Addis Ababa University
Colleges of Health Sciences,
Department of Obstetrics and Gynecology

Prevalence of postpartum depression and associated factors among post-cesarean section women visiting postnatal clinic at three teaching Hospitals of Addis Ababa University

Principal Investigator: -Dr. Zebiba Ashenafi (MD, Obstetrics and Gynecology Resident)
Advisors:

1. Dr. Sisay Teklu (MD, Associate Professor in Gynecology and Obstetrics)
2. Dr. Merga Negeri (MD, Assistant Professor in Gynecology and Obstetrics, Fellow in Gynecologic Oncology)

A thesis Submitted to the Department of Obstetrics and Gynecology, School of Medicine, Addis Ababa University, in Partial Fulfillment of the requirement of Specialty Certificate in Obstetrics and Gynecology

July, 2025
Addis Ababa, Ethiopia

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Declaration

DRPC FORM III: RESEARCH PROPOSAL APPROVAL BY ADVISORS[1]
ADDIS ABABA UNIVERSITY COLLEGE OF HEALTH SCIENCES, SCHOOL OF MEDICINE, DEPARTMENT OF OBSTETRICS AND GYNECOLOGY, POSTGRADUATE PROGRAM

I, Dr. Zebiba Ashenafi, hereby certify that, with the help of my advisors, I have finished my research thesis, "Prevalence of Postpartum Depression and Associated Factors among Postpartum Women Visiting Postnatal Clinic at Three Teaching Hospitals of Addis Ababa University," in compliance with the requirements of graduate studies. To the best of my knowledge and effort, I have avoided plagiarism and duplication of resources unless specifically credited and/or recognised, and it hasn't been submitted for consideration or application for a proposal yet.

Investigator Dr. Zebiba Ashenafi _____ _____

In light of this, we certify that we have read and evaluated the research thesis on "Prevalence of postpartum depression and associated factors among post caesarean section women visiting postnatal clinic at three teaching Hospitals of Addis Ababa University as part of the resident's research project for the department's partial fulfilment of the Degree of Speciality in Obstetrics and Gynaecology, under our supervision from the beginning to the present, including ethical concerns, and that it can be submitted to the DRPC for additional administrative processing and documentation of the thesis."

Advisors Dr. Sisay Teklu _____ _____

Dr. Merga Negari _____ _____

Acknowledgment

I would like to thank the Department of Obstetrics and Gynecology at Addis Ababa University for granting me permission to conduct this study. Additionally, I would like to express my gratitude to Drs. Sisay and Merga, my advisors, for their important guidance and recommendations, which started with the choice of topic and continued with the production of this thesis. Lastly, I would like to thank the study participants and data collectors.

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Abbreviations and Acronyms

AAU: Addis Ababa University
DSM-V=Diagnostic and Statistical Manual Disorders V
EPDS= Edinburgh Postnatal Depression Scale (EPDS)
FMOH: Federal Ministry of Health
GMH= Ghandi Memorial Hospital
OBGYN: Obstetrics and Gynecology
PNC= Postnatal clinic
PPD=Postpartum Depression
SPSS: Statistical Package for the Social Sciences
TASH = Tikur Anbesa Specialized Hospital
UK= United Kingdom
USA= United States of America
ZMH= Zewditu Memorial Hospital

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Abstract

Background: One of the biggest health issues in the world, postpartum depression (PPD), can negatively impact mothers, their babies, and their families. Unfortunately, psychological issues have received little attention in developing nations like Ethiopia when it comes to screening, diagnosis, and treatment.
Objective: To assess the prevalence and associated factors of postpartum depression among post cesarean women visiting postnatal clinic at three teaching hospitals, Addis Ababa, Ethiopia.
Methods: A cross-sectional study was carried out in a hospital. A structured questionnaire administered by an interviewer was used to gather data between January 1st, 2025, and March 31st, 2025. Depression symptoms were measured using the Edinburgh Postnatal Depression Scale, which was locally pre-validated. SPSS version 26 was used to enter and analyse the data. Using descriptive analysis, the prevalence of postpartum depression was determined. Bivariate and multivariable regression analyses were employed to determine the variables associated with postpartum depression. P-values below 0.05 will be considered significant. The 95% confidence interval (CI) and odds ratio (OR) were computed.

Results: Postpartum depression was found to be 38% common in women who had caesarean sections. PPD was significantly correlated with a number of factors. Compared to women aged 18–24, those aged 25–34 had a lower risk of developing PPD (AOR = 0.49, 95% CI: 0.25–0.95). Women who were illiterate (AOR = 1.4, 95% CI: 1.29–4.59), had unintended but desired pregnancies (AOR = 5.3, 95% CI: 1.08–26.64), were multiparous (AOR = 5.5, 95% CI: 2.82–10.64) or grand multiparous (AOR = 5.9, 95% CI: 2.41–14.61), had mothers who gave birth to female babies (AOR = 2.8, 95% CI: 1.74–4.65), and had low social support (AOR = 3.4, 95% CI: 1.15–10.28) were all associated with increased odds of PPD.

Conclusion: The high prevalence of PPD among women delivered by CS indicates the need for routine mental health screening during the postnatal period. Special attention should be given to women with limited education, unplanned pregnancies, high parity, gender-related stress, and inadequate social support. Targeted interventions and integrated maternal mental health services are essential to address this critical public health issue.
Keyword: - postpartum period, post caesarean section, women, Addis Ababa university

1.1 Background

After giving birth, there could be conflicting feelings and changes in one's mental state. A number of psychological problems, including postpartum depression (PPD), have been shown to arise during the postpartum period. Between six and twelve weeks after giving birth, depression episodes may begin and persist for a long time (1-2). After giving delivery, it is the most common mental illness (3). Depression, anxiety, nausea, altered eating and sleeping patterns, decreased libido, crying fits, anxiety, irritability, loneliness, mental instability, suicidal thoughts, and thoughts of harming oneself or the child are just a few of the many physical and emotional symptoms that are frequently linked to it.(1,4)

PPD has been shown to have detrimental effects on a mother's health as well as her child's development. Anthropometry, physical health, sleep, and motor, cognitive, language, emotional, social, and behavioural development are all part of the infant's PPD, while the mother's PPD encompasses relationships, risky behaviours, and physical and psychological health. PPD can also affect nursing, bonding, and the role of the mother in mother-child relationships. (7,15). The negative consequences of PPD are particularly acute in low-income countries like Ethiopia, where the healthcare system fails to provide for mothers with mental illness. The lack of knowledge about postpartum depression among the general public and primary healthcare providers is one factor contributing to this.Furthermore, women may be less inclined to seek out the available mental health care due to the stigma associated with the illness. Reducing maternal and under-five mortality rates—two SDGs that must be met—can be hampered by ignoring maternal mental health concerns. (10–12). These statistics not only demonstrate the actual prevalence of PPD in mothers, but they also emphasise how important it is to understand the environmental factors that influence the disease. In countries with limited resources, such as Ethiopia, where mental health professionals are in short supply, identifying the risk factors for postpartum depression (PPD) is essential. This is because it makes it possible to closely monitor and specifically screen for moms who are After adjusting for premorbid mental health, maternal age, education, primiparity, and newborn medical complications, analysis of variance showed that women who had a caesarean section or vaginal instrumental delivery had higher levels of somatization, obsessive compulsive, anxiety, and depression symptoms, as well as overall general distress.

With the exception of those who gave birth vaginally, women who had an unplanned caesarean section also displayed higher levels of PTSD symptoms associated with childbirth. (Dekel, Ein-Dor, and others, 2019). After a normal vaginal delivery (VD), women who had a caesarean section (CS) scored significantly higher on the Edinburgh Postpartum Depression Scale (EPDS), particularly in terms of anxiety and depression symptoms, according to the most recent study by Zanardo et al. (2018). (Wang, Sun, and others, 2021).

