WOLKITE UNIVERSITY

COLLEGE OF MEDICINE AND HEALTH SCIENCE

DEPARTMENT OF MIDWIFERY

PREVALENCE OF ANTEPARTUM DEPRESSION AND ASSOCIATED FACTORS AMONG PREGNANT WOMEN ATTENDING ANC CLINICS IN BUTAJIRA GENERAL HOSPITAL, GURAGE ZONE, SNNPR, ETHIOPIA, 2019.

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ANBESSE DAWIT

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A RESEARCH PAPER SUBMITTED TO WOLKITE UNIVERSITYCOLLEGE OF MEDICINE AND HEALTH SCIENCE DEPARTMENT OF MIDWIFERY IN PARTIAL FULFILMENT OF THE REQUIRMENT FOR THE DEGREE OF BACHELORS OF SCIENCEIN MIDWIFERY.

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ACRONYMS AND ABBREVATIONS

ANC	Antenatal Care
APD	Antepartum depression
CI	Confidence Interval
AOR	Adjusted Odds Ratio
EPDS	Edinburg postnatal depression
PI	Principal investigator
SPSS	Statistical package for social sciences
WHO	World health organization

Abstract

Background: Antepartum depression (APD) is a form of clinical depression which can be caused by the stress and worry that pregnancy can bring more sever level**.** It can be triggered by unplanned pregnancy, difficulty to become pregnant, history of substance abuse and low economic status. Any form of prenatal stress felt by the mother can have negative effects on various aspects of fetal development, which can cause harm to the mother and child. Therefore, the aim of this study was to assess the prevalence of maternal depression and associated factors among pregnant women attending ANC clinics in Butajira hospital, Gurage zone, SNNPR, Ethiopia, 2019.

Objective: To assess the prevalence of Antepartumdepression and associated factors among pregnant women attending ANC clinics in ButajiraGeneral Hospital, from February 14 –March 30Gurage zone, SNNPR, Ethiopia, 2019.

Methods: Intuition based cross sectional study design was conducted in Butajira general hospital fromFebruary-March 2019. Sample of 263 were selected by systematic random sampling technique. The data were collected by using anonymous interview questionnaire and then entered and processed by SPSS version 24.0 for analysis. Association between dependent and independent variables were assessed using both bivariate and multivariable logistic regression. P values <0.05 with 95% confidence level were used to declare statistical significance.

Results: The prevalence of antepartum depression among pregnant women was 27.6%with(95% CI; 22.4-33.2). The multivariable analysis showed that respondents who had unplanned pregnancy [AOR=2.11 (95%CI;1.0-4.44)], having any complications during their previous labor and delivery [AOR=4.42 (95%CI;2.06-9.48)], previous history of child hospitalization [AOR=3.34(95%CI;1.48-7.51)], and having no satisfaction in their marriage[AOR=3.9(95%CI; 1.15-13.21)], had associated with antepartumdepression.

Conclusion and Recommendations: The prevalence of antepartum depression in this study was relatively higherby[27.6% with (95%CI;22.4-33.2)] than studies done in some parts of Ethiopia. Unplanned pregnancy, complications during labor & delivery of the last baby, women having history of child hospitalization and maternal satisfaction with marriage were some of the factors that increased the antepartum depression. In order to prevent further consequences, all concerned bodies need to take an action by making targeted intervention and early screening of all pregnant mothers for depression**.**

Keywords: Antepartum depression, pregnant women, Butajira, Ethiopia

CHAPTER 1: INTRODUCTION

1.1 BACKGROUND

World health organization (WHO) defined depression as a common mental disorder that presents with depressed mood, loss of interest or happiness, decreased energy, feelings of guilt, or low self-worth, disturbed sleep or appetite, and poor concentration [1]. Antepartum depression (APD) is a form of clinical depression which can be caused by the stress and worry that pregnancy can bring more sever level and it can be triggered by unplanned pregnancy, difficulty to become pregnant, history of substance abuse and low economic status. Any form of prenatal stress felt by the mother can have negative effects on various aspects of fetal development, which can cause harm to the mother and child [1].

Pregnancy cause significant strain on a women's body like mood changes, memory loss, eating habits and sleeping changes. Antepartum depression occurs when these common traits become sever and begin to alter ones day-to-day life [1].Symptoms' of APD are; inability to concentrate, difficulty remembering, feeling emotionally, numbness, extreme irritability, sleeping too much or not enough or restless, extreme or unending fatigue, desire to over eat or not eat at all, weight loss/gain unrelated to pregnancy, loss of interest in sex, a sense of dread about everything including the pregnancy, feelings of guilt, persistent sadness, thoughts of suicide, or death [2].

Antepartum depression can be caused by various reasons including combination of hormonal changes and psychological disturbances associated with pregnancy, relationship problems, family or personal history of depression, infertility, maternal anxiety, life stress, and lack of social support, attitude, unintended pregnancy, domestic violence, low income, lower education, smoking, single status, previous pregnancy loss, complications in pregnancy and a history of trauma [2].

Depressed women are more likely to have unhealthy practices during pregnancy; poor nutrition due to a lack of appetite, poor weight gain during pregnancy and risk for intrauterine growth. Also have less compliant with prenatal care and feel less invested in the care toward their pregnancy. Increased pain and discomfort during their pregnancies, reporting worse nausea, stomach pain [3, 4].

Untreated depression in pregnancy has been also associated with poor pregnancy and birth outcomes such as, maternal pre-eclampsia, low birth weight, smaller head circumference, increased risk of premature delivery, increased surgical delivery interventions, lower APGAR scores, and is considered to be the strongest risk factor for postpartum depression[5].

1.2 STATEMENT OF THE PROBLEM

There is increasing evidence that psychosocial factors may affect health by means of biological effects and changes in behavioral health.Antepartumdepression contributes to 1/3 of work absence due to diseases and to 1/5 of all primary care visits [1]. It's estimated that 7% to 20% of pregnant woman are affected by this condition. Studies showed mental disorder (depression) and substance use are rampant; overwhelmingly disabling, courses when untreated and can lead to increased mortality [1].

There is a popular belief that mental illness are of lower priority because they are not associated with disability or mortality. It is estimated that 25-35% of pregnant women have depressive symptoms and that 20% of them may meet the diagnostic criteria for major depression. Globally, more than 350 million people of all ages suffer from depression [6].Eight hundred thousand people globally who die by suicide each year. Approximately sixty-one, five hundred thousand Americans who experience a mental health disorder in a year, that's one in 4 adults. According to theWHO depression is project to become the second leading contributor to the global burden of disease by 2020[17].

In developing world APD is a critical public health problem because of its intergenerational impact on infant and children [7]. In terms of regional distributions high rates of mental health problems in pregnant women and mothers have been reported from Africa [8]. One in three to one in five women in developing countries, and about one in ten in developed countries and 13 percent of new mothers experience depression [9]. The rate of depression has increased over the pregnancy life course; less common in first trimester (7%) than the second and third trimester which accounts 12% [7].

Lifetime prevalence rates of depression vary throughout the woman's life and women of childbearing age in particular are at high risk for this condition. Depression being the most prevalent women's mental health disorder, as it was the second most common cause for death by suicide in 1990, among women aged 15-44 years old after tuberculosis [10].

Children exposed to maternal depression are at higher risk of delayed cognitive and language development, mental health problems, suboptimal physical growth and a wide range of interpersonal, neuroendocrine, and behavioral problems [7]. Maternal depression, in particular, is critical public health significance because of its intergenerational impact on infants and children [5].

Maternal depression also predicts the risk of early interruption of breastfeeding and high rates of recurrent diarrhea in newborns in addition to affecting the intellectual and psychological development of the child [11].

Its occurrence during pregnancy poses further risks to women as it is associated with obstetric complications, such as premature labor, preeclampsia, bleeding, and premature rupture of membranes and postpartum depression [4].

There are determinants of common mental disorders among pregnant women and mothers of which the social determinants are an important cause of mental health problems in pregnant women. Some of these include low socioeconomic status, less valued gender roles, occurrence of unintended pregnancy and vulnerability to gender-based violence [9].

Despite the fact that APD is the health problem of the mothers, as knowledge of the investigators there is limited information in southern Ethiopia and in our locality. So, this study is aimed to show the prevalence and factors associated withante partum depression among pregnant mothers who attend ANC in Butajira General Hospital, Gurage Zone, Ethiopia.

1.3 SIGNIFICANCE OF THE STUDY

It is truly important that no mother and fetus should be affected due to pregnancy related causes therefore assessing antenatal depression and associated factors will help in designing strategy. Although as far as our knowledge is concerned there is lack of study done on antenatal depression in the study area.

