2 ራሴን ማጥፋት እፈልጋለሁ 3 እድሉን ካገኘው ራሴን አጠፋለሁ
BD10	ማልቀስ	0 ከበፊቱ የተለየ አላለቅስም 1 ከበፊቱ የበለጠ አለቅሳለሁ

		2 በትንሹም በትልቁም አለቅሳለሁ 3 የማልቀስ ስሜት አለኝ ግን ማልቀስ እንኳን አልችልም
BD11	መቁነጥነጥ/መቅበጥበጥ/እረፍት ማጣት	0 ከሁልጊዜው የተለየ የመቅበዝበዝ ስሜት የለኝም 1 ከሁልጊዜው የበለጠ የመቅበዝበዝ ስሜት አለኝ 2 ከመቁነጥነጤ የተነሳ አንድ ቦታ እንኳን መቆየት አልችልም 3 ከመቁነጥነጤ የተነሳ ሁልጊዜ መንቀሳቀስ / የሆነ ነገር መስራት ይኖርብኛል
BD12	ፍላጎት ማጣት	0 በሰዎች ላይ/ በተለያዮ እንቅስቃሴዎች ላይ ፍላጎቴን አላጣሁም 1 ለሰዎች/ለነገሮች እንደበፊቱ ፍላጎት የለኝም 2 ለሰዎች/ለነገሮች ፍላጎቴን በአጠቃላይ አጥቼያለሁ 3 ለማንኛውም ነገር ፍላጎት ማሳየት ከባድ ሆኖብኛል
BD13	የመወሰን ወይም ውሳኔ የመስጠት ችግር	0 እንደበፊቱ በነገሮች ላይ እወስናለሁ 1 ከሁልጊዜው ይበልጥ ውሳኔ መወሰን አስቸጋሪ ሆኖብኛል 2 ከበፊቱ ይልቅ ውሳኔ መወሰን በጣም አስቸግሮኛል 3 ምንም አይነት ውሳኔ መወሰን አዳጋች ሆኖብኛል
BD14	ዋጋቢሰነት ወይም የማልረባ ሰው ነኝ ብሎ ማሰብ	0 ዋጋ ቢስ እንደሆንኩ አይሰማኝም 1 ዋጋ ቢስም ጠቃሚም እንደሆንኩ አይሰማኝም 2 ራሴን ከሌሎች ሰዎች ጋር ሳነፃፅር ዋጋቢስ እንደሆንኩ ይሰማኛል 3 ምንም አይነት ዋጋ እንደሌለኝ ይሰማኛል
BD15	የአቅም (ጉልበት) ማጣት	0 ጉልበቴ እንደበፊቱ ነው 1 ከበፊቱ ይልቅ ጉልበቴ ቀንሷል 2 ነገሮችን ለማድረግ በቂ ጉልበት የለኝም 3 ምንም ነገር ለማድረግ በቂ ጉልበት የለኝም
BD16	የእንቅልፍ ስርዓት መዛባት	0 በአተኛኘቴ ላይ ምንም ለውጥ የለኝም 1 ሀ. ትንሽ ከበፊቱ የበለጠ እተኛለሁ ለ. ትንሽ ከበፊቱ የያነሰ እተኛለሁ 2 ሀ. ከበፊቱ የበለጠ በጣም እተኛለሁ ለ. ከበፊቱ በጣም ያነሰ እተኛለሁ 3 ሀ. የቀኑን አብዛኛውን ሰዓት እተኛለሁ ለ. 1—2 ሰዓት ቀድሜ እነሳለሁ ግን መልሼ መተኛት አልችልም
BD17	መበሳጨት/መነጫነጭ	0 ከሁልጊዜው የተለየ አልበሳጭም 1 ከሁልጊዜው ይበልጥ እበሳጫለሁ 2 ከሁልጊዜው በጣም በተለየ ሁኔታ እበሳጫለሁ