1.2 Statement of the problem

PPD is acknowledged as one of the most prevalent and incapacitating side effects of childbirth on a global scale. with an African standpoint, the Democratic Republic of the Congo had a disproportionately concerning burden, with half (50.4%) of mothers
About 17.2% of people worldwide suffer from postpartum depression, making it a major public health concern (1). Due to a variety of factors, including the use of various screening tools, reporting styles, cross-cultural variables, differences in socioeconomic environments, perceptions of mental health and its stigma, and biological susceptibility factors, its prevalence was actually reported to range from 0.5 to 60.8% (5–6). afflicted with PPD (13). A comparable burden is thought to exist in Ethiopia, where PPD was detected in more than one-third (37%) of mothers giving birth in the northeast region of the country (14).
However, it is still often underdiagnosed and undertreated in most clinical practice (4).Additionally, postpartum depression prevalence varies by Sub-Saharan African subregion, with Western Africa having the highest prevalence (20.2%), followed by Eastern and Southern Africa (18.6% and 18.3%, respectively) (7). Research on the extent of PPD in Ethiopia revealed striking heterogeneity, reflecting the inter-geographic variation observed elsewhere. With an overall estimate of 22.9%, the prevalence of postpartum depression in the Southern countries ranged from 12.2% to 33.8%. Researchers have suggested screening for PPD during the well-child visit or early postnatal obstetrical visit, which are among the most frequent points of interaction with the health care system for mothers after childbirth, in order to lessen the potential negative effects of these fairly common psychological disturbances. (8–9). Since maternal mental health issues are now recognised as essential components of the bundle to achieve the Sustainable Development Goals (SDGs) of lowering the under-five mortality rate and the maternal mortality ratio, they have recently drawn the attention of both domestic and international researchers. (10–11).
Many studies have been carried out to identify the risk factors that contribute to PPD in various social contexts and conditions. As a result, several risk factors for postpartum depression have been identified, such as sociodemographic characteristics, obstetric-related factors, and social and behavioural factors (2,12). The current study aimed to ascertain the prevalence of postpartum depression and its contributing factors among postpartum mothers who visited the postnatal clinic at three teaching hospitals in Addis Ababa, Ethiopia, in light of the previously mentioned data.

1.3 Significance of the study

In general, the current study is thought to be helpful in bringing together the body of information about the degree of depression experienced by postpartum moms. It is hoped that the results of this study may assist in identifying women who are susceptible to the illness. Furthermore, by lowering the chance of long-term problems, the results may help with the early diagnosis and treatment of PPD, which may enhance outcomes for both mothers and children. It can produce data that ought to be incorporated into the thorough postpartum care recommendations. In addition, the results can assist policymakers in creating context-appropriate treatments that are helpful in managing and preventing the illness. In addition to this, it will serve as a valuable resource for studies on postpartum depression in mothers. Furthermore, in the current study environment, the extent of PPD is unknown, just as that of other mental disorders. Investigating the prevalence and contributing variables of postpartum depression in postpartum women who visit postnatal clinics at three teaching hospitals in Addis Ababa, Ethiopia, is the aim of this study.

2. Literature Review

2.1 Prevalence of postpartum depression

An Indian study used the EPDS scale to analyse data from 240 moms in order to determine the prevalence of PPD in women. Out of all the mothers, 63 (26.3%) were classified as depressive since their EPDS score was ≥13 (16). A second cross-sectional survey was conducted in 2019 to estimate the prevalence of postpartum depression in Vientiane Capital, Lao People's Democratic Republic, and identify the factors associated with the condition. With a cut-off score of 10, the EPDS was used to measure PPD in 428 women who were 6–8 weeks postpartum. Of the women, 31.8% had probable postpartum depression, and their average age was 28.1 years (17).
At 8 weeks postpartum, 1037 women in Greece were enrolled using the EPDS. This study found that at 8 weeks postpartum, 13.6% of women had probable depression (EPDS score > 13) (18). On the other hand, 242 women who gave birth at Rezaie Maternal Hospital in the Afghan province of Herat between July 11 and September 15, 2021, participated in a cross-sectional study.
Nearly half of the participants in this biphasic study (45.5%) experienced depression in the first phase, but less than one in three people (30.7%) had depression in the second phase (19).
From June to September 2017, 270 postpartum mothers who visited Nigerian public health institutions participated in a facility-based cross-sectional survey. 92 women (34.6%) were recognised as potentially depressed (using a cut-off ≥13) by the authors, who used the EPDS to measure postnatal depression (20). A nested cross-sectional study was carried out in Malawi with 636 women who were released from the maternity department due to early PPD, using a locally validated EPDS. 3.3% of these women had severe early PPD, and 9.6% had moderate to severe early PPD using an EPDS cut-off of ≥ 6 (6).

228 South African mothers who had given birth to a live child within 12 weeks of the data collection period took part in the cross-sectional study. Women with an EDPS score of 13 or higher were 22% more likely to have PPD (21). In 2021, Daliri et al. looked into the prevalence of PPD in women in Ghana's Bawku township (22). A study was carried out by the Yaoundé Gyneco-Obstetric and Paediatric Hospital in Cameroon to determine the prevalence of perinatal mental disorders in 194 expectant mothers. This study found that 45.8% of all mental illnesses were perinatal depression (23). In another Cameroonian study, Dingana et al. found that 31.8% of 207 postpartum women had depression (24).

Data from 238 women who visited two maternity teaching hospitals in the state of Khartoum three months after giving birth were gathered using the EPDS. The prevalence rate was 9.2%, according to the Sudanese authors, who used a cut-off score of ≥12 (12). According to the same criteria, 129 women in a related Sudanese study had a 10.9% prevalence of PPD (25). Between November 2019 and June 2020, 292 mothers six to eight weeks postpartum at three health facilities in southwestern Uganda participated in a cross-sectional study. The Diagnostic and Statistical Manual of Mental Disorders V (DSM-V) was used to make a clinical diagnosis of postpartum depression. PPD was present in 27.1% of people overall (26).

To determine the prevalence and risk factors for postpartum depression in 380 mothers enrolled in four basic healthcare facilities in Zoba Maekel, a similar cross-sectional study was carried out

in Central Region Eritrea. PPD prevalence was 7.4%, according to the study's authors, who assessed PPD using the DSM-V (27).
Between March 1 and April 30, 2018, a community-based cross-sectional survey was conducted in rural northern Ethiopia with 232 women with newborns selected at random. 53 (22.8%) of the women, or almost a quarter of them, had depressive symptoms (28). The study included a survey of 308 mothers who received postpartum care at Debre Berhan Referral Hospital and health centres for postnatal care and vaccination services. Postpartum depression was found to affect 15.6% of women (29).
In 2018, 526 postpartum mothers who had given birth within the last six weeks had a 25% prevalence of postpartum depression, according to a community-based cross-sectional study carried out in Gondar town, Northwest Ethiopia (30). An institution-based cross-sectional study by Mulugeta and associates from June to July 2021 found that 37.4% of people had PPD overall (14). Similarly, 461 postpartum women who visited public health facilities in Addis Ababa between May 15, 2021, and July 15, 2021, participated in an institution-based cross-sectional study. Of the women enrolled in the study, ninety-one (19.7%) experienced postpartum depression (31).

2.2 Factors associated with postpartum depression

An Indian study that sought to identify the variables linked to PPD adoption among Indian women showed a substantial statistical correlation between partner support and social support (16). According to Inthaphatha et al., among the Lao population, Pregnancy depression, low birth satisfaction, and unintended pregnancies were all associated with a higher likelihood of postpartum depression (17).
In Greece, increased PPD symptoms were substantially correlated with preeclampsia, prenatal hypertension, and/or lactation difficulties. Pregnancy-related sleep patterns, including snoring and sleep deprivation, as well as breastfeeding for less than two months, were substantially linked to an increased risk of PPD. Additionally, the EPDS score was linked to a few other difficulties, including unintended pregnancies and hospitalisations during pregnancy; however, these correlations were explained by the mother's sociodemographic traits (18).
Furthermore, the aforementioned Nigerian study found that the onset of depression symptoms in postpartum women was correlated with the mother's economic level and having a younger mother (20). In Malawi, it was shown that while live birth result, being single as opposed to divorced or widowed, and having less schooling were linked to lower risk, maternal anaemia at birth was linked to an elevated risk for moderate and/or severe early PPD. Additionally, only having HIV was linked to severe PPD in this study (6).
According to the South African authors, women who had babies older than six weeks and those who lived in lower-income households had a higher chance of having PPD. Once more, they noted that experiencing partner or spouse violence, along with a stressful life event, increased the likelihood of getting PPD. On the other hand, it was shown that social support and support from a spouse or partner decreased the likelihood of developing PPD (21).
Furthermore, the Sudanese authors demonstrated that while characteristics like older moms, exclusive breastfeeding, and regular prenatal vitamins throughout pregnancy reduce the likelihood of PPD, a history of violence exacerbated the development of PPD (12). However, Cameroonian scientists discovered a strong correlation between the lack of social support and depression and extreme anxiety prior to delivery (23). Similarly, Dingana et al. found that

gender-based violence, male babies, and financial stress were all distinct psychosocial factors associated with PPD. Additionally, they found a link between PPD and psycho-clinical factors like a history of depression in the past and a family history of mental illness (24). In Uganda, PPD was linked to obstetrical difficulties, excessive newborn crying, HIV positive status, rural living, and low perceived social support (26). Maternal occupation, economic status, lack of partner support, unplanned pregnancy, postpartum maternal illness, and residence were found to be statistically significantly associated with postpartum depression in the aforementioned Eritrean study (27).