Addressing this gap will provide critical information to help regional health institutions to see their current antenatal depression status and sought to identify gaps and to provide inputs for regional health bureau to develop feasible and sustainable institution based interventions and so as to improve care service. In addition finding of this result will help as baseline for future research .Over all reproductive age women will be benefited from this study, by helping policy makers to identify the magnitude and risks associated with APD and designing intervention plan.

CHAPTER 2: LITERATURE REVIEW

2.1. Magnitude of Antepartum Depression

A cross sectional study done in Brazil and Turkey on women who attending public health clinic for ANC follow showed that the magnitude of maternal depression was 14.2%, and 10.9% respectively [3,12]. The nationwide health survey report and community based cross sectional study done in Ethiopia showed that the magnitude of depression was 9.1% and 4.8% respectively [13]. A cross sectional study done at Maichew, NorthEthiopia showed magnitude of APD was 31.1%. Another cross section study done at Gondar revealed that the magnitude ofAPDwas 25.8%.A cross sectional study done in Debra tabor showed that the magnitude of APD was 11.8%, and a cross section study at Addis Ababa southwest Ethiopia showed that the magnitude of antepartum depression was 11.7% [14, 15, 16, and 9].

2.2. Factors associated with antepartum depression

There are factors associated with APD some of this are low socioeconomic status, less valued gender roles, occurrence of unintended pregnancy and vulnerability to gender-based violence.

2.2.1 Socio demographic related factors

A cross sectional study done in urban area of Germany revealed that female sex, old age, widowed and divorced marital status was found to be associated with antepartum depression [11]. A cross sectional study conducted inTurkey 55.6% of women had qualified from primary school, 87.7% were unemployed, from these 42.5% were depressed. And 74.2% women stated that their income level was medium and from these 33.5% were depressed. And 7.7% of women did not perceive social support from husband, family and friends emotionally during pregnancy [12].

A systematic review study done in different countries showed that antepartum depressive symptoms were common among women who have low level of education (21.4% with no formal education and 9.1% with formal education), in addition this study also revealed that maritalstatus was a significant risk factor for the occurrence of antepartum depression (women who were dissatisfied with their marriage 14.5% were more likely to be depressed than women who were satisfied 8.5%) [4]. This study showed that 46.8% were unemployed; andfromthese33.5% are experiencing depression, 58.3% and out these 8.2% were classified as having a low, low middle or high socioeconomic status, respectively and 37.2% have a death of family member or friend, 36.3% had financial difficulties, 29.2% conflict in close friendships and 28.4% marital conflict [24].

2.2.2 Obstetrics related factors

Community based cross sectional study done in Debra tabor showed that having DM, unplanned pregnancy, history of Stillbirth, history of abortion, being in the third trimester of pregnancy, and presence of a complication in the current pregnancy were significantly associated with antenatal depression [16].

The study done in Addis Ababa revealed 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.

A systematic review study showed that, 24.2% women with unplanned and 17.1% women with unwanted pregnancy had a significantly higher rate of depression than the planned and wanted pregnancy groups 8.5% and 7.9% respectively. The most frequent medical problems during the current pregnancy were hypertension (6.9%) and bleeding (3.6%) which was associated with antepartum depression [9].

2.2.3. Substance abuse related factors

A cross sectional study which was done in urban area of Germany revealed that those mothers who were current smokers (10.9%), current alcohol users (6.3%), and current illicit drug (1.8%) user was found to be associated with antepartum depression [11].An observation based cross sectional study done in Pakistan showed that frequent khat consumption in third trimester of pregnancy had a significantly associated with reduction of maternal weight gain [5]. Depressed pregnant women have a higher risk of practicing unhealthy behaviors such as smoking, drinking including all factors that can increase the risk for poor perinatal outcomes [7].

2.2.4. Previous psychiatric history

A cross sectional study which was done in urban area of Germany showed that 23% of the entire sample reported a previous history of depression, while only 3.3% reported any previous psychiatric treatment [11].Community based cross sectional study which was done in Debra tabor showed that previous history of depression was significant risk factor for antepartum depression [16].

2.3. Conceptual framework

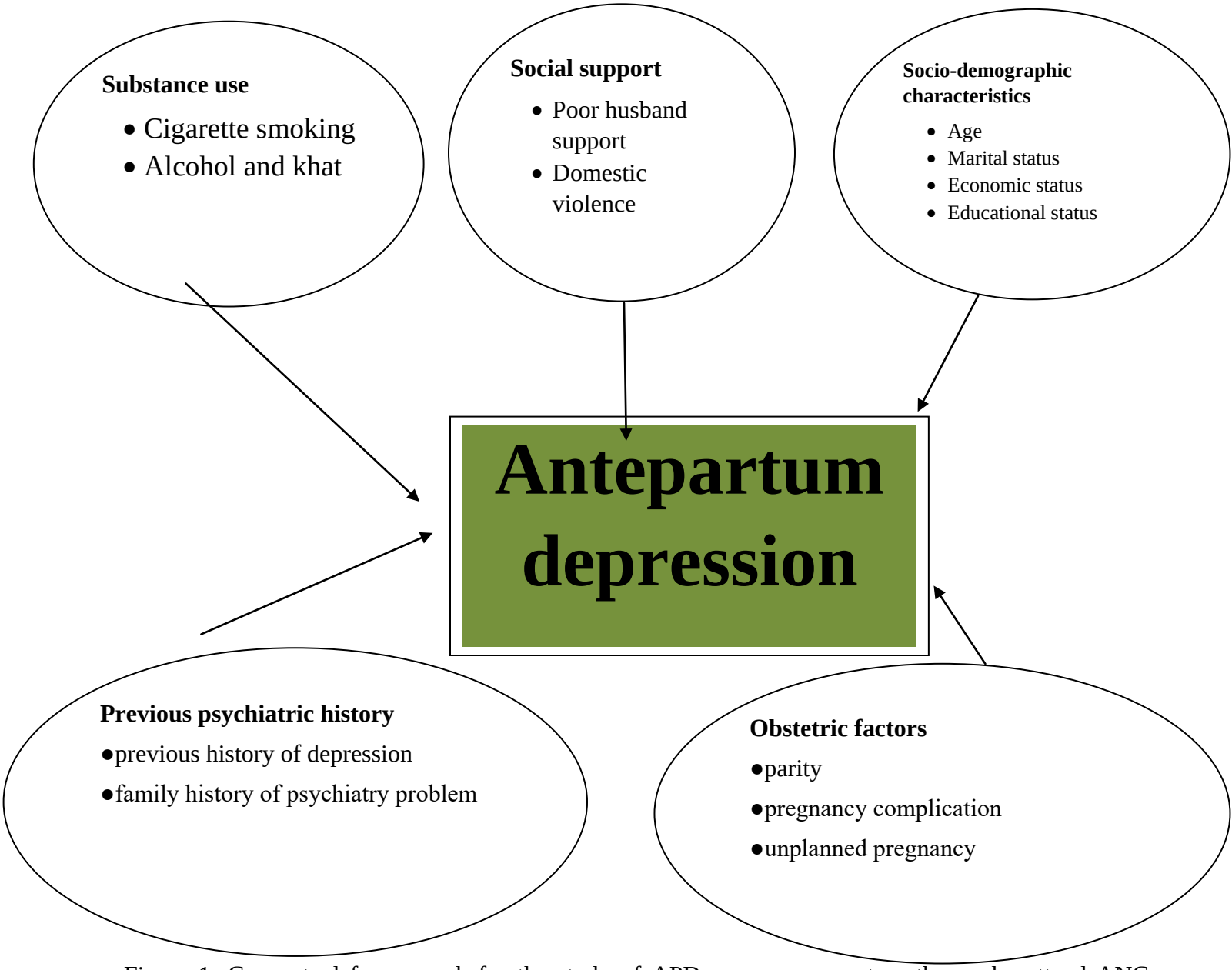


Figure 1: Conceptual frame work for the study of APD among pregnant mothers who attend ANC clinic in Butajira general Hospital, South-west Ethiopia, 2019.

Source;-[9,11,12,16,24]

CHAPTER 3: OBJECTIVES

3.1 General Objective

- To assess the prevalence of Antepartumdepression and associated factors among pregnant women attending ANC clinics in ButajiraGeneral Hospital, from Feburary14-March 30Gurage zone, SNNPR, Ethiopia, 2019.