		3 በማንኛውም ሰዓት እበሳጫለሁ
BD18	የምግብ ፍላጎት መቀየር	0 የምግብ ፍላጎቴ ላይ ለውጥ የለኝም 1 ሀ የምግብ ፍላጎቴ ከሁልጊዜው ቀነስ ብሏል ለ የምግብ ፍላጎቴ ከሁልጊዜው በዛ ብሏል 2 ሀ. የምግብ ፍላጎቴ ከበፊቱ በጣም አንሷል ለ. የምግብ ፍላጎቴ ከበፊቱ በጣም በዝቷል 3 ሀ. ምንም የምግብ ፍላጎት የለኝም ለ. ምግብ በጣም እበላለሁ
BD19	ሀሳብ የመሰብሰብ ወይም የትኩረት ችግር	0 እንደበፊቱ ሀሳቤን መሰብሰብ እችላለሁ 1 እደሁልጊዜው ሀሳቤን መሰብሰብ አልችልም 2 አንድ ነገር ላይ ረዘም ላለ ሰዓት ሀሳቤን መሰብሰብ አልችልም 3 ምንም ነገር ላይ ሀሳቤን መሰብሰብ አልችልም
BD20	ድካም/መዛል	0 ከበፊቱ የተለየ አይደክመኝም/አልዝልም 1 ከሁልጊዜው በተለየ በቀላሉ ይደክመኛል/እዝላለሁ 2 ከበፊቱ ይልቅ ብዙ ነገሮችን ለማድረግ ይደክመኛል/እዝላለሁ 3 በከበፊቱ ይልቅ ነገሮችን ለማድረግ በጣም ይደክመኛል
BD21	ፃታዊ ግንኙነት ለማድረግ ፍላጎት ማጣት	0 ከቅርብ ጊዜ ወዲህ የሚስተዋል የተለየ የፃታዊ ግንኙነት ፍላጎት መቀየር የለኝም 1 ከበፊቱ ይልቅ ለፃታዊ ግንኙነት ፍላጎቴ ቀንሷል 2 አሁን ለፃታዊ ግንኙነት ያለኝ ፍላጎት በጣም ቀንሷል 3 ምንም አይነት የፃታዊ ግንኙነት ፍላጎት የለኝም
	ድምር	_____
ስለ ትብብርዎ እናመሰግናለን::		

Guca ooddefannoo koddii_____

Yunniversitiy jimmaa

Institiyutii sayinsii fayyaa fi medikala

kutaa yalaa sammuu

Kutaa III: gaaffiwwan afaan oromoon qophaa'an

Maqaan koo_____

ani barata digirii lamaffaa yunniversity jimmatti kutaa yalaa dhukubbaa sammuutti. qorannon kun kutaa barumsaa koo waan ta'eef hojjachuun naraa eegama kanaaf qorannicha kanan hojedhuu yaalamtoota kutaa ANC, JUMC ciisanii yaalaman iirrattii fi qorannichis kallattii furmaataa kaa'uuf gargaara. Faayyummaa sammuu dubartoota ulfaa dabaluu fi dhibee muukaa'uu fi waantoota isaan waal fakkataan akassuumas dubartoota ulfaa fi gargaartota waraa ciidanii yaalaman keessatti argaman tilmaamuuf gargaarakanaafuu, qoraanoon kun kan qophaa'e dhukubbaa saammuu ykn muukkaa'uu hamamtaa isaa, murteessitoota fi knf, qorachuufi waan ta'eef hirmaachuuf filatamteerta. Odeeffannon kun wa'ee dubartoota ulfaa fi ulfa hin taane irratti odeffannoo sirrii argachuuf gargaara. Odeeffannon kun qoranno qofaaf nu gargaara akkasumas, gatiin keessan nama biraaf dabarfamee hin kennamu. yeroo hin barbaannetti dhiisuuf ykn dhabuuf mirga guutuu qabda/qabdu.garuu, wantii isiin nutti himtaan milkaa'ina kaayyoo keenyaaf baayee nu gargaara.