According to an investigation conducted from an Ethiopian viewpoint, maternal PPD was found to be substantially linked with baby underweight, infant acute respiratory infection, and family food insecurity (28). Mulugeta et al. found that PPD was more common in women who experienced intimate partner abuse, had trouble nursing their babies, or had a family history of mental illness (14). Asaye showed that a history of abortion, birth weight less than 2.5 kg, gestational age less than 36 weeks, unplanned pregnancy, a family history of mental illness, and the lack of prenatal and postnatal visits were all significantly associated with postpartum depression (30).

Another Ethiopian study found that PPD was influenced by the child's sex, history of child loss, unexpected pregnancy, negative life events, substance use during pregnancy, history of depression, marital satisfaction, income management, occupational status, and marital status (31). Wubetu et al. discovered in their study that postpartum depression was significantly associated with being widowed or widowed, having a child in the hospital at the moment, having little social support, and losing a close relative or cousin (29).

2.3 Conceptual framework

After reviewing relevant literature (6,20,24,32–34), the principal investigator created this conceptual framework especially for the study for which it was intended. The framework is thought to support the study's goal of identifying factors that may influence postpartum women's development of depression.

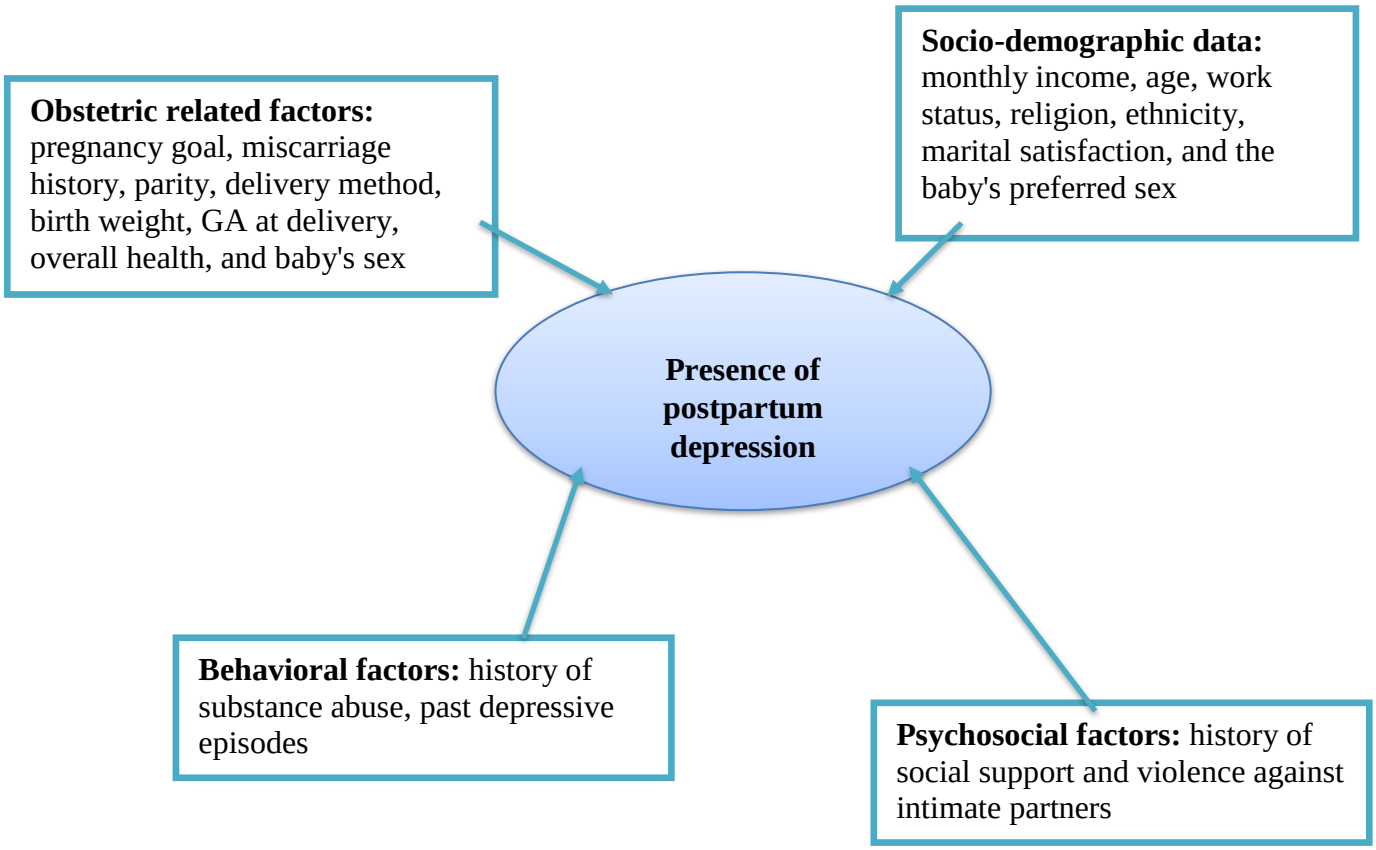

Figure 1. Factors potentially associated with postpartum depression among women

3. Objectives

3.1General objective

- Assessment of the prevalence of postpartum depression among post cesarean delivery women visiting postnatal clinic at the three teaching hospitals of Addis Ababa University

3.2Specific objectives

- ✓ To determine how common postpartum depression is among women who have had caesarean deliveries and are visiting the postnatal clinic at the three teaching hospitals connected to Addis Ababa University
- ✓ To determine the factors linked to postpartum depression in women who have had caesarean deliveries and are visiting the postnatal clinic at Addis Ababa University's three teaching

4. Methods

4.1 Study area and period

The hospital receives patients from all over the country. It has more than 700 beds. The obstetrics and gynaecology department has one ANC, one labour ward, two inpatient wards, and a standard gynaecologic clinic. ZMH and GMH are renowned public hospitals in Addis Ababa that serve as teaching hospitals affiliated with Addis Ababa University College of Health Sciences.
The Tikur Anbesa Specialised Hospital (TASH), Zewditu Memorial Hospital (ZMH), and Ghandi Memorial Hospital (GMH), three teaching hospitals affiliated with the obstetrics and gynaecology department of Addis Ababa University College of Health Sciences, located in Addis Ababa, Ethiopia's capital, served as the study's sites from November 1, 2024, to February 28, 2025. TASH, Ethiopia's largest teaching and referral hospital, is situated in the nation's capital.

4.2 Study design

A cross-sectional study design based in a hospital was used.