3.2 Specific Objectives

●To determine the prevalence of antepartum depression among pregnant women attending ANC.

●To identify factors associated with antepartum depression among pregnant womenattending ANC.

CHAPTER 4:METHODS

4.1. Study area and period

The study was conducted from February 14-March 14 2019 in Butajira general hospital which is located in south west of Addis Ababa inGurage zoneButajira town. Which islocated 130 km far away from Addis Ababa and 117km fromHawassa capital city of SNNPR. Butajira town has a total population of 33,406 of whom 16,923 are men and 16,483 women. The majority of the inhabitants are reported as Muslim religion followers 51.27% followed by Orthodox Christians 39.58% and Protestants 8.72% [32].Butajira general hospital provides clinical services for the town of Butajira and its surrounding communities serving approximately 1,300,000 people. Health services include; Emergency, Gynecology/obstetrics, Surgery, ANC and family planning, Pediatrics (including malnutrition program), a TBC unity, Anti-Retroviraltherapy (ART and Dental care(34).

4.2. Study design

Institution based cross sectional study was conducted

4.3. Population

4.3.1 Source population

All pregnant women who visit ANC clinic at Butajira general hospital

4.3.2 Study population

All pregnant women whoattendANCclinicatButajira general hospital during the study period

4.4. Inclusion and exclusion criteria

4.4.1 Inclusion criteria

All pregnant women attending ANC clinic at Butajira general hospital during the data collection period were included.

4.4.2 Exclusion criteria

Pregnant women who have a known mental disorder and those seriously ill and unable to respond during data collection

4.5. Sample size determination and sampling technique

4.5.1. Sample sizedetermination

The sample size was determined by using single population proportion formula by considering assumptions of proportion of depression 31.1% in Ethiopia. Desired precision of 5% at 95% confidence level [35]. By using single population Formula

: $$n = \frac{(z_{\alpha/2})^2 \cdot pq}{d^2}$$

Where: Zα/2= Z value at (α =0.05%) = 1.96

Where n= minimum sample size of the study subjects

z=is standardized normal distribution curve/value for the 95% confidence interval (1.96)

p=proportion of maternal depression among pregnant women (31.1%)

d=the margin of error taken (0.05)

$$n = \frac{(1.96)^2[0.311(1-0.311)]}{(0.05)^2}$$

n=238.94≈239

Considering 10% non-response rate, the total study subjects were 239+24=263 pregnant women.

4.5.2 Sampling technique

Systematic random sampling technique was used to include pregnant women coming to Butajira general hospital ANC clinic during data collection period.

To get the sampling frame we took a total one year ANC follow up mothers then divide by 12 to get an average of one month's population. Then an average population becomes 1750. So,N=1750which is total population that visit ANC in month

K^{th}=N/n Where; N =is total population size

=1750/263 n= is desired sample size

=6.65≈7

4.6Data collection tool

The interviewer administered questionnairewas prepared in such a way that it includes Socio demographic and economic characteristics,obstetricvariables, questions which assess outcome variable by using EPDS which is a tool for assessing depression which includes 10 questions with 4 choices each with a maximum score of 30.With interpretation of >=13scores considered as depressed and score <13 considered as NOT depressed [36].

4.6.1 Data collection procedure

A pretested, structured interviewer administered questionnaire was prepared by reviewing relevant literatures. The questionnaire was designed first in English language and it was changed to local language *MISKAN*by translator and again it was changed back to English for further analysis. Before

interviewing data collectors we gave information about the aim of the study, purposes, possible risks and benefits, the right and refusal to mothers and the confidentiality issues. Then those mothers who were willing and who signed in the voluntary consent were interviewed. All pregnant women who were attend ANC clinic and who fulfilled eligibility criteria were participated in the study. In data collection process 2 data collectors (BSC midwives) supervised by 1 BEmONC trained BSC Midwife and principal investigator were involved. The data were collected for 20 working days.

4.7. Variables

4.7.1 Dependent variables

●Antepartum depression

4.7.2. Independent variables

Social demographic variable

-husbands educational status

Obstetric variable

-Parity

-Gravidity,

-Sex of previous children

-Unplanned pregnancy, previous fetal loss, previous congenital anomaly

-Substance abuse

-Previous psychiatric history, violence,

- Social support

4.8. Operational Definitions

Ante partum depression;: Antepartum depression (APD) is a form of clinical depression which can be caused by the stress and worry that pregnancy can bring more sever level**.(1)**

Antepartum Depressed: Those pregnant mothers who score ≥ 13 cut off point of EPDS. From ten EPDS questions each of which has four choices resultingmaximum score of 30 and minimum 0.

Antepartum Not Depressed: Those pregnant mothers who score <13 cut off point of EPDS. From ten EPDS question's each of which has four choices resulting maximum score of 30 and minimum 0 [36].

4.9. Data quality assurance and control

To ensure quality, questionnaire was initially prepared in English language and then translated in to Amharic and in to local language which is *MISKAN* and back translated to English to check the consistency. Data collectors were both working outside the study areaPretestwas conducted on 5% of the total sample size at Butajira health center by data collectors and then the questionnaire was assessed for its clarity, completeness and the necessary correction was done accordingly. During data collection data collectors were supervised by field supervisor and over all activities was controlled by principal Investigators and finally after data collection before entry all collected data were checked for completeness.

4.10. Data processing and analysis

Data were coded, cleaned, edited, enteredandanalyzedusingSPSS version 24.0. Descriptive statistical analysis wascarried out to compute frequency and percentage for independent and dependent variables.The goodness ofmodel was tested using Hosmer and Lemeshow test and its p-value was found to be 0.786, which implies the model is good. Binary logistic regression analysis was used to ascertain the association b/n explanatory and outcome variables and some of the statistical tests like; odds' ratio was used. Variables with significant ($P < 0.2$) association in the bivariate analysis were entered into multivariate analysis to determine associatedfactors on depression and those variables with $P<0.05$ in multivariate analysiswere considered to be statistically significant [32]. Finally the result of the study was presented in texts, tables, graphs and it was discussed using odds ratio and 95% confidence level.

4.11. Ethical consideration

A letter written by Wolkite University College of medicine and health science department of Midwiferywas given to Butajira general hospital and official permission to undertake the study was obtained and Permission to conduct the study wasasked from the responsible body of Butajira general hospital. The respondents were informed about the objective, purpose, risks and benefits of the study and the right to refuse to participate and then informed written and signed consent wastaken. In addition to thesewe intervene by linking the participants in this study who have history of previous depression and those who are using substances during pregnancy also we creator an opportunity for our participants to have a counseling session from the midwifery.

5. Results

5.1. Socio demographic characteristics of the respondents

A total of 263 pregnant women were involved for interview in the study with a response rate of 95%.The age of respondents ranged from 16 to 42 years with a mean of 2.28(SD± 0.55) years. Majority 155 (62%) of respondents were in between 20-29 years old and out of the total respondents 74 (29.6%) were orthodox. Nearly one in three (38.4%)respondentswere educated until secondaryschool and most 229 (91.6%) of them were married. More than half (56.0%) of the respondents were ahousewife and most (54.0%) were reside from the urban area. Majority(56.4%) of respondents didn't know their monthly income(**Table 1**).

Table 1: Sociodemographic characteristics of pregnant women who attained antenatal care services at Butajira Hospital, February 2019 to March 2019 (n=250)

Variables	Category	Frequency	Percent
Age	14-19	13	5.2
	20-29	155	62.0
	>29	82	32.8
Religion	Orthodox	74	29.6
	Catholic	42	16.8
	Protestant	59	23.6
	Muslim	73	29.2
	Adventist	2	0.8
Residence	Urban	135	54.0
	Rural	115	46.0
Marital status	Married	229	91.6
	Single	6	2.4
	Divorce	3	1.2
	Widowed	5	2.0
	Cohabiting	7	2.8
Educational status of the mother	No formal education	37	14.8
	Primary school(1-8)	62	24.8
	Secondary school(9-12)	96	38.4
	Diploma and above	55	22.0
Occupation	Housewife	140	56.0
	Merchant	40	16.0
	Paid worker	27	10.8
	Farmer	4	1.6
	Daily labor	19	7.6
	Student	20	8.0
Husbands educational level	No formal education	33	13.2
	primary school(1-8)	64	25.6
	Secondary school(9-12)	83	33.2
	Diploma and above	64	25.6
Income	<445	16	6.4
	446-1200	36	14.4
	1201-2500	20	8.0
	2501-3500	8	3.2
	I don’t know	29	11.6
	Idon’t have my own	141	56.4

5.2 Obstetric history of pregnant mothers

Majority 107(42.8%) of the respondents had two times ANC follow ups in current pregnancy. Only 75(30.0%) of respondents had four or more number of pregnancy. Among 200respondents who had history of pregnancy, nearly67(26.8 %) had experienced complication during labor and delivery. Whereas, 32.4% of respondents had unplanned type of pregnancy and, 45(18.0%) of respondents experienced at least one abortion in their previous pregnancy (Table 2).