Yoo eeyyee ta'e itti fufi _____

Yoo lakkii ta'e gaafatamaa ittii aanuutti darbi _____

Galatoomaa!

kutaa I: Gaafiwwan hawaasummaa ilaallatan; funnanaa qorannootin kan gutamma

SE1: Umurii:

_____

SE2.amanta
1. Muslima
2. Ortodoksi
3. Protestant
4. Katolliki
5. biraa ___

SE3. sabaa:
1. Oromoo
2. Amhaara
3. Tigray
4. Yem
5. biraa ___

SE4. sadarkaa barumsaa:
1. Kan hin baratin
2. Sadarkaa tokkofaa
3. Sadarkaa lammafa
4. biraa_____

SE5. fudhaa fi heeruma:
1. Kan hin heerumin
2. Kan heerumte
3. Seraan addaa ba'an
4. abban mana du'e
5. addan bahee

SE6: hojjii
1. Hadhaa mana
2. Qonnaan bulaa
3. Hojjii dhunfaa
4. Hojjetaa mootumma
5. Barataa
6. biraa ____

SE7	Bakka jireenyaa?	1. magaalaa 2. Baadiyyaa
SE8	Misensotaa mattii meqaatu waalin jiratee?	_____
SE9	Ji'atti qarchii meeqa argataa?	_____

kutaa II: gaaffillee sirna da'umsaa waliin walqabatee

wa'ee ulfaa fi da'uumsaa darbee

OB1	Kanan duraa deseertaa?	2. eeyyee 2. Lakkii	
OB2	Gaffiin deebiin OB1 eeyyee yoo ta'e ulfaa torbee 28 ol ta'e meqaa desee?	2. 1 2. 2 3. 3 4. ≥ 4x	
OB3	Gaffii OB2 irraa ijollee meqaatu lubbun jiru?	2. 0 2. 1, 2 ykn 3 3. ≥ 4	
OB4	Yeroo meqaaf daa'uumsa duraa oggesa fayaa illalte?	2. eeyyee 2. Lakki	
OB5	Xaxaa ykn rakkon ulfaa darbee irraati si muddatee jiraa?	2. eeyyee 2. lakki	
OB6	Deebiin gaaffii OB5 eeyyee yoo ta'e dhukkubaa armaan gadi kessaa kamettu si qunnamee beekaa?	13. olliqifta 14. dhiiguu 15. dhukkubaa onnee 16. hanqina dhigaa 17. HIV	19. allarjii 20. dhibaa dhigaa 21. hepatatasii 22. dhukkubaa ujumoo dhigaa 23. ulfaa basuu (<28 torbee)

		18. Dhukkubaa sukkaraa	24. Kan biroo_____
Ulfaa ammaa (durbaa ulfaa hin qabne darbii)			
OB7	Ulfaa ji'aa meqaa?(torben,ji'aan)	1. ji'a (1-3) 2. Ji'a (4-6) 3. Ji'a(7-9)	
OB8	ulfaa meeqafa kettii?	1. 1ffaa 2. 2ffaa 3. 3ffaa 4. Kan biroo_____	
OB9	Yeroo meqaaf ulfaa ammaaf oggesa fayaa illalte?	_____	
OB10	ijoolee qabachuf kayyefaterttaa?	2. eeyyee 2. lakkii	
OB11	Ulfu yaroo amma kana karoorfatte ykn barbaadde ulfooftee?	1. Eeyye 2. Lakkii	
OB12	Kan armaan gadi keessaa rakkon kee yoo jiratee irraa marsii?	1. Ollaqsissuu 2. dhiguu 3. dhukkubaa onnee 4. hanqina dhigaa 5. HIV 6. Dhukubbaa sukkaraa	7. allarjii 8. dhibaa dhigaa 9. Hepatitisi 10. Dhukubbaa ujummo dhigaa 11. Ulfaa basuu (<28 weeks) 12. biroo_____