4.3 Population

4.3.1 Source population

All mothers who came for postnatal follow at three teaching hospitals, in Addis Ababa, Ethiopia

4.3.2 Study population

After giving birth by caesarean section, mothers who fulfilled the inclusion requirements and were selected using the recommended sampling technique for postnatal follow-up at three teaching hospitals in Addis Ababa, Ethiopia

4.4 Eligibility criteria

4.4.1 Inclusion criteria

- Women who visit the postpartum clinic at one week after giving birth
- Women who are not critically ill by other comorbid disease.
-women who gave birth by cesarean section

4.4.2 Exclusion criteria

- Women who had major life crises after giving birth
-Women with severe communication disorders brought on by illnesses
- Women who were diagnosed with major depressive disorder

4.5 Sample size determination

The sample size for the study was determined using a single population proportion formula. Based on a prior study carried out in Northeast Ethiopia, the sample size is determined by assuming that the prevalence of PPD in postpartum women is 37.4%, accounting for a 10% nonresponse rate, a 5% margin of error, and a 95% confidence level (14).

$$n = \frac{z^2 p(1-p)}{e^2}$$

n = the required sample size
p = the proportion of PPD in postpartum women – 37.4 %
$Z_{\alpha\backslash 2}$ = the critical value at 95% confidence level = 1.96
e = precision (margin of error) = 5%
Accordingly,

$$n = \frac{(1.96)^2 * 0.374(1-0.374)}{0.05^2}$$

$$n = \frac{(1.96)^2 * 0.374(0.626)}{0.05^2}$$

$$\mathrm{n} = 360$$

Therefore, when the calculated sample size is increased by 10% to account for the non-response rate, the final sample size required for this study is 396.

4.6 Sampling procedure

During the study period, an estimated 1350 mothers will visit the postnatal clinic at the study hospitals. Therefore, a systematic random sampling technique was used to recruit individual participants, with k being 3.5 (≈1350/396) after the first patient was chosen at random using a lottery method, because the total required sample size is 396.

4.7 Data collection tools and techniques

Data was collected through in-person interviews using a structured, pre-tested data collection questionnaire. A validated questionnaire in Amharic was used to collect data. The tool was adapted from previous, related research and includes closed-ended questions specifically designed for the study.

The questionnaire, which aims to evaluate sociodemographic characteristics, obstetric items, and individual factors among study participants, was created by reviewing pertinent related studies (6,20,24,32–34). Importantly, it incorporates the Edinburgh Postnatal Depression Scale (EPDS), the most popular depression screening tool in perinatal care (15).

Raw scores on the EPDS, a ten-item self-report questionnaire, range from 0 to 30. Every question receives a score ranging from 0 to 3. Items 1, 2, and 4 receive scores of 0, 1, 2, or 3, with the top answer proposal receiving a score of 0 and the bottom answer proposal receiving a score of 3. On the other hand, items 3, 5, and 10 are scored in reverse order, so the best answer proposal scores 3 and the worst answer proposal scores 0 (35, 36).

In the Ethiopian context, a cut-off of "8" is recommended in the literature for "possible depression" (37) and is used in this study.

Three certified medical personnel were recruited and trained in the data collection procedure. To familiarize supervisors and data collectors with the data collection tool, interview technique, eligible study subjects, sampling techniques, and ethical considerations, the investigator

conducted a two-day training session. Prior to gathering any data, interviewers obtained the written informed consent of study participants.

4.8 Variables in the study

4.8.1 Dependent variable

- Postpartum depression

4.8.2 Independent variables

- Sociodemographic traits, such as age, marital satisfaction, work status, and monthly income
- Obstetric-related factors, including the baby's sex, general health, parity, history of miscarriages, and intention of pregnancy
- Behavioural elements like past substance abuse and depressive episodes
- Psychosocial factors: these comprise social support (both practical and emotional) and intimate partner violence (IPV).

4.8 Operational definition

- **Postpartum period** – is set to represent the first six weeks after the baby was delivered
- **Postpartum depression** - According to the EPDS, postpartum depression is defined as a psychological disturbance in the mother (total score ≥ 8 out of the total score) (37).
- **Social support**: The 14-point Oslo Social Support Scale defines social support as a psychosocial resource that is accessible within the framework of one's social network and interpersonal relationships. Patients will be categorised as having strong social support if their score is between 12 and 14, as having moderate social support if their score is between 9 and 11, and as having poor social support if their score is between 3 and 8 (38).

4.10 Data quality management

To ensure the quality of the data, the data collectors were given a quick training on the principles of the data collection tool and ethical considerations prior to the actual data collection process.

The principal investigator and the data collectors maintained strict supervision throughout the data collection process, and they double-checked the questionnaire every day for accuracy and consistency. The questionnaire was pretested using 5% of the estimated sample size. Pretesting was done for word ambiguity, average interview length, sensitivity of questions, appropriateness of language, and comprehensibility. Based on the feedback received after this process, the tool was finalized and modified.

4.11 Data analysis and interpretation

With the Statistical Package for Social Science (SPSS) version 26, data entry, coding, cleaning, and statistical analysis were completed. Frequency and cross tabulation were used to search for missing variables and values. The baseline characteristics and PPD level of the participants were determined using descriptive statistics such as mean, percentage, frequencies, and standard

deviation. Factors influencing the outcome variable (PPD) were extracted using binary and multiple logistic regressions.

To examine each variable's relationship to the dependent variable separately, bivariable logistic regression analysis was employed. Variables that yielded a p-value of less than 0.25 in the binary regression analysis were exported into a multiple logistic regression model in order to compute the odds ratio with corresponding 95% confidence interval. Finally, the results of the study were presented using text, figures, tables, and diagrams.

4.12 Ethical considerations

The department of obstetrics and gynaecology at Addis Ababa University was consulted for ethical approval prior to the actual data collection. To move forward with data collection at the study health facility, a letter of support was sent to the head of the obstetrics and gynaecology departments. Written informed consent was obtained and the study's purpose was fully explained in plain language before client interviews began. Throughout the data collection process, study participants were informed that their information would be kept confidential, anonymous, and used only for this study. Finally, it was stated that participants who displayed depressive symptoms during evaluation would be sent to the psychiatry unit for a possible thorough evaluation and appropriate care.

If a participant is found to have an organized suicidal plan during the interview, it was urgently be communicated with the treating physician and other caregivers for immediate intervention.

4.13 Dissemination of the study

When the research was finished, the findings were presented during the defence. The TASH department of obstetrics and gynaecology will receive the study's findings. Additionally, an attempt will be made to inform the Federal Ministry of Health about the findings' overall picture, since the results are anticipated to be inputs to health policymakers. Lastly, a respectable peer-reviewed journal will receive the manuscript for potential publication.

5. Result

5.1 Sociodemographic characteristics of the study participants

There were 389 participants in this study, yielding a 98.2% response rate. With a mean age of 27.7 ± 4.58 years, 71% of the participants were between the ages of 25 and 34. 42.9% of the participants were housewives, 55.5% were Orthodox, 45.5% had finished primary school, and 56.3% of households made between 5,000 and 10,000 Ethiopian Birr a month.

Table 1. The study participants' sociodemographic attributes **who visiting postnatal clinic at the three teaching hospitals of AAU, 2025.**

Variable	frequency	Percent
Age in years		
18-24	84	21.4
25-34	276	71
≥35	29	7.5
Religion		
Muslim	91	23.4
Orthodox	214	55
Catholic	24	6.2
Protestant	60	15.4
Marital status		
Married	346	88.9
Unmarried	43	11.1
Education status		
Unable to read and write	19	4.9
Primary	177	45.5
high school	66	17
collage and above	127	32.6
Occupation		
Housewife	167	42.9
Civil servant	49	12.6
Private employed	104	26.7
Merchant	5	1.3
Daily laborer	43	11.1
Unemployed	17	4.4
Merchant	4	1.0
Household monthly income		
<5000	34	8.7
5000-10000	219	56.3
10000-15000	42	10.8
>15000	94	24.2

5.2 Behavioral characteristic of the study participants

Nine percent of study participants expressed dissatisfaction with their marital relationship, and eight percent reported work-family conflict in the previous year. One percent of participants had experienced the death of a family member or close relative within the previous three months, and six participants reported having an intimate partner. 96.4% of the participants breastfed their child, and nearly 10% of them preferred the sex of their child. Excessive baby crying was reported by 3% of participants.

Table 2. The behavioral characteristic of the study participants

Variable	Frequency	Percent
Work-family conflict within the last 1 year		
Yes	31	8
No	358	92
Do you think you are satisfied with your current marital relationship		
Yes	354	91
No	35	9
History of intimate partner violence		
Yes	6	1.5
No	383	98.5
Death of family member or close relative in the past 3 months		
Yes	4	1
No	385	99
Desired sex of the baby		
Yes	352	90.5
No	37	9.5
Breast feeding		
Yes	375	96.4
No	14	3.6
Excessive baby crying		
Yes	13	3.3
No	376	96.7

5.3 Health related characteristics of the study participants

0.8% (n = 3) of the study participants had a history of substance use, and only 1% had a medical condition. Pregnancy-related illnesses affected sixteen percent of the participants, with preeclampsia and gestational diabetes mellitus (GDM) coming next.