Table 2: Obstetric history of pregnant women who attained antenatal care services at Butajira Hospital, February 2019 to March 2019(n=250).

Variables	Category	Number	Percent
Number of previous Pregnancies	One	50	20.4
	Two	80	31.6
	Three	45	18.0
	Four and above	75	30.0
Number ANC follow ups on current pregnancy	First visit	59	23.6
	Second visit	107	42.8
	Third visit	67	26.8
	Fourth visit	17	6.8
Number of alive children she have	One	79	31.6
	Two	51	20.4
	Three and above	70	28.0
History of abortion	Yes	45	18.0
	NO	205	82.0
How frequently do you have abortion	One	40	88.8
	Two	5	11.1
Sex of last baby	Male	118	47.2
	Female	82	32.8
Desired sex of last baby	Male	116	46.4
	Female	84	33.6
Mode of deliver for your last pregnancy	Vaginal	142	56.8
	C/section (C/S)	22	8.8
	Instrumental delivery	36	14.4
Any complication during delivery of your last baby	Yes	67	26.8
	No	133	53.2
Any of your children hospitalized	YES	81	32.4
	NO	119	47.6
Was pregnancy planned	Yes	119	47.6
	NO	81	32.4
Any illness or complication in the last pregnancy	Yes	57	22.8
	No	143	57.2

5.3. Substance abuse of pregnant women

In this study 68(27.2%) of respondents had drunk alcohol before pregnancy, whereas 57 (22.8%) respondents had history of drinking alcohol during pregnancy. Twenty five (10.0%) and 17(6.8%) respondents had history of smoking before and during pregnancy respectively (**Table 3**).

Table 3: Substance abuse of pregnant women who attained antenatal care services at Butajira Hospital, February 2019 to March 2019(n=250).

Variables	Category	Number	Percent
Drink alcohol before pregnancy	Yes	68	27.2
	No	182	72.8
Smoked before pregnancy	Yes	25	10.0
	No	225	90.0
Drink alcohol during pregnancy	Yes	57	22.8
	No	193	77.2
Smoked during pregnancy	Yes	17	6.8
	No	233	93.2

5.4. Psychosocial history of the pregnant mothers

Nearly more than half (72.8%) of respondents were satisfied with their mirage and133 (53.2%) of respondents had good support from their husband, most 136(54.4%)of the respondentshadsatisfied with their relationship with husband's family.More than half (63.2%) of the respondents hadprevious history of depression whereas, 12.8%, 5.6% and 7.2% of respondents had experienced verbal, physical and both (verbal & physical) abuse in their home (Table 4).

Table 4: Psychosocial history of pregnant women who attained antenatal care services at Butajira Hospital, February 2019 to March 2019(n=250).

Variables	Category	Number	Percent
Any of your relative suffered from mental illness	Yes near relative	35	14.0
	Yes distant relative	41	16.4
	No	174	69.6
Previous history of depression	Yes	158	63.2
	No	92	36.8
Have you ever experienced any abuse in your home	Yes	64	25.6
	No	186	74.4
What kind of abuse do ever experience	Verbal	32	12.8
	Physical	14	5.6
	Verbal and physical	18	7.2
Are you satisfied with your marriage	Yes	182	72.8
	No	27	10.8
	More or less	41	16.4
Does your husband support you and your pregnancy	Yes	133	53.2
	No	57	22.8
	More or less	60	24.0
Did any of your relative present in health facility for your last child birth	Yes	155	62.0
	No	45	18.0
Are you satisfied with your relationship with your husband's family	Yes	136	54.4
	No	44	17.6
	More or less	70	28.0

5.5. Prevalence of Depression

The result of the study shows that, 27.6% of respondents with 95%CI (22.4- 33.2) women had depression related to pregnancy (Fig 3).

From the total of pregnant women 69 (27.6%) with 95%CI(22.4-33.4) of the respondents were depressed, whereas the remaining (72.4%) of respondents were not depressed(fig 2)

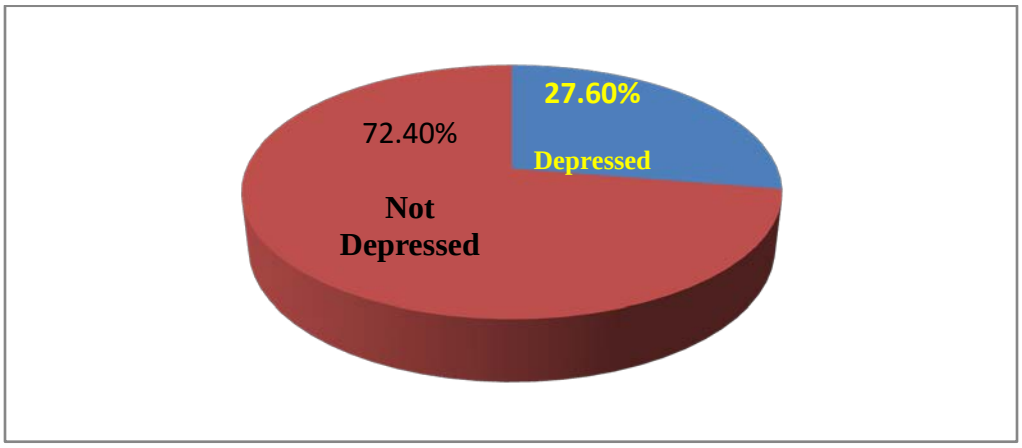


Figure 2: Chart showing the distribution of depression among pregnant women who attained antenatal care services at Butajira Hospital, February 2019 to March 2019.

Table 5: Result of depression among pregnant women who attained antenatal care services at Butajira Hospital, February 2019 to March 2019(n=250).

Variables	Category	Number	Percent
In the past 7days have u ever experienced laugh and see the funny side of things	As much as I always could	46	18.4
	Not quite so much now	95	38.0
	Definitely not so much	92	36.8
	Not at all	17	6.8
In the past 7 days have u ever looked forward with enjoyment to things?	As much as I ever did	47	18.8
	Rather less than I used to	93	37.2
	Definitely less than I used to	84	33.6
	Hardly at all	26	10.4
In the past 7days have u ever been anxious or worried for no good reason	No, not at all	55	22.0
	Hardly, ever	73	29.2
	Yes, sometimes	90	36.0
	Yes, very often	32	12.8
In z past 7days hv u blamed yourself unnecessarily when things went wrong	No, never	67	26.8
	Not, very often	89	35.6
	Yes, some of the times	80	32.0
	Yes, most of the time	14	5.6
In z pats 7days have u felt scared or panic fpr no good reason?	No, not at all	52	20.8
	No, not much	89	35.6
	Yes, sometimes	77	30.8
	Yes, quite a lot	32	12.8
In z past 7days did u have the thought of harming yourself	Never	74	29.6
	Hardly ever	70	28.0
	Sometimes	83	33.2
	Yes quite often	23	9.2
In z past 7days have you been so unhappy that you have had difficulty sleeping	No, not at all	74	29.6
	Not very often	84	33.6
	Yes, sometimes	66	26.4
	Yes, most of the time	26	10.4
In z past 7days have you felt sad or miserable?	No, not at all	49	19.6
	Not very often	108	43.2
	Yes quite often	66	26.4
	Yes, most of the time	27	10.8
In z past 7days have you been so unhappy that you have been crying	No never	108	43.2
	Only occasionally	60	24.0
	Yes, quite often	60	24.0

In z past 7days things hv been getting on top of you	Yes most of the time	22	8.8
	No, I have been coping as well as ever	60	24.0
	No most of the time I have coped quit well	71	28.4
	Yes, sometimes I haven't been coping as well as usual	98	39.2
	Yes, most of the time I haven't been able to cope at all	21	8.4

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5.6. Factors associated with Depression

Binary Logistic regression was performed to assess the association of each independent variable with APD. The result revealed that age, educational level of the women, current status of pregnancy (planned/unplanned), mode of delivery, complication during labor and delivery, child hospitalization after delivery, previous history of depression, maternal satisfaction with marriage, any abuse during pregnancy and smoking during pregnancy were found to have p-value less than 0.2 from bi-variatelogistic regression and considered for the multiple logistic regression model. In multivariable logistic regression the age of respondents, current status of pregnancy (planned/unplanned), complication during labor and delivery, child hospitalization after delivery and maternal satisfaction with mirage were significantly associated with depression at P-value of <0.05.