Kutaa III: Gaaffiilee dhukkubaa sammuu irraat i xinxallaan

MR1	Missensotaa mattii kessaa ulfaa duraa fi bodaa rakkoo muka'uu kan isaa qunammee beekuu jira?	1. eeyyee 2. Lakkii
MR2	ammaa irraati wantii baayee si dhiphisuu maali?	1. Hommaa hin jiru 6. Bakkee jirenyaa 2. Da'umsaa ilmokoo 7. hiyyumma 3. Ulfaa ta'u 8. Fayyaa koo 4. Wal qunamattii hiriyyaa 9.kan biroo_____ 5. Soda xaxaa ulfaa duraa sodachu
MR3	Dirqiidhan gudedamtee bektaa?	1. Eeyyee 2. Lakkii

MR4	Yaroo uulfaa kana keessatti yaroon atti abbaa waraa keettin waldhabdee ni jiraa? Heerumteeta yoo ta'e?	1. Eeyyee 2. Lakkii
MR5	Miidhaa dirqin gudeedu, rebbichaa ykn arabsoo namaa dhiheenyaattin kan tahee si qunaamee beekaa?	1. Eeyyee 2. Lakkii

Kutaa IV: gaaffiwwan gargaarsaa hawaasaa maddaalii illaaltu(oslo)

OS1	Yeroon rakkoo si qunnamu gargaarsa olla argachuun hammam sitti salphata?	1. Baayee salphaa 2. salphaa 3. Ni ta'a 4.rakkisaa 5. Baayee rakkisaa
OS2	Yeroo rakkoon si qunnamu namoota sitti dhihaatan meeqaf mari'achifta?	1. Hin jiru 2. 1-2 3. 3-5 4. 5+
OS3	Hoji ati hojjattuf namoonni hammam sitti dhimmamu?	1. Baayee baayee 2. baayee 3. Hin beekamu 4.xiiqoo 5. Hin jiru

Kutaa V: fayyadamaa arradallee addaa addaa waalin (ASSIST V 3.0)

wa'ee fayyadamaa arradaa		
501	Umrii kee kessa, arradda kan kanatti anan kessa haagam fuudhatan?	lakkii eeyyee
	1. omishaa tamboo (sigarraa, tamboo alaaftamuu,.fi knf)	0 3
	2. dhugatti alkoholi (biraa, wayinni, fi knf.)	0 3
	3. kannabisi (mariwaana,hashish fi knf.)	0 3
	4. arradda nama dadamaqasuu (caatii,speed,ecstasyfi knf.)	0 3
	5. qorricha hiriba (valiyemii, knf.)	0 3
	6. kan biroo:	0 3
Deebiin kee yoo lakki ta'e gaffii fi deebii dhabii. Yoo deebiin kee eyyee ta'e gara gaaffii 502 darbii.		
502	Arraadoole armaan gadi keessaa ji'oota sadaan darban kessaatii hagamin fayyadamataa?	Gonkuma yeroo 1-2 ji'atti torbettii guyyaa guyyan
	1. omishaa tamboo (sigarraa, tamboo alaaftamuu,.fi knf)	0 2 3 4 6