Table 3. Health related characteristics of the study participants

Variable	frequency	Percent
Presence of chronic medical illness		
Yes	4	1
No	385	99
History of substance use		
Yes	3	0.8
No	386	99.2
Current pregnancy illness		
Yes	63	16.2
No	326	83.8
Existence of pregnancy-related conditions		
Yes	63	16.3
No	326	83.8
Current illness related to pregnancy (n=63)		
Anemia	3	4.8
APH	13	20.6
ECLAMPSIA	2	3.2
GDM	6	9.5
Gestational Hypertensions	13	20.6
HBsAg (+)	1	1.6
Pre-eclampsia and GDM	11	17.5
Preeclampsia	12	19
RVI	2	3.2

5.4 Social support related characteristics of the study participants

The table below showed that 39.6% of the study participants had a score of moderate level assessing social support score.

Table 4. Social support related characteristics of the study participants

Variable	Frequency	Percent
How many individuals are you so close to that you can rely on them in the event of a serious personal issue?		
None	8	2.1
1-2	130	33.4
3-5	233	59.9
>=5	18	4.6
How much interest and concern do people show in what you do?		
None	6	1.5
Uncertain	191	49.1
Little	18	4.6
Some	137	35.2
A lot	37	9.5

How easy is it to get practical help from others if you should need it?		
very difficult	5	1.3
Difficult	14	3.6
Possible	272	69.9
Easy	82	21.1
very easy	16	4.1
Social support assessing score		
Poor	201	51.7
Moderate	154	39.6
Strong	34	8.7

5.5 Obstetric related characteristics of the study participants

39.6% of the participants had their first pregnancy, 29.6% had a history of abortion, and 3% of the pregnancies were unintended and unsupported. Every participant had a caesarean section, and 44.2% of the babies were born between 39 and 40+6 weeks gestation, and 88.4% of the babies had normal birth weights.

Table 5. Obstetric related characteristics of the study participants

Variable	frequency	Percent
Intention of the pregnancy		
wanted and planned	366	94.1
unwanted and unplanned	12	3.1
wanted but unplanned	11	2.8
History of abortion or miscarriage		
Yes	115	29.6
No	274	70.4
Parity		
Primigravida	154	39.6
Primiparous	200	51.4
Multiparous	35	9
Mode of delivery		
CS	389	100
General health of the baby		
Poor	6	1.5
Good	383	98.5
Sex of the infant		
Male	218	56
Female	171	44
Baby birth weight		
<2500	27	6.9
2500-3999	344	88.4
≥4000	18	4.6

Gestational age at delivery		
<37	31	8.0
37-38^{+6}	99	25.4
39-40^{+6}	172	44.2
41-41^{+6}	61	15.7
≥42	26	6.7

5.5 The postpartum depression related characteristics of the study participants

According to the study's findings, 38% of women experienced postpartum depression, whereas 62% did not, as the figure below illustrates.

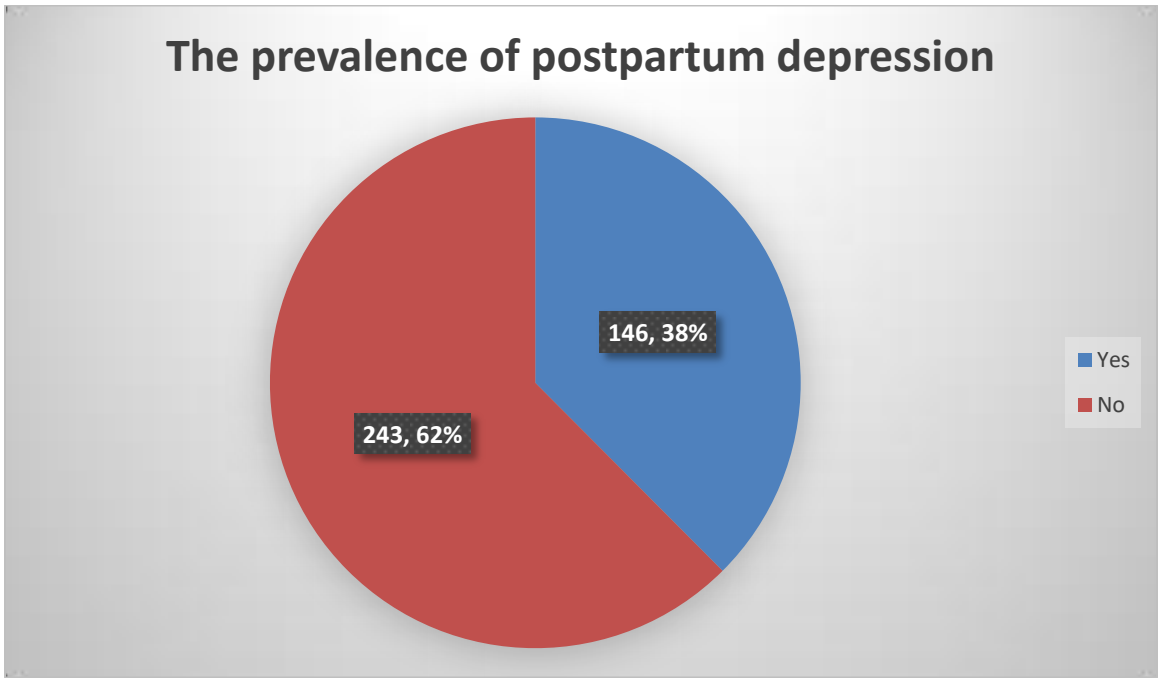

Figure 2. The prevalence of postnatal depression among postnatal women in the three teaching hospitals of AAU, Ethiopia.

In reference to the particular depression assessment instruments, 67.6% of the research participants consistently find the humorous side of things. Sixty-nine percent of study participants occasionally felt anxious or worried for no apparent reason, and seventy-one percent never placed needless blame on themselves when things went wrong. Sixty-six percent of study participants reported feeling uneasy or afraid for no apparent reason, and 1.8% reported having suicidal thoughts on occasion.

Table 4. the study participants response characteristics on postnatal depression.

Variable	Response	Frequency	Percent
I have been able to laugh and see the funny	Not at all	4	1
	Definitely not so much now	18	4.6

side of things	Not quite so much now	104	26.7
	As much as I always could	263	67.6
I have looked forward with enjoyment to things	Hardly at all	5	1.3
	Definitely less than I used to	19	4.9
	Rather less than I used to	78	20.1
	As much as I ever used	287	73.8
I have blamed myself unnecessarily when things went wrong	No, never	276	71
	Not very often	86	22.1
	Some of the time	27	6.9
I have been anxious or worried for no good reason	No, not at all	273	70.2
	Hardly ever	82	21.1
	Sometimes	27	6.9
	Very often	7	1.8
I have felt scared or panicky for no very good reason	Not at all	258	66.3
	Not much	101	26
	Sometimes	23	5.9
	Quite a lot	7	1.8
Things have been getting on top of me	No, I have been coping as well as ever	250	64.3
	No, most of the time I have coped quite well	105	27
	Yes, sometimes I haven't been coping as well as usual	23	5.9
	Yes, most of the time I haven't been able to cope at all	11	2.8
I have been so unhappy that I have had difficulty sleeping	Not at all	248	63.8
	Not very often	107	27.5
	Sometimes	27	6.9
	Most of the times	7	1.8
I have felt sad or miserable	Not at all	264	67.9
	Not very often	106	27.2
	Quite often	12	3.1
	Most of the time	7	1.8
I have been so unhappy that I have been crying	Never	316	81.2
	Occasionally	61	15.7
	Quite often	5	1.3
	Most of the time	7	1.8
The thought of harming myself has occurred to me	Never	366	94.1
	Hardly ever	13	3.3
	Sometimes	7	1.8
	Quite often	3	0.8

5.6 The determinant factor of postpartum depression

Based on bivariate logistic regression analysis, this study found that among women who gave birth by caesarean section, postpartum depression was associated with education level, income, desired sex of the baby, intention for pregnancy, parity, sex of the baby, and social support score. According to the results of the multivariate logistic regression, mothers aged 25–34 years were

51% less likely to experience postpartum depression than mothers aged 18–24 years (AOR=0.49, 95%CI=0.25, 0.95), and mothers who were illiterate were 1.4 times more likely to experience postpartum depression than mothers with college degrees and higher (AOR=1.4, 95%CI=1.29, 4.59).
study participants whose intention of pregnancy of wanted but unplanned were 5.3 times increase its postpartum depression compared to those of pregnancy intention of planned and supported (AOR=5.3, 95%CI=1.08, 26.64). Study participants of multiparous were 5.5times increase its postpartum depression (AOR=5.5, 95%CI=2.82, 10.64) and grand multiparous were 5.9 times increase its postpartum depression (AOR=5.9, 95%CI=2.41, 14.61). the odds of delivered female baby were 2.8times increase postpartum depression (AOR=2.8, 95%CI=1.74, 4.65) and the odds of having poor social support were 3.4times increase its postpartum depression compared to those of having strong social support (AOR=3.4, 95%CI=1.15, 10.28).

