



COLLEGE OF HEALTH AND MEDICAL SCIENCES

SCHOOL OF GRADUATE STUDENTS

**PREVALENCE AND ASSOCIATED FACTORS OF ANXIETY AMONG
PREGNANT WOMAN ATTENDING ANTENATAL CARE IN PUBLIC
HOSPITALS OF JIGJIGA CITY SOMALI REGION, ETHIOPIA**

MPH THESIS RESEARCH

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Prevalence and Associated Factors of Anxiety symptom among Pregnant Woman Attending Antenatal Care at Public Hospitals in Jigjiga City Somali Region, Ethiopia

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BIOGRAPHICAL SKETCH

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TABLE OF CONTENTS

APPROVAL SHEET	I
STATEMENT OF THE AUTHOR	II
BIOGRAPHICAL SKETCH	III
ACKNOWLEDGMENTS	IV
TABLE OF CONTENTS.....	V
LIST OF TABLES	VIII
LIST OF FIGURES	IX
LIST OF ACRONYMS AND ABBREVIATIONS	X
ABSTRACT.....	XI
1. INTRODUCTION	1
1.1 Background	1
1. 2. Statement of the Problem	3
1.3. Significance of Study	5
1.4 Objectives.....	6
1.4.1 General Objective	6
1.4.2 Specific Objectives.	6
2. LITERATURE REVIEW	7
2.1. The Prevalence of Anxiety among Pregnant Women Attending Antenatal Care Service... ..	7
2.2 Factors Associated with Anxiety among Pregnant Women Attending Antenatal Care Service	8
2.2.1. Socio-demographic Related Factors	8
2.2.2. Obstetric Related Factors.....	8
2.2.3. Psychosocial related and substance use related factors	9
2.3. Conceptual Framework.....	10
3. METHODS	11
3.1 Study area and period.....	11
3.2 Study design	11
3.3. Source Population and Study population	11
3.3.1. Source Population.....	11

3.3.2 Study Population.....	11
3.4 Inclusion and Exclusion Criteria.....	11
3.4.1 Inclusion criteria.....	11
3.4.2 Exclusion criteria.....	11
3.5 Sample Size Determination.....	12
3.6 Sampling Procedure and sampling techniques.....	13
3.7. Data Collection Method.....	14
3.7.1 Data Collection Instrument.....	14
3.7.2. Data Collectors and Supervisors.....	14
3.7.3 Data Collection Procedure.....	14
3.8 Variables.....	15
3.8.1 Dependent variable.....	15
3.8.2 Independent variables.....	15
3.9. Operational definition.....	15
3.10 Data Quality Control.....	16
3.11 Data Analysis Method.....	16
3.12 Ethical consideration.....	17
3.13 Information dissemination.....	17
4. RESULTS.....	18
4.1 Socio-demographic characteristics of the participant.....	18
4.2 Obstetrics related factors.....	20
4.3 Clinical condition related factors.....	22
4.4 Social support factors.....	23
4.5 Substance use related factors.....	24
4.6 Prevalence of anxiety among pregnant women.....	25
4.7 Factors associated with anxiety among pregnant women attending antenatal care.....	27
5. DISCUSSION.....	28
6. Conclusion and Recommendations.....	30
6.1 Conclusion.....	30
6.2 Recommendations.....	30

7. REFERENCE	32
8. ANNEXES	34
8.1. Information Sheet and Informed Voluntary Consent for Head of hospitals in jijiga town.	34
8.2. Participant Information Sheet and Voluntary Consent for Participant with Age Of \geq 18 Years (English Version)	36
8.3. Participant Information Sheet and Voluntary Consent for Participant With Age Of \geq 18 Years (to be translated to Amharic language	38
8.4. Participant Information Sheet and Informed Consent for Participant with Age of \geq 18 Years Old (to be translated as Af- Somali language)	40
8.5. Participant Information Sheet and Voluntary Consent for Parent/Guardians of Participants <18 Years Old (English language)	43
8.6. Participant Information Sheet and Voluntary Consent for Parent/Guardians of Participants <18 Years Old (Amharic Version)	45
8.7. Participant Information Sheet and Voluntary Consent for Parent/Guardians of participants <18 Years Old (Af-somali Version).....	47
8.8. Questionnaire (English Version).....	50

LIST OF TABLES

Table 1. sample size determination for specific objective two on prevalence and associated factors of anxiety among pregnant woman attending antenatal care in public hospitals of Jigjiga city, 2024.....	12
Table 2. socio-demographic characteristic of among pregnant women attending ANC public hospitals in jigjiga city-2024.....	19
Table 3. Obstetric related factors among pregnant women attending ANC in public hospitals jigjiga city 2024.....	21
Table 4. Clinical condition related factors among pregnant woman attending antenatal care in public hospitals of Jigjiga city, 2024.....	22
Table 5. Social support factors among pregnant woman attending antenatal care in public hospitals of Jigjiga city, 2024.....	23
Table 6. Behavioral related factors among pregnant woman attending antenatal care in public hospitals of Jigjiga city, 2024.....	24

LIST OF FIGURES

Figure 1: Conceptual framework for prevalence and associated factors of anxiety among pregnancy women-jigjiga city adapted from literature review 2024.....	10
Figure 2; Schematic diagram of simple random sample pregnancy women attending antenatal care at public hospitals in jigjiga city-2024.....	12
Figure 3; Prevalence of anxiety among pregnant woman attending antenatal care in public hospitals of Jigjiga city, 2024.....	24
Figure 4. Level of anxiety grouped among pregnant woman attending antenatal care in public hospitals of Jigjiga city, 2024.....	25

LIST OF ACRONYMS AND ABBREVIATIONS

AA	Antenatal Anxiety
ANC	Antenatal Care
CI	Confidence Interval
DM	Diabetic Mellitus
DSM	Diagnostic and Statical Manual
GA	Gestational Age
GAA	Global Antenatal Anxiety
GAD	General Anxiety Disorder
HAMA-A	Hamilton Anxiety Rating Scale for Antenatal Anxiety
HTN	Hypertension
IHRERC	Institutional Health Research Ethics Review Committee
KGH	Karamara General Hospital
MA	Maternal Anxiety
MOD	Mode of Delivery
OCB	Obsessive Compulsive Disorder
PRA	Pregnancy Related Anxiety
PIH	Pregnancy Induced Hypertension
PNC	Postnatal Care
SHYJURSH	Sheik Hassan Yabare Jigjig University specialist hospital
SP	Social phobia
SVD	Spontaneous Vaginal Delivery
WHO	World Health Organization

ABSTRACT

Background: Anxiety is one of the most prevalent mental health problems during pregnancy as a result of the physical and psychological changes. Anxiety among pregnancy, involving labor and delivery, the well-being of the fetus/infant and the mother it has been associated with various consequence of mother and their baby like postpartum depression, preterm birth, preeclampsia, low birth weight, fetal distress, poor cognitive development child. This study aimed to assess the prevalence and associated factors of anxiety among pregnant women in jigjiga city.

Objective: This study aimed to determine the prevalence of anxiety symptom and associated factors among pregnant women attending antenatal care in Jigjig city public hospitals, Ethiopia from November 15.2024 to December 30.2024.

Methods:

An institutional based cross-sectional study design was conducted among pregnant women attending antenatal care service at public hospitals in jigjig city Somali region Ethiopia, from Nov.15, to Dec.30 2024. Simple random sampling was used to enroll eligible pregnancy women attending antenatal care service. Data was collected with interviewer-administered questionnaires demographic, obstetric, psychosocial, substance used and Hamilton Anxiety Rating Scale for Antenatal Anxiety (HAMAA). Scale was used to assess symptoms of antenatal anxiety respectively. Women with HAMA-A score ≥ 17 were considered to have anxiety disorder. Data were entered to kobo tool, then export and analyzed in SPSS-25 version statistical software. Then binary and multiple logistic regression was performed to check the association between dependent and independent variable. Factors associated with anxiety disorders was determined using AOR with 95%CI and statistical significance was declared at P-value < 0.05 .

Results: A total of 587 pregnant women participated in this study making a response rate of 100%. The prevalence of anxiety among pregnant women in this study was found to be 45% (95% CI: 40.9-49.1). Having history of stillbirth (AOR = 1.58, 95% CI: 1.06-2.34, p = 0.022), relative involvement in household decision-making (AOR = 2.33, 95% CI: 1.19-4.54, p = 0.013), unplanned pregnancy (AOR = 1.53, 95% CI: 1.03-2.28, p = 0.037), not having husband support (AOR = 1.44, 95% CI: 1.01-2.04, p = 0.042) were significantly associated with anxiety among pregnant women.

Conclusion: The findings from this study indicated that nearly half of the participants experienced anxiety. Factors such as a history of stillbirth, lack of autonomy in household decision-making, unplanned pregnancy, and lack of husband support were found to be associated with anxiety. The study suggests that the importance of pregnant women is encourage actively seek emotional and psychological support during pregnancy, especially if they have experienced previous adverse pregnancy outcomes.

Keywords: Prevalence, anxiety pregnant women, ANC attending, Jigjiga, Ethiopia

1. INTRODUCTION

1.1 Background

Pregnancy represents vulnerable period when women are prone to emotional distress, due to physical, physiological, hormonal and social change, increases risk of psychiatric morbidity among some women (Akinsulore et al., 2021). According to the WHO, Approximately 10% of pregnant women develop mental health conditions commonly reported with anxiety (Heyningen et al., 2016). Anxiety is one of the most prevalent mental health problems as a result of the physical and psychological changes during pregnant and it's the most common of psychiatric disorder (Nath et al., 2019).

Antenatal anxiety is defined as negative emotional state that associated with worries about the health and well-being of one's baby, the impending childbirth, of hospital and health-care experience during pregnancy and it is common emotional response, especially during first and third trimesters, (Priyadarshanie et al., 2023).

In fifth edition of the Diagnostic and Statistical Manual (DSM), various types of anxiety disorders are recognized, including panic disorder, social phobia, agoraphobia, post-traumatic stress disorder, obsessive-compulsive disorder, and generalized anxiety disorder (Zeng et al., 2015). Antenatal anxiety can occur any time during pregnancy where generalized anxiety disorder manifested as uncontrollable or involving persistent feeling worry, restlessness, fatigue, muscle tension, insomnia with everyday living, fear about pregnancy (Cena et al., 2021).

A meta-analysis done on data from 102 studies conducted in 34 countries of the world found the overall estimate of anxiety in pregnant women to be 15.3% (Dennis et al., 2017). Some studies anxiety during pregnancy is associated with significant complications that has been reported to impact between 20 - 40% of women during pregnancy. The overall report of antenatal anxiety is higher in low- and middle-income countries particularly sub-Sahra Africa. Women in LMIC settings are exposed to a high level of stressful events, increasing their vulnerability to anxiety disorder (van, heyingen et al., 2019)

About 39% of pregnant women met the criteria of diagnosis in anxiety disorder including panic disorder, specific phobia, social phobia, obsessive compulsive disorder, general anxiety disorder, posttraumatic stress disorder,

Anxiety during pregnancy are some associated factors, including educational level, low-economic status, previous abortion or instrumental delivery, unwanted pregnancy, previous stillbirth or difficult labor, cognitive, behavioral change in child health (Akinsulore A et al., 2021). The labor process (e.g., pain, medical interventions, abnormal labor, re-experiencing a previous traumatic delivery personal condition (lack of control, distrust in own abilities), perceived lack of social support, and Additionally, pregnant women experiencing anxiety are less likely to attend regular ANC visits, adhere to prenatal advice, and follow prescribed medications, ultimately resulting in adverse outcomes for both mother and baby (Bayrampour et al., 2018). Thus, it is necessary to optimize mental health in pregnancy women because of its inter-generational impact on pregnancy women, infants and children's health. Resultantly, anxiety and related disorders impede psychosocial or psychological interventions may be beneficial in reducing symptoms of anxiety but need to be evaluated in pregnant populations to strengthen the evidence base. The insights gained from this study inform policymakers and healthcare providers, facilitate the development of comprehensive antenatal care services and ultimately improve maternal healthcare delivery in Somali region. This study aimed to determine the prevalence and associated factors of anxiety disorders among pregnant women in public hospital jigjiga city.