	2. dhugatti alkoholi (biraa, wayinni, fi knf.)	0 2 3 4 6
	3. kannabisi (mariwaana,hashish fi knf.)	0 2 3 4 6
	4. arradda nama dadamaqasuu (caatii,speed,ecstasyfi knf.)	0 2 3 4 6
	5. qorricha hiriba (valiyemii, knf.)	0 2 3 4 6
	6. kan biroo:	0 2 3 4 6
If "deebiin gaaffii 502 gonkummaa yoo ta'e gara gaffii 506 darbii.Arradollee gaaffii502 keessaa tarefamaan keessaa yoo ji'oota sadaan darban keessattii fayadamtee garaa gaaffii 503,504 fi505 darbii.		
503	Ji'oota sadaan darban keessati fedhii barbachaa fayadammaa arraaddolee armaan gadii hagammiti jira turee?	Gonum 0 yeroo 1-2 ji'atti 3 torbetti 4 guyyaa 5 guyyan 6
	1. omishaa tamboo (sigarraa, tamboo alaaftamuu,.fi knf)	0 3 4 5 6
	2. dhugatti alkoholi (biraa, wayinni, fi knf.)	0 3 4 5 6
	3. kannabisi (mariwaana,hashish fi knf.)	0 3 4 5 6
	4. arradda nama dadamaqasuu (caatii,speed,ecstasyfi knf.)	0 3 4 5 6
	5. qorricha hiriba (valiyemii, knf.)	0 3 4 5 6
	6. kan biroo:	0 3 4 5 6
504	Ji'oota sadaan darban keessatti arraddoolee armaan gadii fayyadamuun keettin haggamin rakkoo fayyaa,hawwasumaa,seraa ykn malaqqaa si irratti uumme?	Gonkumaa 0 yeroo 1-2 4 ji'atti 5 torbetti 6 guyyaa 7 guyyaan
	1. omishaa tamboo (sigarraa, tamboo alaaftamuu,.fi knf)	0 4 5 6 7
	2. dhugatti alkoholi (biraa, wayinni, fi knf.)	0 4 5 6 7
	3. kannabisi (mariwaana,hashish fi knf.)	0 4 5 6 7
	4. arradda nama dadamaqasuu (caatii,speed,ecstasyfi knf.)	0 4 5 6 7
	5. qorricha hiriba (valiyemii, knf.)	0 4 5 6 7
	6. kan biroo:	0 4 5 6 7
505	Ji'oota sadaan darban keessatti arraddoolee armaan gadii fayyadamuun keettin haggamin hojjii si irraa eggammuu hojechuu dhistee?	gonkummaa 0 yeroo 1-2 5 ji'atti 6 torbetti 7 guyyaa 8 guyyaan
	1. omishaa tamboo (sigarraa, tamboo alaaftamuu,.fi knf)	0 5 6 7 8
	2. dhugatti alkoholi (biraa, wayinni, fi knf.)	0 5 6 7 8

	3. kannabisi (mariwaana,hashish fi knf.)	0 5 6 7 8
	4. arradda nama dadamaqasuu (caatii,speed,ecstasyfi knf.)	0 5 6 7 8
	5. qorricha hiriba (valiyemii, knf.)	0 5 6 7 8
	6. kan biroo:	0 5 6 7 8
506	Hiriyyoni, mattin fi firikee wa'ee fayadamaa aarrada kee irraatti akkaa dhistuuf xiyefannoo kennaniru?	gonkuma maa / eeyyee ji'a 3 darban kessaa / eeyyeen garu ji'a 3 darban kessaa miti
	1. omishaa tamboo (sigarraa, tamboo alaaftamuu,.fi knf)	0 6 3
	2. dhugatti alkoholi (biraa, wayinni, fi knf.)	0 6 3
	3. kannabisi (mariwaana,hashish fi knf.)	0 6 3
	4. arradda nama dadamaqasuu (caatii,speed,ecstasyfi knf.)	0 6 3
	5. qorricha hiriba (valiyemii, knf.)	0 6 3
	6. kan biroo:	0 6 3
507	Arradaa fayadaamtu kana dhabuuf yaaltee si rakkise jira?	gonkummaa / eeyyee ji'a 3 darban kessaa / eeyyeen garu ji'a 3 darban
	1. omishaa tamboo (sigarraa, tamboo alaaftamuu,.fi knf)	0 6 3
	2. dhugatti alkoholi (biraa, wayinni, fi knf.)	0 6 3
	3. kannabisi (mariwaana,hashish fi knf.)	0 6 3
	4. arradda nama dadamaqasuu (caatii,speed,ecstasyfi knf.)	0 6 3
	5. qorricha hiriba (valiyemii, knf.)	0 6 3
	6. kan biroo:	0 6 3
		gonkummaa / eeyyee ji'a 3 darban kessaa / eeyyeen garu ji'a 3 darban kessaa miti
508	Arradaa lilmoon fudhatamu fudhatee bektaa?	0 2 1