Table 5. The bivariate and multivariate logistic regression of association between independent variable and postpartum depression among postpartum women in the three teaching hospitals of AAU, 2025.

Variable	Postpartum depression		p-value	COR with 95%CI	P-value	AOR with 95%CI
	Yes	No				
Age in years						
18-24	32	52	1		1	
25-34	99	177	0.711	0.91(0.55, 1.50)	0.036	**0.49(0.25, 0.95)**
≥35	15	14	0.202	1.7(0.74, 4.08)	0.116	0.42(0.15, 1.23)
Education						
Illiterate	11	8	0.009	3.8(1.39, 10.14)	0.046	**1.4(1.29, 4.58)**
Primary	69	108	0.027	1.7(1.06, 2.87)	0.932	0.97(0.50, 1.88)
high school	32	34	0.003	2.6(1.38, 4.79)	0.351	1.4(0.66, 3.12)
collage and above	34	93	1		1	
House hold monthly income						
<5000	17	17	0.049	2.2(1.01, 4.99)	0.590	1.3(0.48, 3.65)
5000-10000	88	131	0.119	1.5(0.90, 2.52)	0.117	1.7(0.88, 3.19)
10000-15000	12	30	0.789	0.89(0.40, 1.99)	0.231	0.56(0.22, 1.44)
>15000	29	65	1		1	
Satisfied with the current marital relation ship						
Yes	128	226	1		1	
no	18	17	0.079	1.9(0.93, 3.76)	0.694	1.2(0.47, 3.09)
Desired sex of the baby						
Yes	126	226	1		1	
no	20	17	0.032	2.1(1.07, 4.18)	0.177	1.9(0.74, 4.99)
Intention of the pregnancy						
wanted and planned	131	235	1		1	
unwanted and unplanned	7	5	0.122	2.5(0.78, 8.07)	0.156	2.8(0.68, 11.58)
wanted but unplanned	8	3	0.022	4.8(1.25, 18.34)	0.040	**5.3(1.08, 26.64)**
Parity						
One	33	121	1		1	

Two-four	94	106	0.000	3.3(2.02, 5.23)	0.000	**5.5(2.82, 10.64)**
Five and above	19	16	0.000	4.4(2.02, 9.39)	0.000	**5.9(2.41, 14.61)**
Sex of the baby						
Female	84	87	0.000	2.4(1.59, 3.69)	0.000	**2.8(1.74, 4.65)**
male	62	156	1		1	
Social support						
Poor	75	126	0.031	2.8(1.09, 7.02)	0.027	**3.4(1.15, 10.28)**
Moderate	65	89	0.010	3.4(1.33, 8.71)	0.120	2.5(0.78, 8.04)
Strong	6	28	1		1	

6 Discussion

In this study, 38% of women who gave birth by caesarean section (CS) had postnatal depression. This conclusion is in close agreement with research conducted by Mulugeta and colleagues (37.4%) and from Nigeria (34.6%) (20) (14). suggesting that the prevalence of postpartum depression is similar in other contexts.

The prevalence found in this study, however, is significantly higher than that found in a number of other nations and regions, such as India (26.3%) (16), Vientiane Capital, Lao People's Democratic Republic (31.8%) (17), Greece (13.6%) (18), South Africa (21), Cameroon (31.8%) (24), maternity teaching hospitals in Khartoum state (9.2%) (12), Uganda (27.1%) (26), Central Region Eritrea (7.4%) (27), northern Ethiopia (28), Debre Berhan Referral Hospital and health centres (15.6%) (29), Gondar town, Northwest Ethiopia (25%) (30), and Addis Ababa (19.7%) (31). This discrepancy can be the result of variations in study methods, screening instruments, healthcare systems, and social elements. In contrast to the results from Rezaie Maternal Hospital in Herat province, Afghanistan (19), Cameroon (45.8%), the prevalence in this study was lower (23). These discrepancies may result from inequalities in healthcare access, economic standing, or maternal support networks.

According to this study, women between the ages of 25 and 34 were 51% less likely than those between the ages of 18 and 24 to experience postpartum depression (AOR = 0.49, 95% CI: 0.25–0.95). A study among Sudanese women (12) supports this finding and found that younger moms were more likely to have postpartum depression. This could be because younger mothers are more likely to have less life experience, be less emotionally mature, and have less social or financial support, all of which can make them more susceptible to postpartum depression.

According to the study, moms who were illiterate were 1.4 times more likely to experience postpartum depression than mothers who had completed college or more (AOR = 1.4, 95% CI: 1.29–4.59). This result is in line with a Malawian study (6) that found a robust correlation between a higher risk of postpartum depression and lower educational attainment. This can be the result of low educational attainment, which can restrict access to health information, lower mental health awareness, and make it more difficult to get appropriate care or assistance. Furthermore, low self-esteem, poor health-seeking behaviour, and socioeconomic deprivation are frequently associated with illiteracy. They could all have a role in postpartum depression development.

Participants in this study who had unplanned but desired pregnancies were 5.3 times more likely to experience postpartum depression than those who had both planned and supported pregnancies (AOR = 5.3, 95% CI: 1.08–26.64). This result is consistent with other research done among the Lao people (17), Greeks (18), Eritreans (27), and Mulugeta et al. (2014). This could be because unintended pregnancies, even when they are desired, can bring about logistical, emotional, and financial stressors that can be too much for a mother to handle during the postpartum phase.

According to this study, compared to primiparous women, multiparous women had a 5.5-fold higher risk of postpartum depression (AOR = 5.5, 95% CI: 2.82–10.64), and grand multiparous women were even more at risk, with a 5.9-fold higher chance of postpartum depression (AOR = 5.9, 95% CI: 2.41–14.61). This result is consistent with Wubetu et al.'s work (29). Multiple caring obligations, financial pressure, a lack of social support, or problems from prior pregnancies and deliveries could all contribute to multiparous and grand multiparous women's increased risk. These women may also struggle to balance their responsibilities as mothers and housewives, which can lead to psychological distress in the postpartum period. They may also have less time for self-care.

According to the study, women who gave birth to a girl were 2.8 times more likely to experience postpartum depression than women who gave birth to a boy (AOR = 2.8, 95% CI: 1.74–4.65). This result is consistent with research done in Ethiopia (31). Due to customs around inheritance and traditional beliefs, there may be a preference for male offspring in various cultural situations. Because of this, giving birth to a girl may result in dissatisfaction, pressure from family, or less support from partners or family, all of which might make the mother more susceptible to postpartum depression.

According to this study, postpartum depression was 3.4 times more common in women with little social support than in those with high social support (AOR = 3.4, 95% CI: 1.15–10.28). This result is consistent with earlier research from India (16), Cameroon (23), Uganda (26), and the previously mentioned Eritrea (27). In the emotionally and physically taxing postpartum phase, social support—whether from partners, family, or the community—acts as a buffer. Without this kind of support, women may feel alone, overburdened, or incapable of handling the responsibilities of caring for a newborn, all of which can greatly raise their risk of developing depression.