1. 2. Statement of the Problem

Globally the impact of Anxiety among pregnancy in health problem is raising time to time, the prevalence of anxiety in pregnant women has been reported to range from 11.4% to 63% (Priya et al., 2018). The 10% of expectant mothers worldwide experience antenatal anxiety and depression, this burden is thought to be worse in low-income countries where poverty, communicable and non-communicable diseases abound and 75% of the global burden occurred in developing countries (Waqas et al., 2015).

The burden of antenatal anxiety problems in worldwide distribution estimated as 55.7% southern India, (Nath et al., 2019) 70%Pakistan, (Ali,NS et al., 2019) 26.8%brazil, (Nogueira, et al., 2017) 59.5% Australia, 15.2% 16.8% Spain, Canada, 29.2% United Kingdom (Insan et al., 2022), in Africa it is different prevalence, Benin 44.9%((A. Djidonou, F. T. et al., 2019), Nigeria 26%(A. O. Busari, 2018),Tanzania 25%(V. Wall, S. S. Premji et al., 2022), south Africa 15%(S. Redinger et al., 2018), Ethiopia 43.9%(Abegaz, et al., 2022).

According to a different trimesters-specific study conducted in Spain, the prevalence of anxiety was found to be 19.5% in the first trimester, 16.8% in the second trimester, and 17.2% in the third trimester (InsanSlackHeslehurst and Rankin, 2020) and another cross-sectional study conducted India 40.8% second trimester, 31.4% third trimester, 27.8% first trimester, the highest prevalence was second trimester (Insan et al., 2023).

Anxiety during pregnancy are influenced by various factors younger maternal age, low formal education, ethnicity, low family income, primigravida, previous abortion, still birth, history of C/S, previous history of mental illness, low perceived social support, poor husband support and intimate partner violence, khat, tobacco, alcohol use, therefore it is important to realize each factors can lead to increase anxiety during pregnancy (Naja et al., 2020).

For the time of presence anxiety during pregnancy has been associated with various consequence of mother and their baby like postpartum depression, preeclampsia, obstetric complication, lower gestational age, low birth weight, fetal distress poor cognitive development (Naja et al., 2023). Worry is destructive, unyielding, and contagious, it restricts the ability of care providers and keeps moms, midwives, and obstetricians from performing at their highest level. Worry can impair healthy hormonal activity and put a shadow over pregnancy and childbirth. It is tragically ironic that care professionals are only now becoming aware of the catastrophic impact of dread upon mothers and all those engaged in giving birth, even though birth has never been safer (Hodkinson, et al.-2019).

Anxiety disorders during pregnancy represent a global concern, yet there is a research gap regarding the prevalence and associated factors of anxiety disorders. This gap contributes to the neglect of mental health aspects in prenatal and postpartum healthcare. The most studies in Ethiopia have focus on depression, but it is scarce of antenatal anxiety. Anxiety among pregnant women may be exacerbated, leading to an increased risk of substance use like tobacco, alcohol, and drugs. These substances have known detrimental effects on placental function and fetal growth. Additionally, pregnancy women experience anxiety are not regularly visit ANC, adhere to prenatal care, and follow prescribed medication, thus it is necessary to optimized mental health in pregnancy, since there is a lack of counselling on the psychological information aspects particularly anxiety during pregnancy in Somali region.

1.3. Significance of Study

This study aimed to assess the prevalence and associated factors of anxiety among pregnant women attending antenatal care at public hospitals in Jijiga city, Ethiopia. The outcome of this study will be helpful for pregnancy women attending ANC, clinician staff, administration for public hospitals, regional health bureau, health administrations city and local organizations working in study area to develop an action plan for effective future planning and interventions of appropriate strategies to promote and maintain maternal health service.

Similarly, this study was believed to help community to consider the psychological support of during routine visits of public hospital. Finally, it will provide baseline information for the study area and researchers interested.

1.4 Objectives

1.4.1 General Objective.

This study aimed to assess the prevalence and associated factors of anxiety among pregnant women attending antenatal care at public hospitals in jigjig city Ethiopia, from Nov. 15 to Dec.30 2024.

1.4.2 Specific Objectives.

1. To determine the prevalence of anxiety among pregnant women attending antenatal care service at Public Hospitals in jigjig city, Ethiopia
2. To identify factors associated with anxiety among pregnant women attending antenatal care service at Public Hospitals, jigjig city, Ethiopia

2. LITERATURE REVIEW

2.1. The Prevalence of Anxiety among Pregnant Women

Several studies which were conducted in different part of the world indicate that the prevalence of Pregnancy related anxiety have been showing different rate of prevalence pregnancy related anxiety. According to meta- analysis study conducted in industrialized nations like USA, Europe, Africa and Asia, was founds 25% Canada, 21% Australia,26.6% Brazil, 70% Pakistan, 55.7% India, 23% China, 46.4% Nepal, 36.5%italy, 10.4%Norway, 23% United king-down, 7.7% Poland, 21%Austrialia (Val, A.; Míguez-2023).

The problem was inconsistent extent in LMICs as well. for instances; the variation in African countries was ranged from 15.2% south Africa, 11.4% Ghana, 17.4% coted-Ivoire, 29.5% Singapore, 23.6% eastern Saudi Arabic, Besides the prevalence in cross regions of Ethiopia is varied from 43.9% Debra Markos city in 29.4% Gondar (Marta Yimam-et al-2022).

Focusing on different time points of pregnancy women, the prevalence of antenatal anxiety was highly, 3rd trimester 18.2%, followed by the first trimester 13.1% and the second trimester 12.2%, (Figueiredo & Conde 2011). However, a reverse trend in the first trimester (19.5%), third trimesters (17.2%), and second trimesters (16.6%) was observed in Spain (Soto-Balbuena et al. 2018).

Other studies conducted European countries like Portugal 36% first trimester, 34.6% second trimester, and 36.2% third trimester (Figueiredo-et al-2017), Slovenia 18% first trimester, 15.4 second trimester, 14.5 third trimester (Podvornik et al-2017). Severe anxiety India was found, 1st trimester 48.4%, 2nd trimester 11.2%, and 3rd trimester 29%, while mild anxiety was 48.6%, 60.6%, and 71% separately in the first, second, and third trimester (Madhavan Prabhakaran et al. 2015).

According to the Ethiopia study was conducted Adis Ababa 1st trimester 16.1%, 2nd trimester at 11.60% and 3rd trimester 12.10% (Hanna Melesse, al et 2024)

2.2 Factors Associated with Anxiety among Pregnant Women

2.2.1. Socio-demographic Related Factors

Maternal age, marital status, religion, ethnicity educational status, occupational, and income were each found to be associated factors with antenatal anxiety, the demographic factors assessed in various studies. The study conducted Bangladesh was showing pregnancy women who had not formal education were 3.37 (AOR = 3.37; 95% CI: 1.32, 8.58) times more likely to have Pregnancy related anxiety compared to those women who attended college and above education (Insan et al., 2023)).

The study conducted in Debra-Markos city has reported that antenatal anxiety was related to illiteracy, low income in household, poor employments in women, and low partner relationship (Insan et al., 2022)).

2.2.2. Obstetric Related Factors

The study conducted Debra Markos town institutional based cross-sectional the gravida of the women is another factor associated with pregnancy related anxiety, who were primigravida pregnancy has experience anxiety 1.94 higher compared multigravida and possible justification primigravida women are more prone to fear give birth because they did not have previous experience labor (Naja et al., 2019)).

The hospital based cross-sectional study was conducted in Bedelle general hospital and Metu Karl comprehensive specializer hospital indicated high perceived stress increases the likelihood of pregnancy related anxiety has obstetric complication 2.4 times higher than compared to low previous obstetric complication (history of preterm, abortion, caesarian section, unwanted pregnancy (Tarafa et al., 2022)). Another hospital based cross-sectional study in Uganda, among women with anxiety disorders during the current pregnancy indicated those with a history of hypertension during previous pregnancies showed a significantly higher likelihood, with an odds ratio of 2.93 (95% CI: 1.26–6.81), compared to women without anxiety disorders (Waqas et al., 2015)).

Some studies were showed that the majority of pregnant women had pregnancy related anxiety in obstetric to history of abortion, preterm, painful uterine contractions, caesarean section delivery, unwanted pregnancy, and negative birth experience in a previous pregnancy (RosarioPremjiNyanzaBouchal and Este, 2017)).

2.2.3. Psychosocial related and substance use related factors

The community based cross-sectional study was conducted in Gondar city pregnancy related anxiety who have perceived poor social support were 1.93 times higher than those have good social support, due to the social-support is informational tools and emotional support from individuals, family, friends, neighbors (Priya et al., 2018).

According to some study, was anxiety is considerably exacerbated by a lack of family support and the Ethiopia study of women found that those who did not receive their husbands' emotional support had delivery dread four times more frequently than those who did. A substantial correlation between husband support and a higher level of birthing anxiety was found in a study conducted in Gondar city. In Ethiopia Approximately 2.2% of women had known psychiatric problems, and nearly half (48.6%) of them had experienced intimate partner violence in the most recent pregnancy (Haile et al., 2023)).

2.3. Conceptual Framework

The conceptual frame works adapted after referring different review related to associated factors among pregnancy related anxiety in order to show relationship between dependent variables and in-depends variables (socio-demographic related factors, obstetric related factors, psychosocial and substance use related factors ((Insan et al., 2023, Insan et al., 2020, Insan et al., 2022)

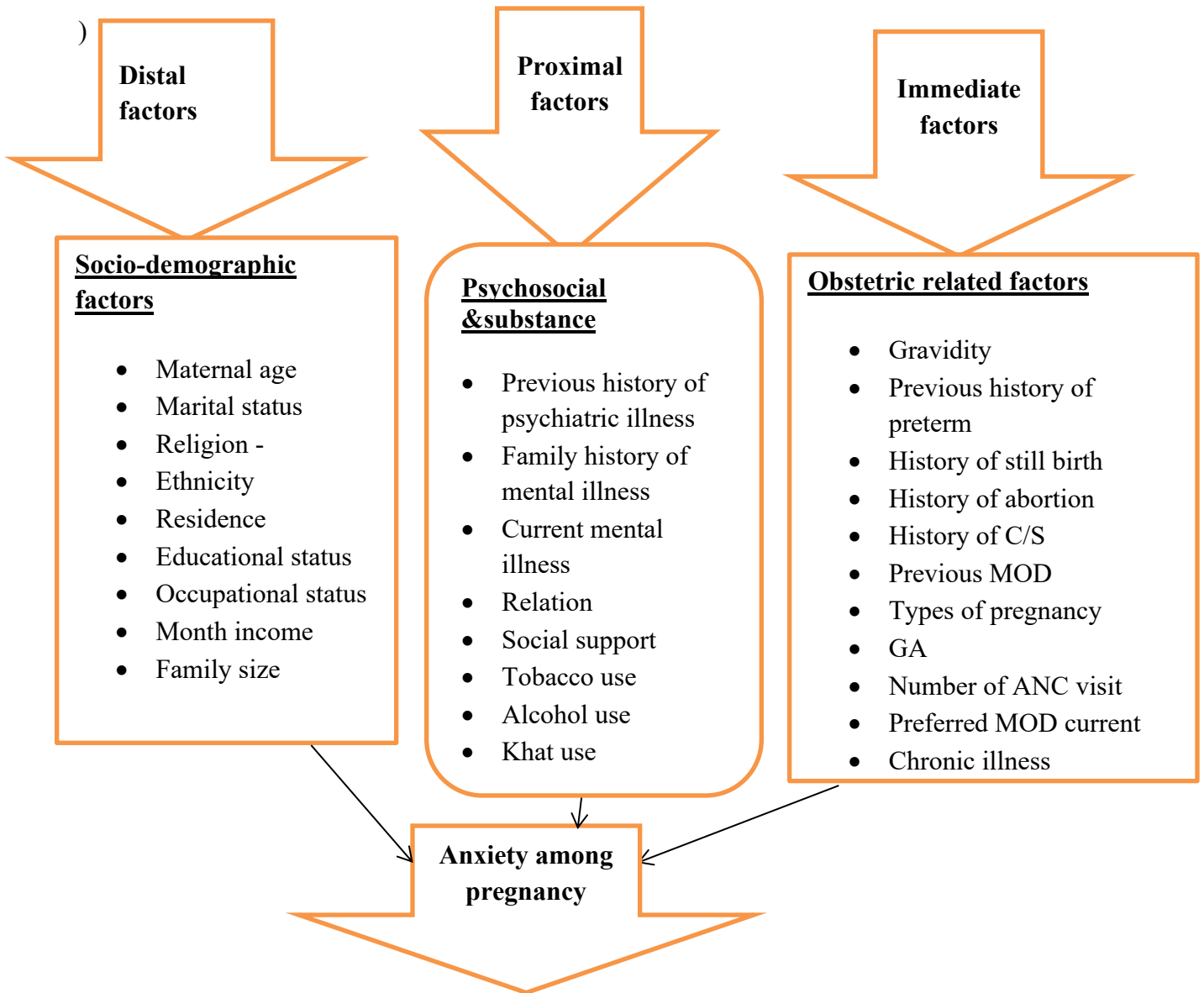


Figure 1: Conceptual framework for prevalence and associated factors of anxiety among pregnancy women jigjiga city. adapted from literature review.