Kutaa VI: gaaffiilee jirachuu muukaa'uu kan sakata'aan(Beck)

lakk.	Gaaffii	Deebii

601	Gaddaa;	0 Gaddii natti hin dhagahammu. 1 Gaddii natti dhagahammaa 2 Yeroo baayee gaddii natti dhagahamma. 3 Gaddaa fi gamachuu dhabuu human ol ta'e nattii dhaga'ama.
602	Abdii maleessa:	0 Wa'ee fulduraa yaada yaraa irratti hin xiyyeefadhu. 1 Wa'ee fulduraa naan hin abdachiisu. 2 Wanan fulduraffi yaaduuf hin qabu. 3 Fulduree kan koo abdii maleessafi kan jijjirame hin qabnedha.
603	Kuufatti darbee/waan galma hin geenye: .	0 Wa'ee fulduraa yaada yaraa irratti hin xiyyeefadhu. 1 Wa'ee fulduraa naan hin abdachiisu. 2 Wanan fulduraffi yaaduuf hin qabu. 3 Fulduree kan koo abdii maleessafi kan jijjirame hin qabnedha
604	Gammachuu dhabuu;	0 Wantoota itti fayyadamaa turetti amma danda'amu milkaa'an ture. 1 Haalan wantoota itti fayyadamaa turetti gammadaa miti. 2 Kanaan booda waan kanan irrayyuu gammachuu argachuu hin danda'uu. 3 Waan hundummattuu gammachuu hin qabu akkassumas itti muffeera
605	Miiraa ceephuu/yadaa ballessummaa:	0 Ani ofii kooti of ceepha'ee hin beekuu. 1 Yeroo gaarii ta'ee keessatti ballessummaa ofii koti nati dhaga'ama. 2 Yeroo baayee ballessumman nati dhaga'ama ykn nan ceepha'aa. 3 Yeroo hundummaa of nan cepha'aa
606	Miiraa adabbii:	0 Adabameera jedhee hin yaadu. 1 Adabammuu nan mala jedhen yadaa. 2 Akkaa adabammuun tilmaama 3 Waanan adabamuu natti fakkaata.
607	Of-jibbuu:	0 Kanaanbooda yaanii iddoon naaf hin kennamne jedhu nati hin dhaga'amu. 1 Kana booda iddoon naaf hin kennamuu. 2 Kana booda ani kabaja hin qabu. 3 Of-na jibbisiisaa..
608	Of komachuun:	0 Nama biraa mufachiseera jedhee hin yaada 1 Ballessaa kiyyaaf of komadha.

		2 Yeroo hunda dogoggara ofii uummef of nan komadha. 3 Wanta yaraa uummame maraaf yeroo mara of nan komadha.
609	Miira of miidhu ykn ajjessuu:.	0 Miira of ajjeessuu hin qabuu. 1 Miira of ajjeessuu jira garu hojji irra oolchee hin beeku. 2 Of-ajjeessun nan fedhaa. 3 Yoon carraa argadhe of ajjeesun barbaada.
610	Boo'uu:	0 Kan durii irra bifa adda ta'en hin boo'uu. 1 Kan durii irra amma nin boo'aa. 2 Ammatii yeroo hunda nin boo'aa. 3 Yeroo duraanii yeroon barbadutti akkan barbaaditti boo'uun nin danda'an ture, amma garuu yoon barbadeyyuu akkaan barbaadetti boo'uu hin danda'uu.
611	Aaragaltii dhabuu: .	0 Kan durii irra bifa adda ta'een akka salphatti dallannu(aaruun)hin jiru. 1 Ammaa irrati kan durii calaa xinoo dallannu dabalen jira. 2 Yeroo baayee dallannu(aaruun) jira. 3 Yeroo hunda dallannu(aaruun)jira.
612	Fedhii dhabuu;	0 Namotaa kan biraa irrati fedii dhabuun hin jiru. 1 Ammaa irrati fedhii namota biraa irrati qabu hirateraa. 2 Fedhii namoota irrati qabu baayee hirteraa. 3 Fedhii namoota irrati qabu gar malee hirteraa.
613	Kan hin tane/kan hin fayyadanee:	0 Murtii wanta barbadee irratii murtessuu nan danda'aa. 1 Akkaa duritti murtii barbadee murtessuu hin danda'uu. 2 Murtii murtessudhaf baayee na rakisa. 3 Murtii murtessu hin danda'uu.
614	Miraa hin fayyaduu jedhu.	0 Miraa ani hin fayaduu jedhu hin qabu. 1 Hin bareduu ykn dulloman jira jedhen yaada. 2 Qamaa koo irratti gutuma gututi jijiramanni jira kan irraa kan ka'ee hin baredduu jadhetin yaada. 3 Hin baredduu jadhetin amanaa.
615	Humna dhabbu;	0 Akkumaa kanan durrati hojjechuu nan danda'aa. 1 Hojjii hojechuuf human dabalta na barbachisa.