The odds of depression is increased by 2.11 times (95% CI; 1.0-4.44) for a women who have unplanned pregnancy than its counterparts. Those pregnant women who have previous history of any complication during labor and delivery were about four times (95%CI: 2.06-9.48) more at risk of depression than women who had no previous history of complications. Those women who have history of their child hospitalized were 3.34 times (95%CI; 1.48, 7.51) the risk of developing depression than its counter parts and those pregnant women who were not satisfied with their mirage were also 3.9 (95%CI; 1.15, 13.21) times more likely to have increased the risk of depression than those women who were satisfied in their marriage (**Table 6**).

Table 6: Factors affecting pregnant women who attended ANC clinic at Butajira hospital from February 2019 to March 2019 (n=250).

Types of Variables		Depression		OR(95% CI)		
		Not Depressed	Depressed	COR	AOR	P.Value
Age	14-19	7	6	**1**	**1**	
	20-29	123	32	**.**30(.095-.97)	1.83(.08 -42.19)	.706
	>29	51	31	.709(.22-2.3)	3.49 (.16-78.61)	.431
Educational level	No formal education	22	15	.88(.38-2.05)	1.29(.40-4.14)	.670
	Primary school(1-8)	48	14	.376(.17-.84)	.44(.14-1.38)	.158
	Secondary school	80	16	.258(.12-.55)	.53(.19-1.53)	.243
	Diploma and above	31	24	1	1	
Was pregnancy Planned	Yes	96	23	1	1	
	No	51	30	2.455(1.29-4.66)	**2.11(1.0-4.44)***	**.049**
Mode of delivery of last baby	Vaginal	111	31	1	1	
	C/section(C/S)	14	8	2.046(.79-5.32)	1.41(.44-4.52)	.569
	Instrumental delivery	22	14	2.278(1.05-4.97)	1.13(.43-2.99)	.805
Any complication during delivery of your last baby	Yes	38	29	3.47(1.8-6.67)	**4.42(2.06-9.48)*****	**.000**
	No	109	24	1	1	
Previous history of depression	Yes	120	38	1.61(.91-2.83)	.67(.32-1.43)	.302
	No	61	31	1	1	
Any of her children hospitalized	Yes	65	16	1.83(.94-3.59)	**3.34(1.48-7.51)****	**.004**
	No	82	37	1	1	
Any abuse in her home	Yes	42	22	1.55(.84-2.86)	1.02(.42-2.48)	.970
	No	139	47	1	1	
Satisfaction on marriage	Yes	144	37	1	1	
	No	13	14	.33(.16-.67)	.49(.18-1.35)	.171
	More or less	23	18	1.38(.52-3.65)	**3.9(1.15-13.21)***	**.029**
Smoking during pregnancy	Yes	16	1	.15(.02-1.17)	.38(.05-3.19)	.371
	No	165	68	1	1	

***P-value is significant at P<0.05** *****P-value is significant at P<0.001**

****P-value is significant at P<0.01** **P-value of Hosmer&Lemeshow test 0.786**

6. Discussion

The finding of this study indicated the prevalence and associated factors of antepartum depression among a sample of ANC followers'.Findings from this study may therefore highlight the current significant levels of antepartum depression and its contributing factors. In addition it verified the need and possibility of integrating depression screening into maternal and child health services.

This study showed that 27.6% of respondents had antepartum depression with 95% CI (22.4-33.2). The finding of this study is in line with the study done at Gondar 25.8% (15).Whereas, the finding of the study is lower than the study done in Maichew31.1% (14) North Ethiopia. Variation in estimation from the Gondar and Debra tabor study might be due to usage of different tools and sample size. Both studies used self reporting questioner (SRQ) of 20 yes no questions which was developed by WHO in order to evaluate all minor mental health problems by taking 683 antepartumwomenand 340 antepartum women using community based cross sectional study design respectively. On the other hand this figure was higher when compared to other similar studies done in Brazil14.2% (3), Turkey 10.9 %(12), Debra tabor 11.8%(16),Addis Ababa11.7% (9) . Discrepancy in estimation might be due to the different tools, assessment period, methods and economical status.

This study found that antepartum depression was significantly higher among women who are not satisfied with their marriage than those who were satisfied with marriage [AOR 3.9, (95%CI; 1.15-13.21)]. This result is consistent with the study conducted in Gondar; Amhara region in Ethiopia (16). This finding might be due to the fact that during the period of pregnancyand delivery women were handling situation alone and did not had the needed support from their partner.

Unplanned pregnancy was also associated with higher odds of having postpartum depression [AOR 2.11(95% CI; 1.0, 4.44)]. These result were also observed in most of previous studies carried out in Turkey (12) and northwestern Brazil (3) where a greater likelihood of antepartum depression related with unplanned pregnancy was reported. . Additionalstudy which was conducted among pregnantmothers who follow antenatal service in Addis Ababa Ethiopia also highlighted that unplanned pregnancy had a major contribution for antenatal depression (9).This express that unplanned pregnancy were a ground for both antenatal depression. In addition to that even if the family planning service

coverage in the country has increased unplanned pregnancy are still common so it implies that there is still a gap in utilization of the service.

Another significant association found in this study was between depression and previous history of complication during labor and delivery in which antepartum depression was significantly higher among participants who experienced complication during their last labor and delivery [AOR 4.42(95% CI; 2.06,9.48)] than their respective reference groups. This result is consistent with the study conducted in NorthEthiopia Maichew (14) where record of complication during labor and delivery showed the strongest association with antepartum depression. This might be due to the fact that negative life events in the previous history is most influential on individuals mental status it also might be because they frightened they might face the same problem on their current labor and delivery as well.

Furthermore, participant's previous experience of child hospitalization had also an association. [AOR=3.34(95% CI; 4.8, 7.51)] This was in line with other studies conducted in Brazil (3), and Debar tabor in Ethiopia (15) by stating previous experience of child hospitalization had a borderline significance with antepartum depression. This might be due to women who had experienced child hospitalization problem before was that, they might stress themselves thinking about the current baby might face the same problem. And worrying themselves that, there could be a chance they lose their baby.

7. Conclusion

The prevalence of antepartum depression in this study was relatively higher than study reports in some parts of Ethiopia. Unplanned pregnancy, complications during labor & delivery of the last baby, women having history of child hospitalization and maternal satisfaction with mirage were some of the factors that increased the antepartum depression. In order to prevent further consequences, all concerned bodies need to take an action by making targeted intervention and early screening of all pregnant mothers for depression.

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8. Recommendations

1. Ministry of health should prepare policies in integrating mental and reproductive health services and allowing partner support in the labor room.

2. Family guidance should create further awareness about unplanned pregnancy and marriage counseling among the community using different mass Medias.

3. Accredited training providers should give a continuous training for all health care providers specially nurses, midwife, and health officers to be able to modify client care

4. Health care providers should give attention and performing regular preventive screening during antenatal and postnatal follow-ups for those women who had a history of mental health problems, negative life events and give education for clients concerning negative outcome of substance use during pregnancy.

5. Further research on antepartum depression using different study design, set up and sample size in order to investigate future some of the risk factors that were found to be associated with antepartum depression.

9. Limitations and strength of the study

9.1. Strength

●Conducting such study in Butajira general hospital could be an important input
Minimizes the existing shortage of literature in the area.

9.2.Limitation

●Using a cross-sectional study design which hinders the researcher from establishing cause and effect relationship between the possible determinant of antepartum depression and the outcome of interest.

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ANNEXES

ANNEX 1

Information sheet

Greeting! My name is _____I am graduating class of WolkiteUniversity. We are studying the magnitude of antepartum depression and associated factors among pregnant women in Butajira general hospital. Your openness and candid response to all questions really matters. Please know that there is no right or wrong answer. However, you can withdraw your participation in this interview any time if you feel uncomfortable about what we are discussing. Everything we are going to talk about for the next few minutes will be kept confidential. We will not be collecting your name at any point during this interview and your identification will never be revealed.

Are you willing to participate in the study? a) Yes b) No

ANNEX 2 QUESTIONNAIRE FORM; ENGLISH VERSION

Questions related to Prevalence and associated factors of antepartum depression

Date _____ Questioner code 001

Part 1 socio-demographic characteristics			
No	**Questions**	**Coding category**	**Skip**
101	Residence?	a. Urban----------1 b. Rural----------2	
102	Age in completed years?		