3. METHODS

3.1 Study area and period

Jigjiga is the capital city of Somali regional state, located in the Fafan zone 650 kilometers away from the capital city, Addis Ababa and 100 Km far from Harar.

According to the 2015 census, the projected population of the Jigjig City Administration is 30,5000 of which 151,422 were males and 153,578 were females. Jigjig have Three public hospitals (one specialist referral hospital, one general hospital and one primary hospital), 3 health centers, and 19 health posts in the city. Sheikh Hassan Yabare Jigjig University Specialist Referral Hospital is one of Ethiopia's largest health institutions in the east. Jigjig University manages the hospital, which also serves as a teaching facility. The hospital has around 342 beds, 7 beds in the intensive care unit, pharmacies, and clinical lab facilities. This study was conducted from November 15,2024 to Dec-30 2024 public hospitals jigjig city.

3.2 Study design

An institutional based cross-sectional study design was employed

3.3. Source Population and Study population

3.3.1. Source Population

All pregnant women attending antenatal care services public hospitals in Jigjiga city Somali region.

3.3.2 Study Population

All pregnant women attending antenatal care services in public hospitals in Jigjiga city who were available during study period.

3.4 Inclusion and Exclusion Criteria

3.4.1 Inclusion criteria

All Pregnant women who visit antenatal care service in public hospitals.

3.4.2 Exclusion criteria

Pregnant women who are in labor or diagnostic during data collection.

3.5 Sample Size Determination

The sample size was calculated both for the first and second specific objective. The sample size was calculated by using single population proportion formula, considering the following assumptions; prevalence of pregnancy related anxiety was done by Bedelle town at Public Hospitals southwest Ethiopia 32.7%., 95% confidence interval and 5% margin of error (Tarafa et al., 2022).

$$n = \frac{(z\alpha/2)^2 p(1-p)}{d^2}$$

n= required sample size for the study

p = population proportion prevalence is 32.7%.

d = margin of tolerable sampling error commonly used 0.05.

z = confidence interval, most common one is 1.96 for 95%.

Finally, by adding a 10% nonresponse rate, the sample size be come 372.

Second objective

The Sample size for the second objective was determined using double population formula with the assumption two-sided the confidence level of 95% the margin of error 5%, power of 80%, and the ratio of the exposed to unexposed 1:1 using Epi info software and summarized in table one. Table 1. Sample size determination for prevalence and associated factors of anxiety among pregnant woman attending antenatal care in public hospitals of Jigjiga town, 2024.

Variables	%Exposed with outcome	AOR	Power	CI	Sample size with 10% of non-respondent rate	Reference
Income	84.4	2.39	80	95%	493	(Mariam et al. 2020))
marital status	48.1	0.61	80	95%	587	(Nath et al., 2019)
social support	27.2	2.21	80	95%	246	(Haile et al., 2023))

Finally, I took the largest sample size obtained from second objective which is **587**

3.6 Sampling Procedure and sampling techniques

There are three public hospitals which provide antenatal care one referral hospital, one general hospital and one primary hospital in jigjig town. listed down with their respective average number of pregnant women attending ANC with three-month report data are taken from each hospital, and then the number of pregnant women in each hospital was proportionally allocated to sample size. Then finally simple random sampling techniques were used to select representative samples of pregnant women attending antenatal care service.

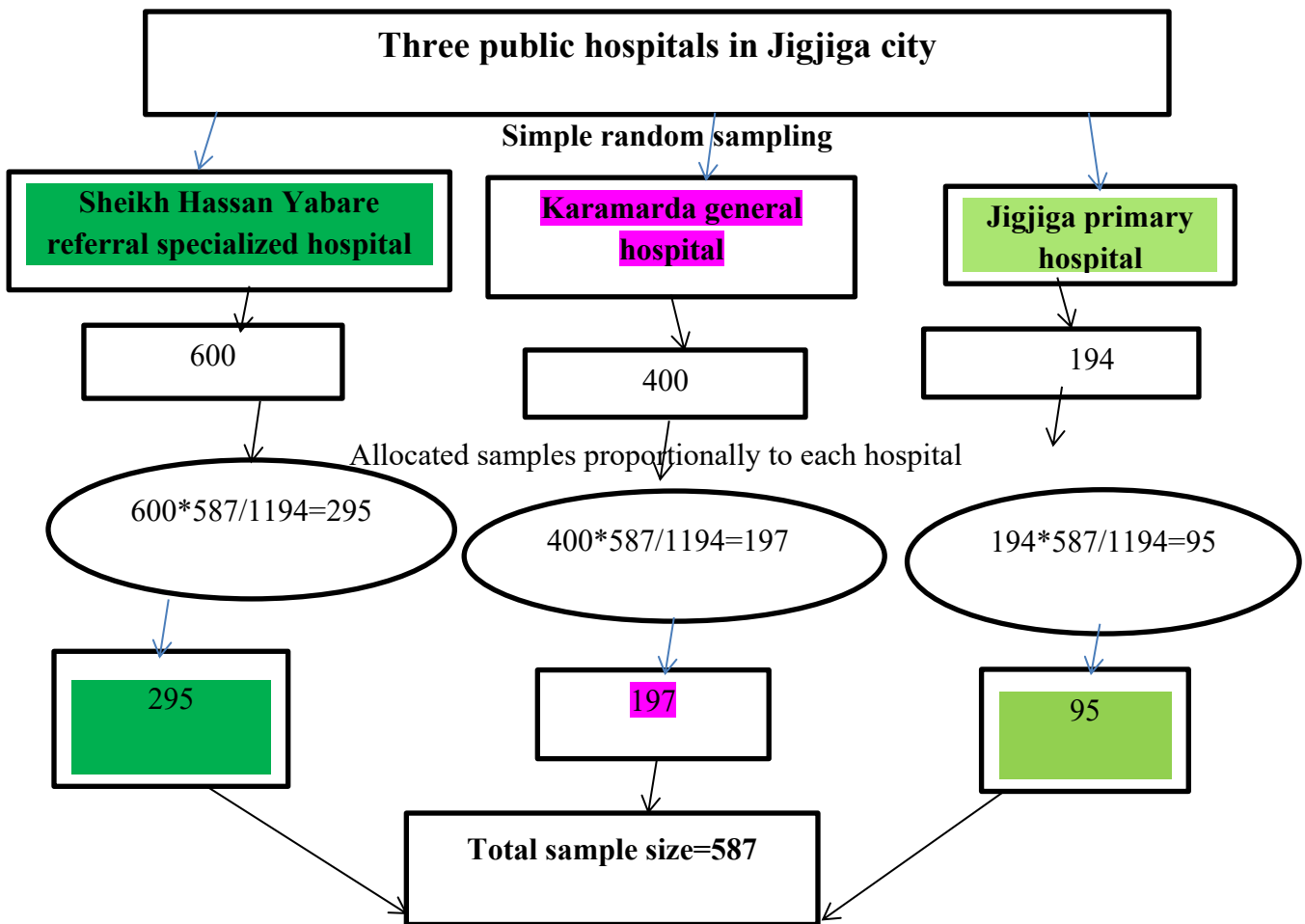


Figure 2: Schematic diagram of simple random sampling Three public hospitals in Jigjiga city.

3.7. Data Collection Method

3.7.1 Data Collection Instrument

The tools included interviewer administered questionnaire to assess factors associated with socio-demographic and obstetric psychosocial, substance use related anxiety and the Hamilton Anxiety Rating Scale for Antenatal Anxiety (HAMA-A) Scale for determining prevalence of anxiety. The HAMA-A is one of the rating scales developed to measure the severity of anxiety symptoms. The scale consists of 14 items, each defined by a series of symptoms, and measures both psychic anxiety (mental agitation and psychological distress) and somatic anxiety (physical complaints related to anxiety). Each item is scored on a scale of 0 (not present) to 4 (severe), with a total score range of 0–56, where <17 indicates mild severity, 17–24 mild to moderate severity and 25–30 moderate to severe. In this study, the total scores were dichotomized: participants scoring <17 was classified as not having anxiety, where as those scoring ≥ 17 was categorized as having anxiety disorder during pregnancy (mariam Nabwire, al et. 2020).

3.7.2. Data Collectors and Supervisors

Two-degree BSc, nurse and two-degree BSc, midwiferies were data collectors and two psychiatric nurses were supervisors to data collection process.

3.7.3 Data Collection Procedure.

Data collectors used face-to-face interview administered questionnaire and Hamilton anxiety rating scale in pregnant women when they completed their daily ANC services. data collection was started after communicating with responsible body by Somali regional health office and data collectors were received trained. The questionnaire was first prepared English then translated in to Af-Somali and Amharic language. The interview took about 15-20 minutes in each participant and Information voluntary consent was obtained from pregnant women who come for ANC visit, those who aged >17 years old. The data was collected from those who agree to participate and signed informed consent form. Patient data were kept confidential.

3.8 Variables

3.8.1 Dependent Variable

Prevalence of Anxiety among pregnancy women

3.8.2 Independent Variables

Socio demographic: maternal age, marital status, religion, ethnicity, residence, educational status, Occupation, monthly income, family.

Obstetric related: - Gravidity (primigravida, multi-gravida), previous history of preterm, history still birth, history of abortion, previous history of cesarean section, previous mode of delivery, current pregnancy status, Gestational age, Number of ANC visit, preferred MOD for current pregnancy, chronic illness (hypertension, D.M, heart failure).

Psychosocial related factors; - Previous history of psychiatric illness, family history of mental illness, Current mental illness, bad relationship with spouse, social support.

Substance use related factors; -tobacco use, Alcohol use, khat use, other illegal drugs.

3.9. Operational definition

Anxiety among pregnancy: The number of women who had anxiety disorders (HAMA-A score \geq 17) divided by the total number of women recruited into the study (Brunton al et 2019).

Substance use; - when patients the used current or ever in chewing khat, Alcohol, Tobacco.

Social support: it was measured by using Oslo-3 social support scale. It has three components with three up to eight scale – **poor**, nine up to Eleventh- **moderate**, twelve up to fourteen-**strong** (Abiola t, udofia, 2013).

3.10 Data Quality Control

To check the accuracy and its consistency to measure tools correctly, pretest was done on 5% of the total sample size of pregnant women attending ANC, jigjiga primary hospital before the actual study period from Nov.15to Dec.30/2024. Two-degree nurses and Two-degree midwives participated in the data collection after one day of training was given on the objective, relevance of the study, confidentiality of information, respondent's right, and informed consent. The principal investigator and the psychiatric nurse were supervisors making frequent checks on the data collection process to ensure the completeness and consistency of the gathered information and errors found during the process were corrected.

3.11 Data Analysis Method

Data were collected using kobo tool and was exported to SPSS version 25 for analyses. The prevalence of anxiety disorders was calculated by the number of women who had anxiety disorders (HAMA-A score ≥ 17) divided by the total number of women recruited into the study. Descriptive statistical analysis was conducted to compute frequencies, percentages, and means for the independent variables. The data were presented using frequency tables, figures, and graphs. To assess factors associated with anxiety disorders in pregnancy, bivariate analysis was performed to compute odds ratios at the 95% level of significance. To assess independent associations of the exposure factors, multivariable analysis was performed. Variables eligible for inclusion in the multivariable logistic regression model was those with a p-value of less than 0.25 at bivariate analysis (Zou G.A 2004). Additionally, variables with biological plausibility, such as a history of alcohol consumption and mode of delivery in the past pregnancy, was considered for inclusion. Factors with p-value < 0.05 in the final multivariable model was considered statistically significant.