7. Conclusion

A significant public health concern was raised by this study's finding that 38% of women who gave birth by caesarean section had postnatal depression (PPD). Significant correlations were found between a number of parameters and higher probabilities of PPD. Compared to women aged 18–24, those aged 25–34 had a lower risk of developing PPD. On the other hand, high parity (both multiparous and grand multiparous), illiteracy, unwanted yet desired pregnancies, giving birth to a girl, and having little social support were all linked to an increased risk of postpartum depression.

8. Recommendation

In light of the study's findings, the following suggestions are put up to lessen the incidence and consequences of postpartum depression (PPD), especially for women who give birth by caesarean section:

- Strengthen antenatal and postnatal counseling services with a focus on mental health awareness, emotional support, and early detection of depressive symptoms.
- Expand access to education for girls and women, as higher educational attainment is associated with lower risk of PPD. Health education campaigns should also target illiterate mothers to improve awareness and coping strategies.
- Encourage planned and supported pregnancies through effective family planning services, preconception counseling, and male partner involvement.
- Mobilize community and family-based support systems to provide emotional, physical, and financial assistance to postpartum women, particularly those with limited support.
- Conduct awareness programs to challenge and reduce gender-based stigma and societal pressure surrounding the birth of female children, which can contribute to maternal stress and depression.

9. Limitation

- Hospital-based design limits generalizability to the community
- Cross-sectional nature cannot establish cause–effect
- Timing of assessment may miss some cases

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Annexes

Annex 1: Participants' information sheet

_____ is my name. Dr. Zebiba Ashenafi is conducting research for the Department of Obstetrics and Gynaecology at Addis Ababa University in order to partially fulfil the requirements for a Speciality Certificate in Obstetrics and Gynaecology, and I am working as a data collector for this study.

This study aims to assess the prevalence and associated factors of postpartum depression among women who will gave birth by cesarean section visiting postnatal clinic at the three teaching hospitals of Addis Ababa university. Regarding the questions, we would appreciate your candid opinion.

Procedure: We are inviting you to participate in this study in order to determine the prevalence and contributing factors of postpartum depression among women who had caesarean sections. You must comprehend our project and sign to indicate your willingness to participate. After that, the data collectors will ask you to respond.

Risk and/or Discomfort: You might experience some discomfort from taking part in this research project, especially if you feel like you're wasting your time (roughly fifty minutes). There is very little risk involved in taking part in this study.

Benefits: Although you might not directly benefit from taking part in this study, your involvement will probably aid in our evaluation of the prevalence and contributing factors of postpartum depression in women.

Incentives: There won't be any compensation for your participation in this project.

Confidentiality and Anonymity: We will maintain the confidentiality of the data we gather for this study. The study will store the information that was gathered about you in a file that will be assigned a code number instead of your name. Only the principal investigator will be able to determine which number corresponds to which name, and this information will be kept under strict confidentiality.

Right to Refuse or Withdraw: You are completely free to decline to take part in this study (you can choose not to answer some or all of the questions). If you choose not to, it will not have an impact on the medical care you receive at any medical facilities. Additionally, you are free to leave this study whenever you want, without compromising your rights as a facility client.

Persons to contact: You can get in touch and ask questions whenever you'd like.

Dr Zebiba Ashenafi: phone number: +251927720712

Annex 2: Consent form

Annex 2.1: Consent form in English

I, the undersigned, have read and comprehended that determining the prevalence and contributing factors of PPD is the aim of this specific research project. The information I provided will be used exclusively for this study, and both my identity and the information I provide will be kept private. Additionally, I've been told that I can stop answering a question at any point during the process, decline to take part in the study, or refuse to answer a question in which I have no interest. As a result, I willingly consented to take part in the study.

Signature of the participant: ----------
Interviewer signature: ----------
Date: ----------

Annex 3: Questionnaire

Annex 3.1: Questionnaire in English version

This is the survey that will be utilised for the research project called,
"Prevalence and associated factors of postpartum depression among post cesarean women visiting postnatal clinic

001. code _____

002. date_____

Please encircle, fill or tick your responses in front of the questions presented below.
Part I: Socio-demographic information

Q NO	Question item	Coding categories/alternative
101	Age in years	----------
102	Ethnicity	----------
103	Religion	----------
104	Marital status	• Single • Married • Divorced • Widowed
105	Educational status	• Can't read/write • Can read and write • Primary school • High school • College diploma +
106	Job/employment status	• Farmer • Merchant • Civil servant • Private employed • Unemployed • Housewife • Student • Day labourer • Other (specify----------)
107	Average household monthly income	……ETB

108	Work-family conflict within the last 1 year	• Yes (if yes specify_____) • No
109	Do you think you are satisfied with your current marital relationship:	• Yes • No
110	History of intimate partner violence	• Yes • No
111	Death of family member or close relative in the past 3 months	• Yes • No
112	Desired sex of the baby	• Yes • No
113	Breast feeding	• Yes • No
114	Baby crying excessively	• Yes • No

Part II: Obstetric and related variables

Q. No	Question item	Response
201	Intention of the pregnancy	• Wanted and planned • Unwanted and unplanned • Wanted but unplanned
202	History of miscarriage or stillbirth	• Yes • No
203	Parity	_____
204	Mode of delivery of current pregnancy	• Spontaneous vaginal delivery • Instrumental • Caesarean delivery
205	General health status of the baby	• Good • Poor
206	Sex of the infant	• Male • Female
207	Birth weight	_____
208	Gestational age at delivery	_____

209	History of treatment for mental illness including depression	• Yes • No
210	History of chronic medical illness	• Yes • No
211	History of substance use	• Yes - Type_____ - Duration_____ - Amount per week_____ • No
212	Current pregnancy illness	• Yes (if yes specify) _____ No

Part III: Social support assessing items

Q.no	Question item	Categories/alternative
301	How many people are you so close to that you can count on them if you have great personal problem?	• None • 1-2 • 3-5 • 5+
302	How much interest and concern do people show in what you do?	• None • Little • Uncertain • Some • A lot
303	How easy is it to get practical help from others if you should need it?	• Very difficult • Difficult • Possible • Easy • Very easy

Part IV: THE EDINBURGH POSTNATAL DEPRESSION SCALE

As you have recently had a baby, we would like to know how you are feeling. Please tick the box of the answer which comes closest to how you have felt **IN THE PAST 7 DAYS**, not just how you feel today.

Questions	Possible answers
401. I have been able to laugh and see the funny side of	• Not at all

things:	• Definitely not so much now • Not quite so much now • As much as I always could
402. I have looked forward with enjoyment to things:	• Hardly at all • Definitely less than I used to • Rather less than I used to • As much as I ever did
403. I have blamed myself unnecessarily when things went wrong:	• Yes, most of the time • Yes, some of the time • Not very often • No, never
404. I have been anxious or worried for no good reason:	• Yes, very often • Yes, sometimes • Hardly ever • No, not at all
405. I have felt scared or panicky for no very good reason:	• Yes, quite a lot • Yes, sometimes • No, not much • No, not at all
406. Things have been getting on top of me:	• No, I have been coping as well as ever • No, most of the time I have coped quite well • Yes, sometimes I haven't been coping as well as usual • Yes, most of the time I haven't been able to cope at all
407. I have been so unhappy that I have had difficulty sleeping:	• Yes, most of the time • Yes, sometimes • Not very often • No, not at all
408. I have felt sad or miserable:	• Yes, most of the time • Yes, quite often

	• Not very often • No, not at all
409. I have been so unhappy that I have been crying:	• Yes, most of the time • Yes, quite often • Only occasionally • No, never
410. The thought of harming myself has occurred to me:	• Yes, quite often • Sometimes • Hardly ever • Never

Thank your respondent!