		2 Hojjii kammiyuu hojachuuf baayee of cimsu na barbachisa. 3 Hojjii kammiyuu hojachuu hin danda'uu.
616	Jijirrama halaa hiribba irrati:	0 Akkaa duranniti hiribanni naa fudheta.
		1a bicuu kan duranni calaa nan rafaa. 1b bicuu kan duranni gadin rafaa.
		2a kan duranni calaa baayeen rafaa. 2b baayee kan durrii gadiin rafaa.
		3a guyyaa kessaa yeroo baayeen rafaa. 3b Hirribaa kiyaa irraa sa'aa 1-2 duraan ka'aa fi debi'ee rafuuf nan rakadha.
617	Dallannu(aarruu):	0 Dhadhabbin kan duraati irraa addaa kan ta'e nati hin dhaga'aamu. 1 Dhadhabin salphati nati dhaga'aama. 2 Hojjii kaammiyuu oggaan hojedhuu nan dhadhabaa. 3 Hojjii kaammiyyuu oggaan hojedhuu baayeen dhadhabaa.
618	Jijirammaa Fedhii nyaata;	0 Jijirammaa fedhii nyaata irrati hin qabu.
		1a fedhiin nyaata koo xiqoo hirateraa. 1b fedhiin nyaata koo xiqoo daballera.
		2a fedhiin nyaata koo baayee hirateraa. 2b fedhiin nyaata koo baayee daballera.
		3a gonkummaa fedhii nyaata hin qabuu. 3b yeroo hunda fedhii nyaata qaba.
619	Rakkina hubachuu:	0 akkaa duraani hubachuu nan danda'aa 1 akkaa duritti hubacchuu hin danda'uu 2 yeroo dherattif wanta tokkoo irraa xiyyefannoo kennu hin danda'uu 3 wanta kammiyuu irraatii xiyefachuu hin danda'uu
620	dhadhabbii:	0 yeroo duraa irraa kan addaa ta'e wa'ee fayyaa koo hin yaduu. 1 Wa'ee dhukubbaa qamaa koo kan akkaa cinini garra, gogaa garra fi dhukkubbi garra nan yadaa. 2 Wa'ee dhukkubaa qamaa koo baayeen yadaa. 3 Wa'ee dhukkuba qamaa koo garmaleen baayiisen yadaa fi issa ala waan

		bira yaduu hin danda'uu.
621	Fedhiiwal-qunnamattii salaa dhabuu:	0 Fedhii wal-qunnamatti salaa irrati jijiramaa hin arginne. 1 Fedhii wal-qunnamatti salaa irrati jijiramaa xinoo argerraa. 2 Fedhii wal-qunnamattii salaa hin qabu. 3 Fedhii wal-qunnamattii salaa gonkummaa hin qabu.

Galatoma!!!