3.12 Ethical consideration

Ethical clearance was obtained from Haramaya University, College of Health and Medical Sciences, Institutional Health Research Ethics Review Committee (IHRERC), with Ethical clearance number, Ref. No. IHRERC /277/2024. An official letter of data collection was obtained Regional Health Office. Informed voluntary consent form, was signed participants after the purpose of the study discussed in detail. For those who are unable to read, the form was read aloud to them. For those who were unable to sign, finger prints were taken and witnessed by an impartial, literate witness. They were informed that they were free to withdraw their consent at any point in the research process. Information obtained from them was not be disclosed to third person, Name and other identification information was not included in the tool.

3.13 Information dissemination

The result of the study will be presented to Haramaya University College of health and medical Sciences. Copies of the thesis will be submitted to the university library and the result will be communicated to the hospital where the study was conducted. The results will be published on reputable Journals.

4. RESULTS

4.1 Socio-demographic characteristics of the participant

A total of 587 pregnant women participated in this study making a response rate of 100%. The mean age was 27.62 years (± 6.36 SD). More than half (58.4%) of participants were between 20-29 years old. Majority (94.9%) of participants were urban dwellers. In terms of ethnicity, nearly three-fourths (75.1%) were Somali. The study population was predominantly Muslim (83.8%). The vast majority (93%) of participants were married. Regarding educational status, nearly three-fourths (70.6%) of participants had at least some level of formal education. Among the participants, more than half (57.4%) were housewives. Household decision-making was primarily influenced by husbands (68.3%). In terms of economic status, more than half (60%) of the participants reported a monthly income between 7000-10,000 ETB (table-2).

Table 2. Socio-demographic characteristics of pregnant woman attending antenatal care in public hospitals of Jigjiga city, 2024

Variables	Category	Frequency	Percentage
Age	15-19	46	7.8
	20-29	343	58.4
	30-39	178	30.3
	>40	20	3.4
Resident	Rural	30	5.1
	Urban	557	94.9
Ethnicity	Somali	441	75.1
	Amhara	71	12.1
	Oromo	35	6
	Others	40	6.8
Religion	Muslim	492	83.8
	Christian	95	16.2

Marital status	Widowed	16	2.7
	Married	546	93
	Divorced	25	4.3
Level of education	Illiterate	55	9.4
	Literate	127	21.6
	Primary school	112	19.1
	Secondary school	145	24.7
	College and above	148	25.2
Occupation status	House wife	337	57.4
	Self employed	142	24.2
	Government employed	68	11.6
	NGO	40	6.8
Decision making	wife	60	10.2
	Husband	401	68.3
	Relatives	126	21.5
Monthly income	1000-3000	54	9.2
	4000-6000	181	30.8
	7000-10000	352	60

4.2 Obstetrics related factors

Regarding gravidity, nearly three-fourths (67.3%) of the participants were multigravida. With respect to previous deliveries, nearly two-thirds (64.7%) of the women had given birth via spontaneous vaginal delivery (SVD). Looking at childbirth outcomes, the majority (75.5%) of the women reported having previous live births. Similarly, 13.1% of women had a history of abortion. In terms of current pregnancy complications, 17.5% of women reported experiencing at least one complication, with pregnancy-induced hypertension (37.9%) being the most commonly reported issue.

The gestational age distribution showed that nearly half (44.3%) of the participants were more than 26 weeks pregnant. Additionally, the majority (89.6%) of the women had a single pregnancy. Regarding pregnancy planning, the majority (76.5%) of the women reported that their pregnancy was planned. Despite attending antenatal care (ANC) services, nearly half (50.6%) of the participants did not have a regular ANC follow-up. When asked about preferred mode of delivery, the overwhelming majority (90.8%) of participants preferred vaginal delivery (table-3)

Table 3. Obstetrics related factors among pregnant woman attending antenatal care in public hospitals of Jigjiga city, 2024

Variable	Categories	Frequency	Parentage
Number of pregnancies	Primigravida	192	32.7
	Multigravida	395	67.3
Previous pregnancies	Nullipara	169	28.8
	Primipara	71	12.1
	Multipara	347	59.1
Mode of delivery	SVD	380	64.7
	Instrumental delivery	77	13.1
	C/S	130	22.1
	Yes	153	26.1

History of anesthesia for surgery	No	434	73.9
Outcome of previous childbirth	Live	443	75.5
	Stillbirth	144	24.5
History of abortion	Yes	77	13.1
	No	510	86.9
Previous pregnancy complication	Yes	103	17.5
	No	484	82.5
If yes what was the illness	Bleeding	28	27.2
	Prolonged labor	36	34.9
	Pregnancy induced hypertension	39	37.9
Gestational age	<24 weeks	138	23.5
	24-26 weeks	189	32.2
	>26 weeks	260	44.3
Currently number of conceptions	Single pregnancy	526	89.6
	Multiple pregnancy	61	10.4
Pregnancy status	Planned	449	76.5
	Unplanned	138	23.5
Regular ANC follow up	Yes	290	49.4
	No	297	50.6
Mode of delivery preferred	Vaginal delivery	533	90.8
	C/S	54	9.2

C/S: cesarean section, SVD: spontaneous vaginal delivery

4.3 Clinical condition related factors

Among the study participants 21.7% have clinical condition. Regarding psychiatric health, only 4.3% of the participants had a previous psychiatric condition. Additionally, 2.6% of the women reported developing a psychiatric condition after hospital admission. Similarly, 6.8% of participants reported a family history of psychiatric illness, and 4.6% had gotten psychiatric counseling. The terms of multiple illnesses, 3.4% of participants had more than one clinical condition (table-4).

Table 4; Clinical condition related factors among pregnant woman attending antenatal care in public hospitals of Jigjiga city, 2024

Variables	Category	Frequency	Percentage
Previous psychiatric illness	Yes	25	4.3
	No	562	95.7
Psychiatric condition after hospital admission	Yes	15	2.6
	No	572	97.4
Contact to psychiatric counseling	Yes	27	4.6
	No	560	95.4
Psychiatric illness in the family?	Yes	40	6.8
	No	547	93.2
More than one illness?	Yes	20	3.4
	No	567	96.6

4.4 Social support factors

The findings revealed that more than half (53%) of the participants did not receive support from their husbands. The mean of Oslo 3 social support scale was 7.45 with $SD \pm 1.73$. Regarding overall social support, the majority (75.8%) of participants reported experiencing low social support, while 22.7% had moderate social support, and only a small fraction (1.5%) had high social support.

Table 5. Social support factors among pregnant woman attending antenatal care in public hospitals of Jigjiga city, 2024

Variable	Category	No anxiety n (%)	Anxiety n (%)	Total n (%)	χ^2 (df)	p-value
Husband support	Yes	162 (50.2)	114 (43.2)	276 (47.0)	2.84 (1)	0.092
	No	161 (49.8)	150 (56.8)	311 (53.0)		
Oslo-3 Social Support Scale	Low	249 (77.1)	196 (74.2)	445 (75.8)	0.69 (2)	0.709
	Moderate	69 (21.4)	64 (24.2)	133 (22.7)		
	High	5 (1.5)	4 (1.5)	9 (1.5)		

4.5 Substance use related factors

The findings revealed that 8.2% of the participants reported chewing khat. Similarly, 3.1% of the women consumed alcohol. Tobacco use was the least common behavior, with only 2.6% of participants reporting tobacco use in the current pregnancy.

Table 6. Behavioral related factors among pregnant woman attending antenatal care in public hospitals of Jigjiga city, 2024

Variable (Current and Ever)	Category	Frequency	Percentage
Chewing chat in the last one year?	Yes	48	8.2
	No	539	91.8
Alcohol drinking in the last one year?	Yes	18	3.1
	No	569	96.9
Tobacco uses in the last one year?	Yes	15	2.6
	No	572	97.4

4.6 Prevalence of anxiety among pregnant women

The findings revealed that 264 (45%) of participants experienced anxiety.

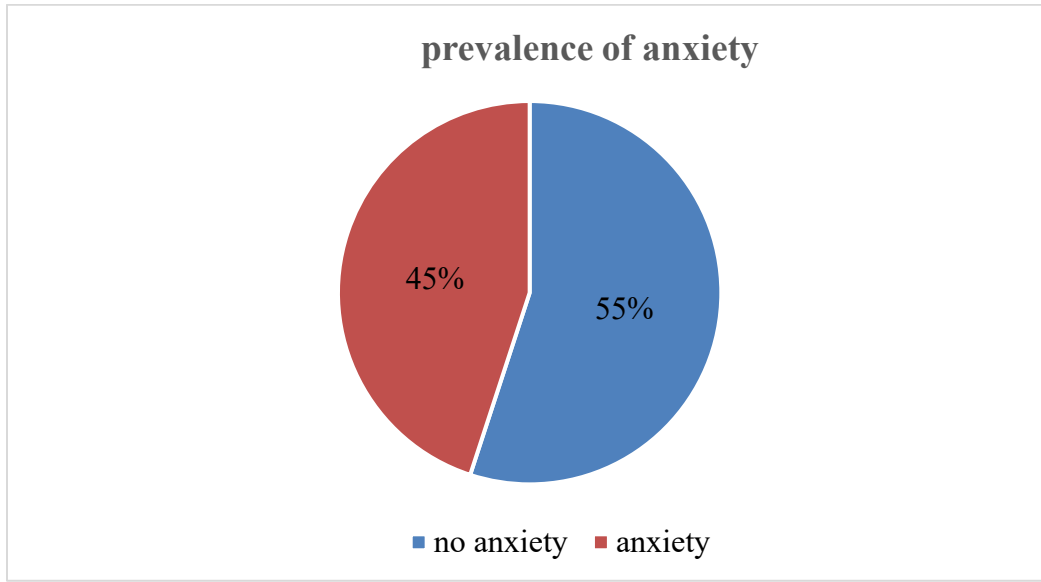


Figure 3. Level of anxiety among pregnant woman attending antenatal care in public hospitals of Jigjiga town, 2024.

Among those who had anxiety, the majority 204 (34.8%) experienced mild anxiety, while 53 (9%) had moderate anxiety, and 7 (1.2%) had severe anxiety

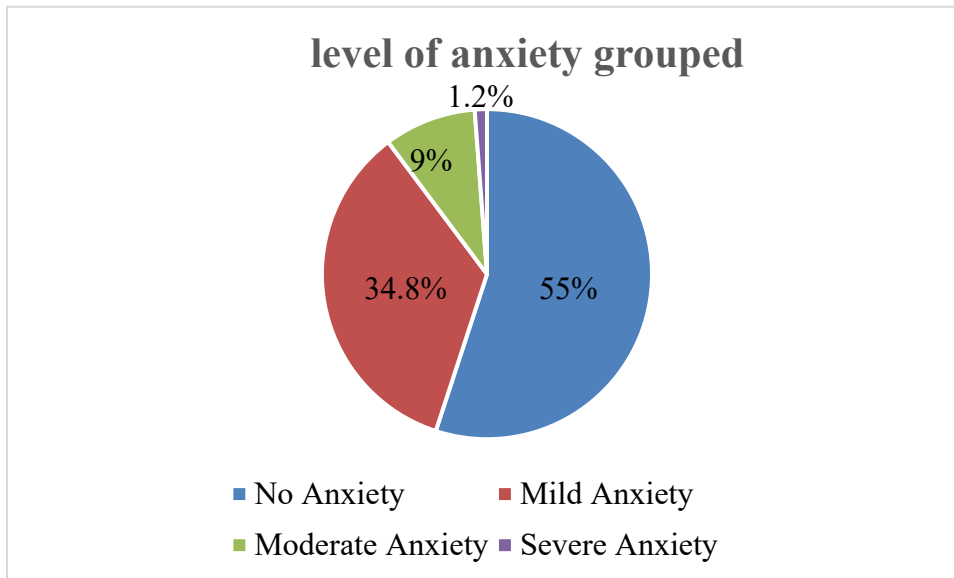


Figure 4. Level of anxiety grouped among pregnant woman attending antenatal care in public hospitals of Jigjiga city 2024.