103	Religious background?	a. Christian orthodox ----------1 b. Catholic.----------2 c.Protestant----------3 d.Muslim----------4 e. Others-specify----------5	
104	Follow any religious/cultural rituals?	a. yes ----------1 b. no----------2	If your response for no 104 is “B” skip to
105	What kind of religious/cultural rituals Do you follow?		
106	Current marital status?	a. Single----------1. b. Married.----------2 c. Divorced/separated.----------3 d. Widowed.----------4 e.cohabiting……5	

107	Have you ever attended school?	a. yes----------1 b. no ----------2	If your response for no 107 is “B” skip

108	Highest level of schooling you Attended?	a. Primary school (1-8----------1 b. Secondary school (9-12----------2 c. Technical/vocational.----------3 d. Diploma ----------4	
109	Occupational status?	a. Student----------1 b. paid worker ----------2 c. unpaid employee----------3 d. House wife----------4 e. merchant----------5 f. pensioner----------6 g. farmer----------7 h. unemployed----------8 i. Others-specify ----------9	If your response for no 109 is “B” go to no 110 but if without “B” skip to no 111
110	If you are paid worker what is your occupational condition?	a. civil servant----------1	
		b. non civil servant----------2 c. NGO employee----------3 d. daily laborer----------4 e. house maid----------5	

111	Husband's occupational status?	a. Student----------1 b. merchant----------2 c. civil servant----------3 d. non civil servant----------4 e. Unemployed.----------5 f. day laborer----------6	
112	Difficult to manage within income?	a. yes----------1	
113	On average the amount of monthly income?	a. < 445 birr ----------1 b. 446-1200----------2 c.1201-2500----------3 d.2501-3500----------4 e.>3501----------5 f. I don't know----------6 g. I don't have my own income-------7	
14.1	Sex of your last baby?	a. male ----------1	
		b. female ----------2	
14.2	Desired sex for the last baby?	a. Desired .----------1 b. Undesired .----------2 c. I don't mind ----------3	

PART 2 QUESTIONS ON OBSTETRICS FACTOR

No	Questions	Coding Category	Skip
201	Number of pregnancy		
202	Number of living children do you have?		
203	Have you ever had an abortion?	a. Yes----------1 b. No----------2	If your response for no 203 is "B" skip to
204	Number of abortion you experienced?		
205	Have you ever experienced death of your baby?	a. Yes----------1 b.no…….....2	
206	Did any of your children are hospitalized?	A,yes……1 B,no……2	
207	The mode of deliver for your last pregnancy was?	A,vaginaly……1 B,c/section…….2 C,instrumental deliver……..3	
208	Was your last pregnancy planned?	A,yes……...1 B,no…….2	
209	Any illness/complication during your last pregnancy?	a.yes----------1 b. no----------2	
210	Was there any negative life event during your last pregnancy?	A,yes……..1 B,no……..2	

211	What kind of events do you experienced?	A,yes…….1 B,no……..2	

Part 3 substance use

No	Questions	CodingCategory	Skip
301	Have you ever used any kind of Substance before pregnancy?	a. Yes----------1 b. no----------2	Ifyour response for no 301 is “B” skip to no 303
302	If you ever used any kind of substance Before pregnancy specify it?		
303	Did you use any kind of substance in Your last pregnancy?	a.yes----------1 b. no----------2	Ifyour response for no 303 is “B” skip
304	If you ever used any kind of substance In your last pregnancy specify it?		

PART 4 QUESTIONS ON PREVIOUS PSYCHIATRIC HISTORIES

No	Exposure variable	Coding category	Skip
401	Any of your relative suffered from mental illness?	a. Yes near relative ----------1 b. Yes distant relative ----------2 c. No----------3	
402	Previous history of depression?	a. yes ----------1 b. no----------2	

PART 5 QUESTIONS ON SOCIAL SUPPORT

No	Exposure variable	Coding	Skip
501	Have you ever experienced any abuse In your home?	a. Yes----------1 b. No----------2 c. Others-specify----------3	Ifyour response for no 501 is “B” skip to no 503
502	What kind of abuse do you ever experienced?	a. Verbal----------1 b. Physical----------2 c. Verbal and physical ----------3	
503	Are you satisfied with your marriage?	a.yes----------1 b. no----------2 c. more or less----------3 d. Others-specify----------4	
504	Father of your child is supporting both Of you enough?	a.yes.----------1 b. no----------2 c. more or less----------3 d. Others-specify----------4	

505	Did any of your relatives present in health facilities during your last child birth?	a. yes----------1 b .no----------2	
506	Are you satisfied by the relationship you have with your mother-in-law?	a. yes----------1 b. no ----------2 c. more or less----------3 d. Others-specify----------4	

PART 6 Edinburgh Postnatal Depression Scale (EPDS)

No	Question	Coding Category	Skip
601	Experiencing laughing and seeing the funny side of things?	1. As much as I always could---------1 2. Not quite so much now ----------2 3. Definitely not so much now--------3 4. Not at all----------4	
602	Looking forward with enjoyment to things?	1. As much as I ever did ----------1 2. Rather less than I used to----------2 3. Definitely less than I used to-------3 4. Hardly at all----------4	
603	Being anxious or worried for no good reason?	1. no not at all----------1 2. Hardly ever----------2 3. yes, sometimes----------3 4.yes,very often ----------4	
604	Blaming yourself unnecessarily when things went wrong?	1. yes, most of the time----------1 2. yes, some of the time----------2 3. not very often----------3 4. no, never----------4	

605	Feeling scared or panicky for no very good reason?	1. No, not at all ----------1 2. No, not much. ----------2 3 Yes, sometimes ----------3 4Yes, quite a lot----------4	
606	Do you have the thought of harming yourself?	1.never ----------1 2. hardly ever ----------2 3.sometimes ----------3 4. yes, quite often ……4	
607	Being unhappy and having difficulty sleeping?	1.no,not at all ----------1 2. not very often ----------2 3. yes, sometimes ----------3 4. yes, most of the time----------4	
608	Feeling sad or miserable?	1. no, not at all ----------1 2. Not very often ----------2 3. Yes, quite often ----------3 4. yes, most of the time----------4	
609	Being unhappy that you have been crying?	1.no,never----------1 2. only occasionally----------2 3. yes, quite often ----------3 4. Yes, most of the time ----------4	

610	Things getting on top of you?	1. Yes, most of the time I haven’t been able to cope at all----------1 2. yes, sometimes I haven’t been coping as well as usual----------2 3. no, most of the time I have quite well----------3 4.no,I have been coping as well as ever----------4	

ANNEX IV AMHARIC VERSION OF INFORMATION SHEET

የመረጃፅናማብራሪያ

ጤናይስጥሌኝ እኔ.....እባላለሁ፡፡በወልቂጤዩኒቨርስቲህክምናፊኩሉቲበአዋላጅ
ነርስየትምህርትክፍልየአራተኛአመትየዲግሪተማሪዎችስንሆንበዚህሆስፒታልየሚገኙእናቶችበእርግዝና
ወቅትየሚያጋጥማቸውንየድብርትምልክቶችበተመለከተጥናትእያደረግንእንገኛለን፡
ከዚህጥናትየሚገኙትመረጃዎችበዚህከተማበሽታው ምን ያህልእደተስፋፋጠቋሚ ሆኖ ጥቅም ላይይውላል፡፡
በዚህጥናትውስጥመሳተፍቀጥተኛየሆነጥቅምየሌለሲሆንጥናትውስጥበመሳተፍየሚመጣምንምአይነትችግርወይምጉዳትግንየለ
ውም፡፡የጥናቱመጠይቅቢበዛ 20 ደቂቃይወስዳል፡፡
ጥናቱውስጥሊሳተፉየሚችሉትበተመራማሪውአማካኝነትከጠቅላላውበእጣየተለዩናቸው፡፡
ጥናቱውስጥመሳተፌየሚፈልጉእናቶችበፈቃደኝነትላይብቻየተመሰረተተሳትፎመሆኑንመገንዘብአለባቸው፡፡
ባለመሳተፍምክኒያትየሚመጣምንምአይነትቅጣትየለውም፤
ነገርግንከእርሶየምናገኘውንመረጃአስፈላጊስለሆነጥናትውስጥእንደሚሳተፉተስፋእናደርጋለን፡፡
ከእርስዎየምናገኘውማንኛውምአይነትመረጃከእኛጥናትውስጥከምንሳተፈውሰዎችውጪለማንኛውምሶስተኛወገንእንደማይደር
ስእናምስጢራዊነቱየተጠበቀእንደሚሆንልናረጋግጥላቹእንወዳለን፡፡

አሁንቃለ_መጠይቁንመጀመርእንችላለን?