Name of data collector----------

Sig----------

date ----------

Name of supervisor----------

Sig----------

date----------

Annex 3.2: የአማርኛ እትም መጠይቅ

ድህረ ወሊድ ክሊኒክ በሚጎበኙ ሴቶች ላይ የድህረ ወሊድ ድብርት መስፋፋት እና ተያያዥ ምክንያቶች ለጥናቱ የሚውለው ይህ መጠይቅ ነው።

001.: ኮድ _____

002. ቀን _____

እባክው ለተጠቀሰት ጥያቄዎች መልስውን በማክበብ፣ በመሙላት፣ ምልክት በማድረግ ያስቀምጡ::

ክፍል 1: የሶሺዮ-ሕዝብ መረጃ

የጥያቄ ቁጥር	የጥያቄ አይነት	ምድቦች / አማራጭ
101	እድሜ	----------
102	ብሔር	----------
103	ሀይማኖት	----------
104	የጋብቻ ሁኔታ	☐ ያለገባች ☐ ያገባች ☐ የተፋታች ☐ ባል የሞተባት
105	የትምህርት ሀኔታ	☐ ማንበብ/መፃፍ ማትችል ☐ ማንበብ/መፃፍ ምትችል ☐ 1ኛ ደረጃ ት/ቤት ☐ 2ኛ ደረጃ ት/ቤት ☐ ኮሌጅና ከዚያ በላይ
106	ሥራ	☐ ገበሬ ☐ ነጋዴ ☐ ተቀጣሪ ☐ ስራ የሌለው ☐ የቤት እመቤት ☐ ተማሪ ☐ የቀን ሰራተኛ ☐ ሌላ ካለ --------
107	የወር ገቢ(በብር)	----------
108	ባለፈው 1 ዓመት ውስጥ የስራ እና የቤተሰብ ግጭት ነበር?	☐ አዎ (አዎ ከሆነ ይግለጹ_____) ☐ አይደለም
109	ባለሽ ትዳር ደስተኛ ነሽ ከሌለሽስ ትዳር በሱ ደስተኛ ነሽ	☐ አዎ ☐ አይደለም
110	የቅርብ አጋር ጥቃት ደርሶብሽ ያዉቃል	☐ አዎ ☐ አይደለም
111	በ 3 ወር ጊዜ ውስጥ የቤተሰብ	☐ አዎ

	ወይም የቅርብ ዘመድ ሞት ነበር	☐ አይደለም
112	የፈለግሽውን ፆታ ነዉ የወለድሽዉ	☐ አዎ ☐ አይደለም
113	ጡት ታጠቢያለሽ	☐ አዎ ☐ አይደለም
114	አዲስ የተወለደዉ ህፃን ከተለመደዉ በላይ ያለቅሳል	☐ አዎ ☐ አይደለም

ክፍል 2: የማህፀን እና ተዛማጅ ተለዋዋጮች

የጥያቄ ቁጥር	የጥያቄ አይነት	ምላሽ
201	የእርግዝናዉ ሁኔታ	☐ የተፈለገ እና የታቀደ ☐ ያልተፈለገ እና ያልታቀደ ☐ የተፈለገ ግን ያልታቀደ
202	ውርጃ ወይም ሞቶ የተወለደ ልጅ አለሽ	☐ አዎ ☐ አይደለም
203	ስንት በህይወት የተወለደ ልጅ አለሽ	----------
204	የአወላድ ዘዴ	☐ ተፈጥራዊ ☐ በመሳሪያ እገዛ ☐ በኦፕራስዮን
205	አጠቃላይ የልጁ ጤና ሁኔታ	☐ ጥሩ ☐ መጥፎ
206	የልጁ ፆታ	☐ ወንድ ☐ ሴት
207	የልጁ የልደት ክብደት	----------
208	የተወለደበት የእርግዝና ጊዜ	----------
209	ከዚህ በፊት የአእምሮ ህመም ድብርትንም ጨምሮ ገጥሞሽ ያዉቃል	☐ አዎ ☐ አይደለም
210	ስር የሰደደ የህክምና ህመም ታሪክ አለሽ	☐ አዎ ☐ አይደለም
211	የሱስ ተጠቃሚ ነሽ	☐ አዎ - ዓይነት_____ - መጠቀም ከጀመርሽ ምን ይህል ጊዜ ሆነሽ_____ - መጠን በሳምንት ☐ አይደለም

ክፍል 3: የማህበራዊ ድጋፍ ግምገማ ንጥል ነገሮች

የጥያቄ ቁጥር	የጥያቄ አይነት	ምድቦች / አማራጭ
301	ትልቅ የግል ችግር ካጋጠመህ በእነሱ ላይ እምነት የመጥልባቸው ስንት ሰዎች በቅርብህ አሉ?	☐ ምንም ☐ 1-2 ☐ 3-5 ☐ 5+
302	ሰዎች በምታደርገው ነገር ምን ያህል ፍላጎት እና አሳቢነት ያሳያሉ?	☐ ምንም ☐ ትንሽ ☐ እርግጠኛ ያልሆነ ☐ አንዳንድ ☐ ብዙ
303	ካስፈለገው ተግባራዊ እርዳታ ከሌሎች ማግኘት ምን ያህል ቀላል ነው?	☐ በጣም ከባድ ☐ አስቸጋሪ ☐ ይቻላል ☐ ቀላል ☐ በጣም ቀላል

ክፍል 4: የኤዲንበርግ የድህረ ወሊድ ድብርት መጠን

በቅርቡ ልጅ እንደወለድክ, ምን እንደሚሰማህ ማወቅ እንፈልጋለን. እባኮትን የመልስ ሳጥኑ ላይ ምልክት ያድርጉ። በአለፉት 7 ቀናት ውስጥ ከተሰማዎት ስሜት ጋር ቅርብ ነው እንጂ ዛሬ ያለዎትን ስሜት ብቻ አይደለም።

ጥያቄዎች	ሊሆኑ የሚችሉ መልሶች
401. መሳቅ እችላለሁ እና የነገሮችን አስቂኝ ገጽታ ለማየት እችላለሁ	☐ በጭራሽ ☐ በእርግጠኝነት አሁን በጣም ብዙ አይደለም ☐ አሁን በጣም ብዙ አይደለም ☐ ሁልጊዜ
402. ነገሮችን በደስታ በጉጉት እጠብቃለሁ	☐ በጭራሽ ☐ በእርግጠኝነት ከበፊቱ ያነሰ ☐ ከበፊቱ ያነሰ ☐ ከመቼውም ጊዜ በላይ
403. ነገሮች ሲበላሹ ራሴን ከሚገባዉ በላይ እወቅሰላዉ	☐ አዎ ብዙ ጊዜ ☐ አዎ አንዳንድ ጊዜ ☐ ከስንት አንዴ ☐ ምንም ፈጽሞ
404. ያለ በቂ ምክንያት እረበሻለዉ ወይም እጨነቃለዉ	☐ አዎ ብዙ ጊዜ ☐ አዎ አንዳንዴ ☐ ከስንት አንዴ

	☐ አይ በጭራሽ
405. ያለ በቂ ምክንያት ፍርሃት ወይም ድንጋጤ ይሰማኛል	☐ አዎ በጣም ብዙ ጊዜ ☐ አዎ አንዳንዴ ☐ ከስንት አንዴ ☐ አይ በጭራሽ
406. ነገሮች በላዩ ላይ ሽክም ይሆኑቢኛል/ይደራረቡብኛል	☐ አይ፣ እኔ እንደቀድሞው በደንብ እቋቋማለዉ ☐ አይ ብዙ ጊዜ በደንብ እቋቋማለዉ ☐ አዎ፣ አንዳንድ ጊዜ እንደተለመደው መቋቋም አልችልም ☐ አዎ ብዙ ጊዜ መቋቋም አልችልም
407. በጣም ደስተኛ ስላልሆንኩ መተኛት እቸገራለዉ	☐ አዎ ብዙ ጊዜ ☐ አዎ አንዳንዴ ☐ ከስንት አንዴ ☐ አይ በጭራሽ
408. ሀዘን ወይም ተራነት ስሜት ይሰማኛል	☐ አዎ ብዙ ጊዜ ☐ አዎ አንዳንዴ ☐ ከስንት አንዴ ☐ አይ በጭራሽ
409. በጣም ስለሚከፋኝ አለቅሳለዉ	☐ አዎ ብዙ ጊዜ ☐ አዎ አንዳንዴ ☐ ከስንት አንዴ ☐ ምንም ፈጽሞ
410. ራሴን የመጉዳት ሀሳብ ወደ እኔ ይመጣል	☐ አዎ ብዙ ጊዜ ☐ አንዳንዴ ☐ ከስንት አንዴ ☐ በጭራሽ

ምላሽ ስጪዎን እናመሰግናለን!

የመረጃ ሰብሳቢው ስም ---------- **የተቆጣጣሪው ስም** ----------

ፊርማ---------- **ፊርማ**----------

ቀን ---------- . **ቀን**----------