4.7 Factors associated with anxiety among pregnant women attending antenatal care

In the bivariate analysis, several factors, including monthly income, outcome of previous childbirth, household decision-making, pregnancy status, husband support, previous hospital admission, multiple illnesses, and khat chewing, were associated with anxiety ($p < 0.25$). Women who had a history of stillbirth had one and half times higher odds of anxiety compared to those who had a live birth (AOR = 1.58, 95% CI: 1.06-2.34, $p = 0.022$). Similarly, women whose relatives made household decisions were two times at higher odds of anxiety (AOR = 2.33, 95% CI: 1.19-4.54, $p = 0.013$) than those who make their own decision. Women with an unplanned pregnancy had one and half times increased odds of experiencing anxiety (AOR = 1.53, 95% CI: 1.03-2.28, $p = 0.037$) than those with planned pregnancy. Additionally, women who lacked husband support were one and half times more likely to experience anxiety (AOR = 1.44, 95% CI: 1.01-2.04, $p = 0.042$) than their counterpart.

Table: 7. Bivariate and Multivariable logistic regression analysis of the factors affecting anxiety among pregnant women attending antenatal care in Jigjig public hospitals, Ethiopia, 2024

Variables	Category	Level of anxiety		COR (95% CI)	AOR (95% CI)	P-value
		Yes	No			
Monthly income	1000-3000	22	32	1	1	
	4000-6000	92	89	1.50 (0.81-2.78)	1.58 (0.83-3.03)	0.161
	7000-10000	150	202	1.08 (0.60-1.93)	1.22 (0.66-2.23)	0.521
Outcome of previous childbirth	Live	188	255	1	1	
	Still birth	76	68	1.52 (1.04-2.21)	1.58 (1.06-2.34)	0.022**
Household decision making	wife	23	37	1	1	
	Husband	175	226	1.25 (0.71-2.17)	1.63 (0.90-2.95)	0.106
	Relatives	66	60	1.77 (0.95-3.31)	2.33 (1.19-4.54)	0.013**
Current pregnancy status	Planned	188	261	1	1	
	Unplanned	76	62	1.70 (1.15-2.49)	1.53 (1.03-2.28)	0.037**
Husband support	Yes	114	162	1	1	
	No	150	161	1.32 (0.95-1.84)	1.44 (1.01-2.04)	0.042**
previous history of hospitalization admission?	Yes	13	7	2.34 (0.91-5.94)	2.16 (0.82-5.71)	0.120
	No	251	316	1	1	
Have you more than one illness?	Yes	12	8	1.88 (0.76-4.66)	1.71 (0.66-4.45)	0.272
	No	252	315	1	1	
Have you chewed chat in the last one year?	Yes	27	21	1.63 (0.90-2.97)	1.66 (0.89-3.10)	0.112
	No	237	302	1	1	

Key: ** Statistically significant at P-value < 0.05, COR=Crude odds ratio, AOR=Adjusted odds Ratio, 1 = reference.

5. DISCUSSION

This study found that almost 5 (4.5/10) out of 10 pregnant women had developed anxiety during ANC follow period. This rate is higher than findings from Addis Ababa, Ethiopia, where the prevalence was 12.7% (Melesse et al., 2025), potentially due to differences in mental health service access and awareness. However, it is lower than the 70% prevalence reported in Pakistan (Ali et al., 2017)), which may be explained by cultural differences, greater socioeconomic stress, or variations in healthcare infrastructure. A similar prevalence rate was observed in Nigeria 43.5% (Akinsulore et al., 2021), suggesting that shared socio-economic and cultural determinants may influence maternal anxiety across regions.

The observed prevalence differences may stem from healthcare system variations, socioeconomic conditions, and cultural attitudes toward mental health. Studies indicate that countries with stronger mental health integration in maternal care tend to report lower anxiety prevalence among pregnant women (Smith et al., 2019). Additionally, social support and economic stability are critical in mitigating perinatal anxiety (Peter et al., 2016). Future research should explore how these contextual factors interact to influence maternal anxiety in diverse settings.

Several psychological and biological mechanisms may explain the high anxiety prevalence observed. Pregnancy-induced hormonal changes, particularly increased cortisol and adrenaline levels, contribute to heightened stress responses (Deklava et al., 2015). Furthermore, past traumatic birth experiences or chronic stress can activate the hypothalamic-pituitary-adrenal (HPA) axis, leading to persistent anxiety symptoms (Valsamakis et al., 2019).

Women with a history of stillbirth had two times higher odds of anxiety than their counterpart. This aligns with studies from India, where pregnancy loss was a major predictor of antenatal anxiety (Gopichandran et al., 2018). The psychological trauma associated with perinatal loss may lead to heightened fears of pregnancy complications. Conversely, studies from China report no significant association (Tang et al., 2019), potentially due to the availability of strong psychological support systems in maternal healthcare settings.

Women who lacked decision-making power in their households had almost two and half times higher anxiety odds. This finding is consistent with a study in Pakistan, where reduced autonomy increased anxiety risk (Mavisakalyan and Rammohan, 2021). Lack of agency in personal and financial decisions can lead to feelings of powerlessness, exacerbating psychological distress. However, European studies report no such association (O'MAHONY and Donnelly, 2010), possibly due to greater gender equality and social support systems.

Unplanned pregnancy was significantly associated with higher anxiety levels (AOR = 1.53, 95% CI: 1.03-2.28, $p = 0.037$). Studies from India support this finding, emphasizing the emotional distress and financial concerns associated with unexpected pregnancies (Nanjundaswamy et al., 2022). However, research from Brazil suggests that strong social and economic support can buffer these effects (Costa Júnior et al., 2022), emphasizing the role of structural interventions in reducing anxiety among pregnant women. Lack of husband support was a significant predictor of anxiety (AOR = 1.44, 95% CI: 1.01-2.04, $p = 0.042$). This aligns with findings from Iran, where spousal support was crucial in reducing maternal stress (Alipour et al., 2018). Emotional and financial support from partners plays a key role in reducing pregnancy-related stress. However, a study in Canada found no significant association (Dennis et al., 2017), likely due to alternative support systems such as counseling and social services.

Strengths and Limitations

The study used primary data to assess prevalence and associated factors of anxiety among pregnant woman attending antenatal care. However, our study has some limitations mainly due to the study being a cross-sectional study design, it is difficult to establish cause-and-effect relationships due to self-report nature of the data collection. the finding might be prone to recall bias and social desirability effect.

6. Conclusion and Recommendations

6.1 Conclusion

The findings from this study indicated that high, study participants experienced anxiety. History of stillbirth, lack of autonomy in household decision-making, unplanned pregnancy, and lack of husband support were found to be critical factors of anxiety. The study suggests that pregnant women should encourage actively to seek emotional and psychological support during pregnancy.

6.2 Recommendations

Based on the findings of this study, the following recommendations are forwarded to the study participants, Regional Health Bureau, woreda-level health offices, health facilities and stakeholders:

For the Participants (Pregnant Women):

- Pregnant women are encouraged to actively seek emotional and psychological support during pregnancy, especially if they have experienced previous adverse pregnancy outcomes.
- Women should participate in decision-making regarding household and reproductive health matters to enhance their sense of control and reduce anxiety.
- Pregnant women are advised to involve their partners in antenatal care visits and openly communicate about their emotional well-being to build stronger support systems

For Health Facilities and Local Organizations:

- Health facilities and community organizations should implement culturally sensitive programs that promote women's autonomy in household decision-making and integration psychosocial intervention.
- Provide targeted psychosocial support and counseling for pregnant women with a history of adverse pregnancy outcomes, such as stillbirth or miscarriage.

For Healthcare Providers and Health Workers:

- Healthcare providers should incorporate routine mental health screening into antenatal care to ensure early identification and management of anxiety among pregnant women.
- Health workers in psychosocial counseling and patient-centered care approaches to effectively respond to the mental health needs of pregnant women.
- Encourage and facilitate partner involvement during antenatal visits to strengthen emotional and practical support for pregnant women.

For Researchers:

- Future researchers should conduct longitudinal studies to understand the long-term psychological effects of antenatal anxiety on maternal and neonatal health outcomes.
- Investigate the sociocultural and economic determinants of antenatal anxiety to design context-specific mental health interventions for pregnant women in low-resource settings.

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8. ANNEXES

8.1. Information Sheet and Informed Voluntary Consent for Head of hospitals in jijiga town.

My name is Ahmed Muhumed Sultan who is a student of Masters of public health in reproductive health at Haramaya University, College of Health and Medical Sciences. I am working as head investigator for the study being conducted in this hospital. I kindly request you to lend me your attention to explain about the study and being selected as the study setting.

The study title: Prevalence and associated factors of anxiety among pregnant women attending antenatal care two public hospitals Jigjig in Ethiopia-2024, cross-sectional study method.

Purpose of study; - The findings of this study can be of paramount importance for the public hospitals to plan intervention programs to reduce prevalence of anxiety among pregnancy women. Moreover, the aim of this study is to write a thesis as a partial requirement for the fulfilment of a Master's Program in Public Health in reproductive health

Procedure and duration: Data collectors was interviewing the pregnant women attending ANC using a questionnaire to provide them with pertinent data that is helpful for the study. There are 57 questions to answer where data collectors were filling the questionnaire by interviewing the pregnant women. The Interviewing was taking about 15-20 minutes, so I kindly request you consider this study in your institution.

Risks and benefits: The risk of participating in this study is very minimal, but only taking a few minutes from your time. There would not be any direct payment for participating in this study. But the findings from this research may reveal important information for the hospital and local health planners.

Confidentiality: The information that participants provide were kept confidential. There is no information that will identify the participants in particular. The findings of the study were general for the study community and was not reflect anything particular of individual persons. The questionnaire was coded to exclude showing names. No reference was be made in written reports that could link participants to the research.

Rights: Participants for this study is fully voluntary. The participants have the right to declare to participate or not in this study. they have the right to withdraw from the study at any time, and this will not label them for any loss of benefits that you otherwise are entitled. they do not have to

answer any question that they do not want to answer. They have the right to stop this study if any misdeed is observed during data collection.

Contact address: If you have any questions about the study, the procedure or anything else related to the study, please contact through the following address: Mobile phone of the investigator: +251915438881 (Ahmed Muhumed sultan)-Email address of the investigator: kadmuhumed346@gmail.com. Institutional Health Research Ethics Review Committee (IHRERC) at office phone 0254662011 or P.O. Box 235, Harar, Ethiopia.

Declaration of informed voluntary consent: I have read the information sheet. I have clearly understood the purpose of the research, the procedures, the risks and benefits, issues of confidentiality, the rights of participants and the contact address for any queries. I have been given the opportunity to ask questions for things that may have been unclear. I was informed that hospital have the right to withdraw from the study at any time or not to answer any question that they do not want. I am also informed that the head has the right to stop this study from being conducted in the hospital if any misdeeds and unethical procedures are observed during the data collection process in the hospital premises. Therefore; I declare my voluntary consent on behalf of-----
----- management to allow this study to be conducted in the hospital with my initials (signature).

Name and signature of Head of the hospital: _____ Date _____

Name and signature of the principal investigator: _____ Date _____

8.2. Participant Information Sheet and Voluntary Consent for Participant with Age Of \geq 18 Years (English Version)

My name is _____ I am working as a data collector for the study being conducted in this

Hospital by Mr. Ahmed Muhumed Sultan who is studying his Master's degree at Haramaya University, College of Health and Medical Sciences. I kindly request you to give me your attention to explain about the study and being selected as the study participant.

The study title: prevalence and associated factors of anxiety among pregnant women attending antenatal care two public hospitals Jijiga, Somali region, Ethiopia, 2024: a cross-sectional method study.

Purposed/aim of the study; - The findings of this study can be of paramount importance for the public hospitals to plan intervention programs to reduce prevalence of anxiety among pregnancy women. Moreover, the aim of this study is to write a thesis as a partial requirement for the fulfilment of a Master's Program in Public Health in reproductive health.