አዎካሉመጠይቁንይቀጥልአይሆንምካሉደግሞአመስግኑናመጠይቁንያቁሙ·

ቃለ_መጠይቁን የሚያደርገውሰውስም ----------ፊርማ---------ቀን----------የተቆጣጣሪውስም----------
----------ፊርማ ----------ቀን----------

ቃለ መጠይቅ

የመጠይቅመለያቁጥር----------

መጠይቁየተሰጠበትቀን----------

መመሪያ፡ለቀጣዮቹጥያቄዎችተገቢውንምሊሽይምረጡ·

ክፍል አንድ ፡ ማህበራዊናየኋሊታሪክባህሪላይየሚያጠነጥኑጥያቄዎች

ተቁ	ጥያቄ	መለያ ቁጥር	እለፍ/ፊ
101	መኖሪያ አድራሻ	ሀ ። ከተማ። ። ። ። ። 1 ለ። ገጠር። ። ። ። ። 2	

102	በሙሉ ቁጥር ዕድሜዎ ምን ያህል ነው ?		
103	ሃይማኖቶ ምንድን ነዉ ?	ሀ. ኦርቶዶክስ ክርስቲያን. . . 1 ለ. ኳቶሊክ. . . . . 2 ሐ. ፕሮቴስታንት. . . . 3 መ. ሙስሊም. . . . . 4 ሠ. ሌላ ካለ ይግለፁ. . .	
104	የሚከተሉት ሐይማኖታዊ ባህላዊ ስርአቶች አሉ ?	ሀ. አዎ አለ. . . . . 1 ለ. የለም. 2	ለተራ ቁጥር 104 መልሶ “ለ”ከሆነ ወደ ጥያቄ ቁጥር 106 ይለፉ
105	የሚከተሉት ሀይማኖታዊ ባህላዊ ስርዓት ካለ ይግለፁ ?		
106	የጋብቻ ሁኔታ ?	ሀ. ያላገባ. . . . . 1 ለ. ያገባ. . . . . 2 ሐ. የፈታ/የተለያየ. . . . . 3 መ. ባለቤቶ የሞተቦት. . . . 4 ሠ. በጋራ እየኖሩ. 5	
107	መደበኛ ትምህርት ተምረዉ ያውቃሉ ?	ሀ. አውቃለሁ. . . . . 1 ለ. አላውቅም. 2	ለተራ ቁጥር 107 መልሶ“ለ”ከሆነ ወደ ጥያቄ ቁጥር 109 ይለፉ
108	ያጠናቀቁት ከፍተኛ የትምህርት ደረጃ ?	ሀ. የመጀመሪያ ደረጃ ትምህርት (1_8). . . . . 1 ለ. ሁለተኛ ደረጃ ትምህርት (9_12). . . . . 2 ሐ. የቴክኒክና ሙያ ስልጠና. . . 3 መ. ዲፕሎማ. . . 4 ሠ. የመጀመሪያ ዲግሪና ከዛ በላይ. 5	

109	የስራ ሁኔታሽ ?	ሀ. ተማሪ. . . 1 ላ. ተከፋይ ሰራተኛ. . . 2 ሐ. የማይከፈለው ሰራተኛ. . . 3 መ. የቤት ሰራተኛ. . . . 4 ሠ. ነጋዴ. . . . . 5 ረ. ጡረተኛ. . . . 6 ሰ. ገበሬ. . . . . 7 ሸ. ስራ የሌለው. . . . 8 ቀ. ሌላ ካለ ይገለፁ. . . 9	ለተራ ቁጥር 109 መልሶ ለ ከሆነ ወደ ጥያቄ 110 ይለፉ ከ “ለ” ዉጪ ከሆነ ግን ወደ 111
110	ተከፋይ ሰራተኛ ከሆኑ የስራ ዘርፎ ምንድን ነው ?	ሀ. የመንግስት ሰራተኛ. . . 1 ለ. የግብረ ሰናይ ድርጅት ተቀጣሪ. . . . . 2 ሐ. የቀን ሰራተኛ. . . . . 3 መ. ሌላ ካለ ይግለፁ. . . . 4	
111	የባለቤትዎ የሰራ ሁኔታ ምንድን ነው ?	ሀ. ተማሪ. . . . . 1 ለ. ነጋዴ. . . . . 2 ሐ. የመንግስት ሰራተኛ. . . 3 መ. ስራ የለዎም. . . . 4 ሠ. የቀን ሰራተኛ. . . . 5 ረ. ሌላ ካለ ይግለፁ. . . 6	
112	ከወሊድ በኋላ ስራ ይሰራሉ ?	ሀ. እሰራለሁ. . . . . 1 ለ. አልሰራም. 2	

,113	ያሉት የገቢ መጠን ቤቶን ለመምራት አስቸግሮታል ?	ሀ. አዎ. . . . . 1 ለ. አያስቸግረኝም. 2	
114	በአማካይ በወር ያሎት የገቢ መጠን በብር ስንት ነው ?	ሀ.<445. . . 1 ለ. 446—1200. . . . 2 ሐ. 1201–2500. . . 3 መ. 2501–3500. . . 4 ሠ. >3501. . . . . 5 ረ. አላውቅም. . . . . 6 ሰ. የራሴ ገቢ የለኝም. . . 7	
115. 1	የመጨረሻ ልጅዎ ፆታ ምንድን ነው ?	ሀ. ወንድ. . . . . 1 ለ. ሴት. 2	
115. 2	የተወለደው የልጅዎ ፆታ ምን ነበር ?	ሀ. የተፈለገው ነው. . . . . 1 ለ. ያልተፈለገው ነው. . . . 2 ሐ. ምንም አይመስለኝም. . . 3	

ክፍል ሁለት፡የወሊድ ሁኔታ ላይ የሚያጠነጥን መጠይቆች

ተቁ	ጥያቄ	መለያ ቁጥር	እለፍ/ፊ
201	ስንት ጊዜ አርግዘው ያውቃሉ ?		
202	ከወለዱት ልጆቾ ምን ያህሉ በህይወት አሉ ?		
203	ውርጃ ኣጋጥሞት ያውቃል ?	ሀ. ያውቃል. . . 1 ለ. አያውቅም. . . 2	

204	ውርጃ ኣጋጥሞት የሚያውቅ ከሆነ ለስንት ጊዜ ?		
205	ከዚህ ቀደም የወለዱት ልጅ ሞቶበት ያውቃል ?	ሀ. አዎ ያውቃል. . . 1 ለ. አያውቅም. . . 2	
206	ልጆችዎ በማንኛውም ህመም ምክኒያት ሆስፒትል ለህክምና ተኝቶ ያውቃሉ ?	ሀ. አው ያውቃል. . . . . 1 ለ. አያውቅም. . . 2	
207	የመጨረሻ ጊዜ ልጅውን የወለዱት እንዴት ነበረ ?	ሀ. በመሃፀን. . . 1 ለ. በኦፐሬሽን. . . 2 ሐ. በማሃፀን ሆኖ በመሳሪያ. 3	
208	የመጨረሻ ጊዜ እርግዝናውን አቅደው ነው ያረገዙት ?	ሀ. አዎ. . . 1 ለ. አይደለም. . . 2	
209	በመጨረሻ እርግዝናዎ ወቅት የጤና መታወክ ወይም ከእርግዝናው ጋር ተያይዞ የመጣ የጤና መወሳሰብ ችግሮች ነበሩ ?	ሀ. አዎ. . . 1 ለ. አልነበረም. . . 2	
210	በመጨረሻ እርግዝናዎ ወቅት መጥፎ ሁኔታዎች ኣጋጥሞት ነበር ?	ሀ. አዎ ነበር. . . 1 ለ. አልነበረም. . . 2	ለተራ ቁጥር 210 መልሶ “ለ” ከሆነ ወደ 301 ይለፉ
211	ያጋጠሞት መጥፎ ሁኔታ ቢገልፁልን ?		