Procedure and duration: I was interviewing you by using a questionnaire to provide me with pertinent data that is helpful for the study. There are 57 questions to answer and I was filling the Questionnaire by interviewing you. The interview was taken about 15-20 minutes. So, I kindly request you to spare me this time for the interview.

Risk and benefits: The risk of participating in this study is very minimal, only taking a few minutes from your time. There would not be any direct payment for participating in this study. But the findings of this study may reveal important information for the pregnant women visit ANC of hospitals and pregnant women Somali regional to fill the gaps identified through this study.

Confidentiality: The information you provide for me will be confidential. There was no information that was identify you in particular. The findings of the study were be general for the study participant and was not reflect anything particular of individual persons. The questionnaire was code to exclude showing names. No reference was be made in oral or written reports that could link participants to the study.

Rights: Participation for this study is fully voluntary. You have the right to declare to participate or not in the study. you have the right to withdraw from the study at any time and this was not label you for any loss of benefits which you otherwise are entitled. You do not have to answer any question that you do not want to answer.

Contact address: Contact address: If you have any questions about the study, the procedure or anything else related to the study, please contact through the following address: Mobile Phone number of investigator: +251915438881 (Ahmed Muhumed) Email address of the investigator: kadermuhumed346@gmail.com. Institutional Health Research Ethics Review Committee (IHRERC) at office phone 0254662011 or P.O. Box 235, Harar, Ethiopia.

Declaration of informed voluntary consent: I have read/read to me the participant information sheet. I have clearly understood the purpose of the research, the procedures, the risks and benefits, issues of confidentiality, the rights of participating and contact address for any queries. I have been given the opportunity to ask questions for things that may have been unclear. I was informed that I have the right to withdraw from the study at any time or not to answer any question that I do not want. Therefore, I declare my voluntary consent to participate in this study with my initials (signature).

Name and signature of the participant: _____ Date

Name and signature of data collector: _____ Date _____

8.3. Participant Information Sheet and Voluntary Consent for Participant With Age Of ≥ 18 Years (to be translated to Amharic language)

ስሜ ነው _____ በሐረማያ ዩኒቨርሲቲ፣ በጤናና ህክምና ሳይንስ ኮሌጅ የማስተርስ ዲግሪ ትምህርታቸውን በመከታተል ላይ የሚገኙት አቶ አህመድ ሙሁመድ ሱልጣን በዚህ ሆስፒታል እየተካሄደ ላለው ጥናት መረጃ ሰብሳቢ ሆኜ እየሰራሁ ነው።

ስለ ጥናቱ እና የጥናት ተሳታፊ ነት መመረጥ ትኩረትህን እንድትሰጡኝ በደግነት እለምናለሁ.

የጥናታዊ ርዕስ፡- በወሊድ እንክብካቤ ላይ በሚገኙ ነፍሰ ጡር ሴቶች ላይ የጭንቀት መብዛት እና ተያያዥ ምክንያቶች ሁለት የህዝብ ሆስፒታሎች ጂጂጋ, ሶማሌ ክልል, ኢትዮጵያ, 2024 የcross-sectional ዘዴ ጥናት.

የጥናቱ ዓላማ፡- የዚህ ጥናት ግኝቶች የሕዝብ ሆስፒታሎች በእርግዝና ሴቶች ላይ የሚደርሰውን ጭንቀት ለመቀነስ የሚያስችሉ ጣልቃ ገብነት ፕሮግራሞችን ማቅረባቸው በጣም አስፈላጊ ሊሆን ይችላል ። ከዚህም በላይ የዚህ ጥናት ዓላማ በመራቢያ ጤና የማስተር ስነ-ስርዓት በህዝብ ጤና ላይ የፈፀመውን ግብዓት በከፊል የሚያሟላ መሆኑን ፅሁፍ መፃፍ ነው።

አሰራር እና የጊዜ ቆይታ፡- ለጥናቱ ጠቃሚ የሆኑ ተያያዥ መረጃዎችን ለማቅረብ ጥያቄ በመጠቀም ቃለ መጠይቅ አቀርባለሁልህ ። መልስ የምሰጠው 57 ጥያቄዎች አሉ እኔም ቃለ መጠይቅ በማድረግ ጥያቄውን እሞላለሁ። ቃለ መጠይቁ ከ15-20 ደቂቃ ያህል ይወስዳል። ስለዚህ በዚህ ጊዜ ቃለ መጠይቅ እንድትደርጉልኝ በደግነት እለምናችኋለሁ ።

አደጋ እና ጥቅሞች፡- በዚህ ጥናት የመሳተፍ አጋጣሚዎ በጣም አነስተኛ ሲሆን ጊዜዎን ጥቂት ደቂቃዎች ብቻ ይወስዳሉ። በዚህ ጥናት ለመሳተፍ ምንም አይነት ቀጥተኛ ክፍያ አይኖርም።

ነገር ግን በዚህ ጥናት የተገኘው ግኝት ነፍሰጡሮች ኤ ኤን ሲ ሆስፒታሎችንና የሶማሌ ክልል ነፍሰጡር ሴቶችን በመጎብኘት በዚህ ጥናት የተለየውን ክፍተት ለመሙላት አስፈላጊ መረጃዎችን ሊገልጹ ይችላሉ።

ምስጢራዊነት :- የምታቀርበኝ መረጃ ምስጢራዊ ይሆናል። በተለይ ነፍሰ ጡር ሴቶችን ለይቶ የሚያሳውቅ መረጃ አይኖርም ። የጥናቱ ግኝቶች ለጥናቱ ተሳታፊ አጠቃላይ ይሆናሉ እናም የእያንዳንዱን ሰው የተለየ ነገር አይያንጸባርቁም። ጥያቄው ስሞችን ከማሳየት የሚቆጠበው ከድ ይሆናል። ተሳታፊዎቹን ከጥናቱ ጋር ሊያያይዙ የሚችሉ በቃልም ሆነ በጽሑፍ የሰፈሩ ሪፖርቶች አይጠቀሱም።

ሙብት:- ለዚህ ጥናት ተሳትፎ ሙሉ በሙሉ በፈቃደኝነት የሚደረግ ነው ። በጥናቱ ላይ ለመሳተፍም ሆነ ለመሳተፍ የማሳወቅ ሙብት አለህ ። ለመሳተፍ ከወሰንክ በማንኛውም ጊዜ ከጥናቱ የመውጣት ሙብት አለህ ። ለማንኛውም ጥያቄ መልስ መስጠት አያስፈልገህም ።

አድራሻ:- ስለ ጥናቱ፣ ስለ አሰራሩ ወይም ከጥናቱ ጋር የተያያዘ ሌላ ጥያቄ ካለዎት፣ እባክዎ በሚከተለው አድራሻ አማካኝነት ያግኙ:- የተንቀሳቃሽ ስልክ መርማሪ ቁጥር +251915438881 (አህመድ ሙሁመድ)

መርማሪው የኢሜይል አድራሻ kadermuhumed346@gmail.com. ተቋማዊ የጤና ምርምር ሥነ-ምግባር ምርመራ ኮሚቴ (IHRERC) በቢሮ ስልክ 0254662011 ወይም በፒ.አ. ሳጥን 235, ሐረር፣ ኢትዮጵያ.

ዕውቀት ያለው የፈቃደኝነት ስምምነት አዋጅ - የተሳታፊውን መረጃ ወረቀት አንብቤያለሁ። የምር ምርመራን ዓላማ፣ አሰራር፣ አደጋ ና ጥቅም፣ የምስጢር ጉዳዮች፣ የማናቸውንም ጥያቄዎች የመሳተፍ ና የአድራሻ አድራሻን በግልጽ ተረድቼዋለሁ። ግልጽ ለሆነ ነገር ጥያቄ የመጠየቅ አጋጣሚ ተሰጥቶኛል። በማንኛውም ጊዜ ከጥናቱ የመውጣት ወይም የማልፈልገውን ማንኛውንም ጥያቄ ለመመለስ ሙብት አለኝ የሚል መረጃ ተነገረኝ ።

እንግዲህ በዚህ ጥናት ላይ ለመሳተፍ የፈቃደኝነቴን ፈቃድ ከመጀመሪያዎቹ (ፈርማ) ጋር አውጃለሁ።

የተሳታፊ ስም _____ ፊርማ _____ ቀን -----

የመረጃ ሰብሳቢ ስም _____ ፊርማ _____ ቀን _____

8.4. Participant Information Sheet and Informed Consent for Participant with Age of ≥ 18 Years Old (to be translated as Af- Somali language)

Magacaygu waa _____ Waxaan ka shaqaynayaa xog ururiye ahaan daraasadda uu isbital ka wado Mr. Ahmed Muhumed oo shahaadada Masterka ka baranayo Jaamacadda Haramaya, Kuliyadda Caafimaadka iyo Cilmiga Caafimaadka. Waxaan si naxariis leh kaaga codsanayaa inaad i siiso dareenkaaga si aan u sharaxo daraasadda iyo in loo doorto ka qaybqaataha daraasadda.

Cinwaanka daraasadda; - Baahsanaanta iyo qodobada la xiriira walaaca ku dhaca haweenka uurka leh ee ka qayb qaata daryeelka dhalmada ku jira labo isbitaal oo guud Jigjig gobolka Soomaalida, Itoobiya, 2024: daraasad hab iskudhafan.

Ujeedada daraasadda: Natiijooyinka daraasadda ayaa wax ku biirin doona haweenka uurka leh si ay uga faa'iideystaan adeegga caafimaadka daryeelka hooyada uurka leh. Waxa kale oo ay ka caawin doontaa bixiyeyaasha daryeelka caafimaadka in ay diiradda saaraan arrimaha si xooggan la xidhiidha ka faa'iidaysiga adeegga caafimaadka ee hooyada uurka leh, waxayna ku siin doonaan talooyin ku salaysan macluumaadka la helay. Intaa waxaa dheer, ujeeddada daraasaddan waa in la qoro tesis iyada oo qayb ahaan looga baahan yahay buuxinta Barnaamijka Master's ee Caafimaadka Dadweynaha ee caafimaadka walaaca hooyada xiliga uurka.

Habka iyo muddada: Waxaan ku waraysan doonaa anigoo isticmaalaya xog-ururinta si aan ii siiyo xog la xidhiidha oo waxtar u leh daraasadda. Waxaa jira 57 su'aalood oo laga jawaabo waxaana buuxin doona su'aalaha adiga oo ku wareysanaya. Wareysigu wuxuu qaadan doonaa 15 ilaa 20 daqiiqo. Markaa, waxaan si naxariis leh kaaga codsanayaa inaad waqtigan iigu tudhid waraysiga.

Khatarta iyo faa'iidooyinka: Khatarta ka-qaybgalka daraasaddan waa mid aad u yar, kaliya waxay qaadanaysaa daqiiqado yar wakhtigaaga. Ma jiri doonto lacag

toos ah ka qaybqaadashada daraasaddan. Laakiin natiijooyinka daraasaddan ayaa laga yaabaa inay daaha ka qaadaan macluumaadka muhiimka ah ee isbitaalka iyo xafiiska caafimaadka si loo buuxiyo daldaloolada lagu aqoonsaday daraasaddan.

Kalsooni: Macluumaadka aad i siisay waxay ahaan doontaa qarsoodi. Ma jiri doono macluumaad si gaar ah kuu aqoonsan doona. Natiijooyinka daraasadda ayaa noqon doona mid guud oo loogu talagalay goobta daraasadda mana ka tarjumayso wax gaar ah oo shakhsi ah. Foomka xog-ururinta ayaa kood lagu dhejin doonaa si meesha looga saaro muujinta magacyada. Wax tixraac ah laguma samayn doono warbixino hadal ama qoraal ah oo xidhiidhin kara ka qaybgalayaasha daraasadda.

Xuquuqda: Ka-qaybgalka daraasaddan waa ikhtiyaari. Waxaad xaq u leedahay inaad caddayso inaad ka qaybqaadato ama aadan ka qaybqaadan karin daraasadda. Haddii aad go'aansato inaad ka qaybgasho, waxaad xaq u leedahay inaad ka baxdo daraasadda wakhti kasta tanina kuma calaamadayn doonto wax khasaare ah oo dheefo ah oo aad xaq u leedahay. Uma baahnid inaad ka jawaabto su'aal kasta oo aadan rabin inaad ka jawaabto.

Cinwaanka xiriirka: Cinwaanka xiriirka: Haddii aad qabto wax su'aalo ah oo ku saabsan daraasadda, habka ama wax kasta oo kale oo la xiriira daraasadda, fadlan la xiriir ciwaanka soo socda:

Lambarka taleefanka gacanta ee baaraha: +251915438881(Ahmed Muhumed)

Ciwaanka iimaylka ee baaraha: kadmuhumed346@gmail.com

Guddiga Dib-u-eegista Anshaxa Cilmi-baarista Caafimaadka Hay'adaha (IHRERC) ee xafiiska ka wac 0254662011 ama P.O. Box 235, Harar, Ethiopia.

Ku dhawaaqida ogolaanshaha ikhtihaariga ah ee la wargaliyay: Waan akhriyay/la akhriyay xaashida macluumaadka ka qaybqaataha. Waxaan si cad u fahmay ujeedada cilmi-baarista, hababka, khatarta iyo faa'iidooyinka, arrimaha sirta, xuquuqda ka qaybgalka iyo ciwaanka xiriirka wixii su'aalo ah. Waxaa la i siiyay fursad aan ku weydiiyo su'aalo laga yaabo in aan caddayn. Waxaa la igu wargeliyay inaan xaq u leeyahay inaan ka baxo daraasadda wakhti kasta ama inaan ka jawaabin su'aal kasta oo aanan rabin. Sidaa darteed, waxaan caddaynayaa oggolaanshahayga ikhtihaariga ah si aan uga qaybqaato daraasaddan oo leh xarfaha hore (saxiixa).

Magaca ka qaybqaataha: _____ Saxiixa _____

Taariikhda _____

Magaca xog ururiyaha: _____

Saxiixa _____ Taariikhda _____

8.5. Participant Information Sheet and Voluntary Consent for Parent/Guardians of Participants <18 Years Old (English language)

Good morning/afternoon dear participant my name is _____ I am working as a data collector for the study being conducted in this hospital by Ahmed Muhumed Sultan who is studying his master's degree program at Haramaya University, College of Health and Medical science. I kindly request you to lend me your attention to explain to you about the study and being selected as the study participant.

The study title: Prevalence and associated factors o anxiety among pregnant women attending antenatal care in public hospitals Jigjig Somali region, Ethiopia, 2024: a cross-sectional method study.

Purposed/aim of the study: The findings of this study can be of paramount importance for the public hospitals to plan intervention programs to reduce prevalence of anxiety among pregnancy women. Moreover, the aim of this study is to write a thesis as a partial requirement for the fulfilment of a Master's Program in Public Health in reproductive health.

Procedure and duration: I was interviewed you by using questionnaires to provide me with pertinent data that is helpful for the study. There are about 57 questions to answer where I was fill out the questionnaire by interviewing pregnant women attending ANC. The interview was taken only 15-20 minutes, so I kindly request you to spare me at this time for the interview.

Risks and benefits: The risk of participating in this study is minimal, but only takes 15-20 minutes from ANC visit. There would not be direct payment for participating in this study. But the findings from this research may reveal important information for the hospital planners.

Confidentiality: The information your daughter was provide for me was be kept confidential. There were be no information that were identify her. The findings of the study are general for the study community and were not reflect anything particular about a person. The questionnaire was coded to exclude showing names. No reference was made in oral or written reports that could link participants to the study.

Rights: Participation in this study is fully voluntary. Your daughter has the right to declare to participate or not in the study. If she decides to participate, she has the right to withdraw from the study at any time and this was not labeling her participant for any loss of benefits to which she otherwise is entitled. She does not have to answer any question that does not want to answer.

Contact address: Contact address: If you have any questions about the study, the procedure or anything else related to the study, please contact through the following address: - Mobile Phone number of investigator: +251915438881 (Ahmed Muhumed) Email address of the investigator: kademuhumed346@gmail.com Institutional Health Research Ethics Review Committee (IHRERC) at office phone 0254662011 or P.O. Box 235, Harar, Ethiopia.

Declaration of informed voluntary consent: I have read/ was read to me/ the participant information sheet. I have clearly understood the purpose of the research, the procedures, the risks and benefits, issues of confidentiality, the rights of participating and the contact address for any queries. I have been given the opportunity to ask questions for things that may have been unclear. I was informed that your daughter she the right to withdraw from the study at any time. Therefore, I declare my voluntary consent to allow you to participate in this study with my initials (signature). Name of the participant: _____ (Assent affirmed if a minor age of 15-17 year). Name and Signature of parent/legal guardian _____ date _____ Name and signature of data collector _____ date _____

8.6. Participant Information Sheet and Voluntary Consent for Parent/Guardians of Participants <18 Years Old (Amharic Version)

መልካም ጠዋት/ከሰዓት ውድ ተሳታፊ ስሜ _____

በሐረማያ ዩኒቨርሲቲ፣ በጤናና ህክምና ሳይንስ ኮሌጅ የማስተርስ ዲግሪ ፕሮግራሙን በማጥናት ላይ በሚገኘው አህመድ ሙሁመድ ሱልጣን በዚህ ሆስፒታል እየተካሄደ ላለው ጥናት መረጃ ሰብሳቢ ሆኜ እየሰራሁ ነው። ስለ ጥናቱ እንድታስረዱላችሁና የጥናት ተሳታፊ ሆናችሁ እንድትመረጡ እንድታደርጉልኝ በደግነት እለምናችኋለሁ ።

ጥናታዊ ርዕስ; - ስርጭት እና ተያያዥ ምክንያቶች ላይ በወሊድ እንክብካቤ ላይ በሚገኙ ነፍሰጡር ሴቶች ላይ ጭንቀት ሁለት የህዝብ ሆስፒታሎች Jigjig ሰማሌ ክልል, ኢትዮጵያ, 2024 የcross-sectional ዘዴ ጥናት.

የጥናቱ ዓላማ :- የዚህ ጥናት ግኝቶች የህዝብ ሆስፒታሎች በእርግዝና ሴቶች ላይ የሚደርሰውን ጭንቀት ለመቀነስ የሚያስችሉ ጣልቃ ገብነት ፕሮግራሞችን ማቅረባቸው በጣም አስፈላጊ ሊሆን ይችላል ። ከዚህም በላይ የዚህ ጥናት ዓላማ በመራቢያ ጤና የማስተር ስነ-ስርዓት በህዝብ ጤና ላይ የፈፀመውን ግብዓት በከፊል የሚያሟላ መሆኑን ፅሁፍ መፃፍ ነው።

አሰራር እና የጊዜ ቆይታ; - ለጥናቱ ጠቃሚ የሆኑ ተያያዥ መረጃዎችን ለመስጠት ጥያቄዎችን በመጠቀም ቃለ መጠይቅ አቀርባለሁ። በኤ ኤን ሲ የሚገኙ ነፍሰ ጡር ሴቶችን ቃለ መጠይቅ በማድረግ ጥያቄውን የምሞላበት 57 ያህል ጥያቄዎች አሉ። ቃለ መጠይቁ ከ15-20 ደቂቃ ብቻ ስለሚፈጅ ቃለ መጠይቁን በዚህ ሰዓት እንድታደነኝ በደግነት እለምናችኋለሁ።

ምስጢራዊነት - ሴት ልጃችሁ የምታቀርበኝ መረጃ በምሥጢር ይያዛል። እሷን ለይቶ የሚያሳውቅ መረጃ አይኖርም ። የጥናቱ ግኝቶች ለጥናቱ ማህበረሰብ አጠቃላይ ሲሆኑ ስለ አንድ ሰው የተለየ ነገር አይያንጸባርቁም ። የጥያቄው ኮዶች ስሞችን ከማሳየት እንዲታቀቡ

ተደረገ። ተሳታፊዎችን ከጥናቱ ጋር ሊያያይዙ በሚችሉ በቃልም ሆነ በጽሑፍ በቀረቡ ሪፖርቶች ላይ ምንም ዓይነት ማመሳከሪያ አይደረግም

ሙብት; - በዚህ ጥናት መሳተፍ ሙሉ በሙሉ በፈቃደኝነት የሚደረግ ነው። ሴት ልጃችሁ በጥናቱ ለመካፈልም ሆነ ለመሳተፍ የማሳወቅ ሙብት አላት። ተሳትፎ ለማድረግ ከወሰነች በማንኛውም ጊዜ ከጥናቱ የመውጣት ሙብት አላት። ልትመልስላት የማንፈልገውን ማንኛውንም ጥያቄ መመለስ አያስፈልጓትም።

አድራሻ አድራሻ:- አድራሻ አድራሻ:- ስለ ጥናቱ፣ ስለ አሰራሩ ወይም ከጥናቱ ጋር የተያያዘ ሌላ ጥያቄ ካለዎት፣ እባክዎ በሚከተለው አድራሻ አማካኝነት ያግኙ:- የተንቀሳቃሽ ስልክ መርማሪ ቁጥር +251915438881 (አህመድ ሙሁመድ) መርማሪው የኢሜይል አድራሻ

kadermuhumed346@gmail.com ተቋማዊ የጤና ምርምር ሥነ-ምግባር ምርመራ ኮሚቴ (IHRERC) በቢሮ ስልክ 0254662011 ወይም በፒ.አ. ሳጥን 235፣ ሐረር፣ ኢትዮጵያ

ዕውቀት ያለው የፈቃደኝነት ስምምነት አዋጅ; አንብቤአለሁ/ ለኔ/ የተሳታፊውን መረጃ ወረቀት አንብቤአለሁ። የምርምሩ ዓላማ፣ አሰራር፣ አደጋ ና ጥቅም፣ የምስጢር ጉዳዮች፣ የመሳተፍ ሙብት እና ለማንኛውም ጥያቄ አድራሻው በግልጽ ተረድቻለሁ። ግልጽ ለሆነ ነገር ጥያቄ የመጠየቅ አጋጣሚ ተሰጥቶኛል። ሴት ልጃችሁ በማንኛውም ጊዜ ከጥናቱ የመውጣት ወይም የማንፈልገውን ማንኛውንም ጥያቄ ለመመለስ ሙብት እንዳላቸው ተነገረኝ። እንግዲህ አንተ/ወላጅ በዚህ ጥናት ላይ በፈረማዬ (ፈርማ) እንድትሰተፍ (እንድትሰተፍ) ለመፍቀድ ፍቃደኝነቴን አሳውቃለሁ።

የተሳታፊው ስም - _____ (አሰንት ከ15-17 ዓመት ዕድሜው ትንሽ ከሆነ አረጋግጦ) የወላጅ/አሳዳጊ ፈርማ _____ ቀን _____

የዳታ አሰባሳቢ ስምና ፈርማ _____ ቀን _____

8.7. Participant Information Sheet and Voluntary Consent for Parent/Guardians of participants <18 Years Old (Af-somali Version)

Subax wanaagsan/galabnimo ka qaybqaataha qaaliga ah! Magacaygu waa _____ isaga oo ka shaqaynaya xog ururin daraasadda lagu qabanayo isbitaalka **Ahmed Muhumed Sultan** oo baranaya barnaamijkiisa shahaadada mastarka ee Jaamacadda Haramaya, Kuliyaadda Caafimaadka iyo Sayniska Caafimaadka. Waxaan si naxariis leh kaaga codsanayaa inaad i siiso dareenkaaga si aan kuugu sharaxo daraasadda iyo in loo doorto ka qaybqaataha daraasadda.

Cinwaanka daraasadda: Baahsanaanta iyo qodobada la xiriira walaaca ku dhaca haweenka uurka leh ee ka qayb qaata daryeelka dhalmada ku jira labo isbitaal oo guud Jigjig gobolka Soomaalida, Itoobiya, 2024: daraasad hab iskudhafan.