ክፍል ሶስት : የኢደገኛ እፅን የተመለከቱ ጥያቄዎች

ተቁ	ጥያቄ	መለያ ቁጥር	እለፍ/ፊ
301	ከማርገዞ በፊት የአልኮል መጠጥ፣ሲጋራ ወይም አደንዛዥ ዕፅ ተጠቅመው ያውቃሉ ?	ሀ. አውቃለሁ. . . 1 ለ. አላውቅም. . . 2	ለተራ ቁጥር 301 መልሶ “ለ”ከሆነ ወደ ጥያቄ ቁጥር 303 ይለፉ
302	ከማርገዞ በፊት የአልኮል መጠጥ፣ሲጋራ ወይም አደንዛዥ ዕፅ ተጠቅመው የሚያውቁ ከሆነ የተተቀሙትን አይነት ይግለፁ		
303	በመጨረሻ የዕርግዝናዎ ወቅት የአልኮል መጠጥ፤	ሀ. ተጠቅሚያለው. .	ለተራ ቁጥር 303 መልሶ“ለ” ከሆነ ወደ ጥያቄ ቁጥር 401

	ሲጋራ ወይም አደንዛዥ ዕፅ ተጠቅመዋል ?	ሀ. አዎ ..... 1 ለ. አልተጠቀምኩም 2	ይለፉ
304	በመጨረሻ የዕርግዝናዎ ወቅት የአልኮል መጠጥ፤ ሲጋራ ወይም አደንዛዥ ዕፅ ከተጠቀሙ ምን እንደሆነ ይግለፁ ?		

ክፍል አራት : የቀድሞ የግልና የቤተሰብ የስነ አምሮ ጤናሁኔታ

ተቁ	ጥያቄ	መለያ ቁጥር	እለፍ/ፊ
401	በቤተሰቦ ውስጥ የአምሮ በሽታ ያጋጠመው ሰው ነበረ ?	ሀ. አዎ የቅርብ ቤተሰብ ..... 1 ለ. አዎ የሩቅ ቤተሰብ ..... 2 ሐ. አልነበረም 3	
402	ከዚህ ቀደም የድብርት ችግር ኢጋጥሞት ያውቃል ?	ሀ. አዎ ..... 1 ለ. አያዉቅም 2	

ክፍል አምስት : የማሃበረሰብ እገዛ ላይ የሚያጠነጥኑ መጠይቆች

ተቁ	ጥያቄ	መለያ ቁጥር	እለፍ/ፊ
501	በቤትዎ በባለቤቶ ጥቃት ደርሶቦት ያዎቃል ?	ሀ. አዎ ..... 1 ለ. አያውቅም ..... 2 ሐ. ሌላ ካለ ይግለፁ	ለተራ ቁጥር 501 መልሶ “ለ” ከሆነ ወደ ጥያቄ ቁጥር 503 ይለፉ
502	ያጋጠሞት የጥቃት ሁኔታ ምን ነበረ ?	ሀ. የቃላት/ስድብ ..... 1 ለ. የአካል/ድብደባ 2	

		ሐ. የቃላትና የአካል ጥቃት. 3	
503	በትዳሮ ደስተኛ ኖት ?	ሀ. አዎ. . . . ነ ለ. አይደለሁም. . . 2 ሐ. ከሞላጐደል. . . . . 3 መ. ሌላ ካለ ይግለጹ	
504	የልጆ አባት ለእርሶና ለልጆ ተገቢውን እገዛ አድርገዋል ብለው ያስባሉ ?	ሀ. አዎ. . . ነ ለ. አላስብም. . . 2 ሐ. ከሞላኝደል. . . 3 መ. ሌላ ካለ ይግለፁ. 4	
505	በወሊድ ወቅት ከቤተሰብ አባላት መሃከል በወሊድ ቦታ የተገኘ ሰው ነበር ?	ሀ. አዎ ነበር. . . ነ ለ. አልነበረም. . . 2	
506	ከባሎ ቤተሰብ ጋር ባሎት ግንኙነት ደስተኛ ኖት ?	ሀ. አዎ. . . ነ ለ. አይደለሁም. . . 2 ሐ. ከሞላኝደል. . . 3 መ. ሌላ ካለ ይግለፁ.	

ክፍል ስድስት : የአማርኛ ትርጉም ለ EPDS

ተቁ	ጥያቄ	መለያ ቁጥር	እለፍ/ፊ
601	መሳቅና የነገሮችን አስደሳች ጎን ማየት ችለዋል ?	ሀ. ሁሌ የምችለውን ያህል.	

		ሀ. አዎ ለ. አሁን በጣም ብዙ አይደለም ሐ. በእርግጥ አሁን ብዙም አይደለም መ. በጭራሽ አይደለም	
602	ነገሮችን ወደፊት በደስታ ያዩ ነበር ?	ሀ. አዎ ሁሌም እንደማደርገው ለ. በፊት ከማደረገዉ ያነሰ ሐ. በእርግጥ በፊት ከማደርገው ያነሰ መ. በአጠቃላይ ከባድ ነዉ	
603	ያለምንም በቂ ምክንያት ተሸብረው ወይም ተጨንቀው ይውቃሉ ?	ሀ. አይደለም መቼም ሆኖ አያውቅም ለ. እምብዛም ሐ. አዎ አንዳንዴ መ. አዎ በጣም ብዙ ጊዜ	
604	ነገሮችወደአላሰፈላጊሁኔታሲያመሩያለምክንያትአራስዎንወቅሰዋሌ ?	ሀ. አይደለም መቼም ሆኖአያውቅም ለ. ብዙ ጊዜ አይደለም	

		ሀ. በጭራሽ ። ። ። 1 ለ. አይደለም ። ። ። 2 ሐ. አዎ አንዳንዴ ። ። ። 3 መ. አዎ ብዙውን ጊዜ ። ። ። 4	
605	ያለምንም በቂ ምክንያት የፍርሐትና የድንጋጤ ስሜት ተሰምቶት ያውቃል ?	ሀ. አይደለም በጭራሽ አይሰማኝም ። ። ። ። 1 ለ. አይደለም ብዙ ጊዜ አይሰማኝም ። ። ። ። 2 ሐ. አዎ አንዳንዴ ። ። ። 3 መ. አዎ በጣም ብዙ ጊዜ ። ። ። ። 4	
606	እራስዎን ለመጉዳት አስበው ያውቃሉ ?	ሀ. በጭራሽ መቼም ። ። ። ። 1 ለ. እምብዛም ። ። ። ። 2 ሐ. አንዳንዴ ። ። ። ። 3 መ. በጣም ብዙ ጊዜ ። ። ። ። 4	
607	በጣም ደስተኛ ባለመሆንዎ እንቅልፍ እምቢ ብሎዎት ያውቃል ?	ሀ. በጭራሽ ። ። ። ። 1 ለ. በጣም ብዙ ጊዜ አይደለም ። ። ። ። ። 2 ሐ. አዎ ብዙጊዜ ። ። ። 3 መ. አዎ በጣም ብዙውን ጊዜ ። ። ። ። ። ።	

		ሰ 4	
608	የሀዘንና የብስጭት ስሜት ተሰምቶት ያውቃል ?	ሀ በጭራሽ ሰ ሰ 1 ለ በጣም ብዙ ጊዜ አይደለም ሰ ሰ ሰ ሰ ሰ 2 ሐ አዎ ብዙውን ጊዜ ሰ ሰ ሰ ሰ ሰ ሰ ሰ ሰ ሰ ሰ 3 መ አዎ በጣም ብዙውን ጊዜ ሰ ሰ ሰ ሰ ሰ ሰ ሰ ሰ 4	
609	በጣም ከማዘንዎት የተነሳ አልቅሰው ያውቃሉ ?	ሀ በጭራሽ ሰ ሰ 1 ለ አልፎ አልፎ ሰ ሰ 2 ሐ አዎ ብዙ ጊዜ ሰ ሰ 3 መ ሰ ሰ አዎ በጣም ብዙውን ጊዜ ሰ ሰ ሰ ሰ ሰ ሰ 4	
610	ነገሮች ከቁጥጥርዎ ውጪ ሆነውቦት ያውቃል ?	ሀ አይደለም ልክ እንደበፊቱ በጥሩ ሁኔታ ነገሮችን እቋቋማለሁ ሰ ሰ ሰ 1 ለ ብዙ ጊዜ በጥሩ ሁኔታ ነገሮችን እቋቋማለሁ ሰ ሰ 2 ሐ አዎ ልክ እንደበፊቱ ብዙ ጊዜ አንዳንድ ነገሮችን መቋቋም አልችልም ሰ ሰ ሰ 3 መ አዎ ብዙ ጊዜ ነገሮችን በአጠቃላይ መቋቋም አልችልም ሰ ሰ ሰ ሰ 4	