Ujeedada daraasadda: Natiijooyinka daraasaddu waxay yeelan doonaan waxtarka ugu muhiimsan ee hooyada uurka leh si ay uga faa'iidaystaan adeegga caafimaadka daryeelka hooyoyinka uurka leh. Waxa kale oo ay ka caawin doontaa bixiyeyaasha daryeelka caafimaadka inay diiradda saaraan arrimaha sida xooggan ula xidhiidha ka faa'iidaydiga adeegga caafimaadka ee walaca ay hooyadu ka qabto uurka waxayna bixin doonaan talooyin ku salaysan macluumaadka la helay. Waxaa intaa dheer, ujeeddada daraasaddan waa in la qoro tesis qayb ahaan looga baahan yahay buuxinta Barnaamijka Master's ee Caafimaadka Dadweynaha ee caafimaadka walaca hooyada uurka leh.

Habka iyo muddada: Waxaan ku waraysan doonaa adiga/walidkaaga aniga oo isticmaalaya xoguruurin si ay ii siiyaan xogta muhiimka ah ee walaaca ay hooyadu ka qabto uurka. Waxaa jira ilaa 57 su'aalood oo laga jawaabay halkan aan ku buuxin doono su'aalaha waraysiga ilmahaaga. Wareysigu wuxuu qaadan doonaa 15-20 daqiiqo oo kaliya, marka waxaan si naxariis leh kaaga codsanayaa inaad ii tudhayso waqtigan wareysiga.

Khatarta iyo faa'iidooyinka: Khatarta ka-qaybgalka daraasaddan waa mid aad u yar, laakiin waxay qaadataa 15-20 daqiiqo oo keliya laga bilaabo wakhtiga adiga iyo waalidkaga. Ma jiri doonto lacag-bixin toos ah ka-qaybgalka daraasaddan. Laakiin natiijooyinka cilmi-baarista ayaa laga yaabaa inay daaha ka qaadaan macluumaadka muhiimka ah ee qorshayaasha caafimaadka maxalliga ah.

Kalsooni: Macluumaadka adiga/ilmahaagu i siiyaan waa la qarin doonaa. Ma jiri doono macluumaad si gaar ah kuu aqoonsan doona adiga/ilmahaaga.

Natiijooyinka daraasadda waxay noqon doontaa mid guud oo loogu talagalay bulshada daraasadda mana ka tarjumayso wax gaar ah oo ku saabsan qofka. Xog-ururinta ayaa la codayn doonaa si looga saaro muujinta magacyada. Wax tixraac ah laguma samayn doono warbixino afka ah ama qoraal ah oo ku xidhi kara ka qaybgalayaasha daraasadda.

Xuquuqda: Ka-qaybgalka daraasaddan si buuxda waa ikhtiyaari.

Adiga/waalidkaga waxaad xaq u leedahay inaad caddayso inaad ka qaybqaadato iyo in kale daraasadda. Haddii adiga/waalidkaga go'aansado inaad ka qaybgelin, adiga/ilmahaagu waxaad xaq u leedahay inaad ka baxdo daraasadda wakhti kasta tanina kuma calaamadin doonto adiga/ilmahaaga wixii faa'iidooyin ah oo aad/ilmahaaga haddii kale xaq u leedahay. Adiga maaha inaad ka jawaabto su'aal kasta oo adiga/waalidkagu aanu doonayn inaad ka jawaabto.

Ciwaanka xidhiidhka: Ciwaanka xidhiidhka: Haddii aad hayso wax su'aalo ah oo ku saabsan daraasadda, habka ama wax kasta oo kale oo la xidhiidha daraasadda, fadlan kala xidhiidh ciwaanka soo socda:

Lambarka taleefanka gacanta ee baaraha: +251915438881 (Ahmed Muhumed)

Ciwaanka iimaylka ee baaraha: kadermuhumed346@gmail.com

Guddiga Dib-u-eegista Anshaxa Cilmi-baarista Caafimaadka Hay'adaha (IHRERC) ee taleefanka xafiiska 0254662011 ama PO Box 235, Harar, Ethiopia.

Ku dhawaaqida ogolaanshaha iskaa wax u qabso ee la wargaliyay:

Waan akhriyay/waa la ii akhriyay/warqad macluumaadka ka qaybqaataha.

Waxaan si cad u fahmay ujeedada cilmi-baarista, hababka, khatarta iyo faa'iidooyinka, arrimaha sirta, xuquuqda ka qaybgalka iyo ciwaanka xiriirka ee su'aalo kasta. Waxaa la i siiyay fursad aan su'aalo ku weydiiyo waxyaabo laga yaabo inaysan caddayn. Waxaa la igu wargaliyay in aan xaq u leeyahay in aan wiilkayga/gabadhayda ka saaro daraasadda wakhti kasta iyo in aan ka jawaabin su'aal kasta oo aanan rabin. Sidaa darteed, waxaan caddaynayaa oggolaanshaha ikhtiyaariga ah si aan ugu oggolaado hooyada/walidkeeda inay ka qaybqaataan (ka qayb qaataan) daraasaddan xarafkayga (saxiixa).

Magaca ka qaybqaataha: _____ (wuxuu xaqiijiyay haddii da'da yar ee 15-17 sano)

Saxiixa waalidka/masuulka: _____ Taariikhda _____

Magaca iyo saxeexa Xog ururiyaha: _____ Taariikhda _____

8.8. Questionnaire (English Version)

Name of data collector: _____ Signature _____
and Date _____

Name of supervisor: _____ Signature _____
and Date _____

No.	Part one socio demographic	Response	Remark
101	Maternal age- (in years)	
102	What is your marital status?	1. Single 2. Married /live together 3. Divorced 4. widowed	
103	Religion	1. muslin 2. Christian	
104	Ethnicity	1. Somali 2. Amhara 3. Oromo 4. Others	
105	Residence	1. Rural Urban	
106	What is your educational status?	1. cannot read and write 2. can read and write 3. primary school 4. secondary school 5. college and above	

107	What is your occupational status?	1. House-wife 2. self -employee 3. Government-employee 4. Non-governmental employee	
108	Decision making?	1. Wife 2. Husband 3. Relative	
109	What is your monthly average income?	(in Ethiopian birr)	

S/N	Part II Questionnaire related to obstetrics.		
201	Your number of pregnancies	1. Prim gravid 2. Multi gravid	
202	What is the number of your previous birth (parity)?	1. Nulliparous 2. Prim parous 3. Multi parous	
203	What was your previous mode of delivery?	1. SVD 2. Instrumental delivery 3. Ceasarean section	
204	History of Cesarean section?	1. Yes 2. No	
205	History of taking Anesthesia for surgery?	1. yes 2. NO	

206	Outcome of previous childbirth	1. Alive 2. Still birth	
-----	--------------------------------	----------------------------	--

207	Did you have previous history of abortion?	1.Yes 2.No	
208	Did you have obstetric complication in your previous pregnancy and childbirth?	1.Yes 2.No	
209	If yes for Question 208 which one?	1.Bleeding 2.Prolonged labor 3. Pregnancy induced hypertension 4.All 5. Others specify...	
210	Gestational age (in weeks)	1.less than 24 week 2.24-26 weeks 3. above 26 weeks	
211	Currently number of conceptions	1. Single pregnancy 2.Multiple pregnancy	
212	Current pregnancy status?	1. Planned 2. Not planned	
213	Do you have regular ANC follow up for the current pregnancy?	1. Yes 2. No	
214	Preferred mode of delivery of the current pregnancy	1. vaginal delivery 2. Caesarean section	
215	Do you have pregnancy related complication during this pregnancy?	1.Yes 2.No	
216	If yes for Q 215 which one	1.vaginal bleeding 2.HEG 3.PIH	

		4. APH 5. Others specify.....	
217	Did you have known medical illness /chronic disease in the current pregnancy	1. Yes 2. No	
218	If yes for q no 217 which one?	1. Heart disease 2. HIV 3. DM 4. HTN 5. Others ...specify	
219	Have you got support from your husband?	1. yes 2. No	

S/n	Part III. Psychosocial variable related characteristics		
	Part one social support		
301	How many people are so close to you that you can count on them if you have great personal problems?	1. None 2. 1-2 3. 3-5 4. > 5	
302	How much interest and concern do people show in what you do?	1. None 2. Little 3. Uncertain 4. Some 5. A lot	

303	How easy is it to get practical help from neighbors if you should need it?	1.very difficult 2.difficult 3.possible 4.easily 5.verry easily	
	Part two. clinical condition related.		
304	Have your previous history of psychiatric condition?	1.yes 2. no	
305	Have you developed psychiatric condition after admission?	1.Yes 2. no	
306	Have you linked to psychiatric consultant?	1yes 2no	
307	Have you family history of psychiatric illness?	1.yes 2.no	
308	Have you your previous history of hospital admission?	1.yes 2.no	
309	Which ward you admitted?	1.yes 2.no	
310	Have you more than one illness?	1. Yes 2. no	
311	How much times you stay in the hospital?	< 1 week 1-2 week >2week	
S/N	Part four. Substance used related factors.		
401	Have you used chat in the last 1 year?	1.yes 2.no	

402	Have you used any kind of alcohol drink in the last 1 year?	1.yes 2. no	
403	Have you used any kind of tobacco product in the last 1 year?	1.yes 2.no	
404	Have you used any illegal substances / Such as hashish, and Heroin in the last 1 year?	1.yes 2.no	

5.Hamilton Anxiety Rating Scale for Antenatal Anxiety (HAMA-A) questions

Below is a list of phrases that describe certain feeling that people have. Rate the patients by finding the answer which best describes the extent to which he/she has these conditions. Select one of the five responses for each of the fourteen questions.

0 = Not present, 1 =Mild, 2= Moderate, 3 =Severe, 4= Very severe.

S/n	Questions	Answers	Skip
501	Anxious mood. Worries, anticipation of the worst, fearful anticipation, irritability.	0=not present 1=mild 2=moderate 3=severe 4very severe	
502	Tension. Feelings of tension, fatigability, startle response, moved to tears easily, trembling, feelings of restlessness, inability to relax.	1. not present 2. mild 3. moderate 4. severe 5. very severe	
503	Fear Of dark, of strangers, of being left alone, of animals, of traffic, of crowds.	0=not present 1=mild 2=moderate 3=severe	

		4=very severe	
504	Insomnia Difficulty in falling asleep, broken sleep, unsatisfying sleep and fatigue on waking, dreams, nightmares, night terrors.	0=not present 1=mild 2=moderate 3=severe 4=very severe	
505	Intellectual Difficulty in concentration, poor memory.	0=not present 1=mild 2=moderate 3.severe 4.very severe	

506	Depressed mood Loss of interest, lack of pleasure in hobbies, depression, early waking, diurnal swing	0=not present 1=mild 2=moderate 3=severe 4=very severe	
507	Somatic (muscular) Pains and aches, twitching, stiffness, myoclonic jerks, grinding of teeth, unsteady voice, increased muscular tone.	0=not present 1=mild 2=moderate 3=severe 4=very severe	
508	Somatic (sensory) Tinnitus, blurring of vision, hot and cold flushes, feelings of weakness pricking sensation.	0=not present 1=mild 2=moderate 3=severe 4=very severe	

509	<p>Cardiovascular symptoms</p> <p>Tachycardia, palpitations, pain in chest, throbbing of vessels, faint feelings, missing beat.</p>	<p>0=not present 1=mild 2=moderate 3=severe 4=very severe</p>	
510	<p>Gastrointestinal symptoms</p> <p>Difficulty in swallowing, wind abdominal pain, burning sensations, abdominal fullness, nausea, vomiting, borborygmi, looseness of bowels, loss of weight, constipation.</p>	<p>0=not present 1=mild 2=moderate 3=severe 4=very severe</p>	
512	<p>Genitourinary symptoms</p> <p>Frequency of micturition, urgency of micturition, amenorrhea, menorrhagia, development of frigidity, premature ejaculation, loss of libido, impotence.</p>	<p>0=not present 1=mild 2=moderate 3=severe 4=very severe</p>	
513	<p>Autonomic symptoms</p> <p>Dry mouth, flushing, pallor, tendency to sweat, giddiness, tension headache, raising of hair.</p>	<p>0=not present 1=mild 2=moderate 3=severe 4=very severe</p>	
514	<p>Behavior at interview</p> <p>Fidgeting, restlessness or pacing, tremor of hands, furrowed brow strained face, sighing or rapid respiration, facial pallor, swallowing, etc.</p>	<p>0=not present 1=mild 2=moderate 3=severe 4=very severe</p>	