



## ASSESSMENT OF POSTPARTUM DEPRESSION AND ITS ASSOCIATED RISK FACTORS AMONG POSTNATAL WOMEN IN RURAL TAMILNADU

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### STRUCTURED ABSTRACT

**Background:** Postpartum depression (PPD) is a common but often underdiagnosed mental health condition that affects women during the postnatal period. It poses significant implications for maternal wellbeing, infant development, and family functioning. Understanding its prevalence and predictors is essential for improving maternal mental health interventions, especially in rural populations where healthcare access and psychosocial support are limited.

**Objectives:** To determine the **prevalence** of postpartum depression and to identify its **associated risk factors and predictors** among postpartum women in rural Tamil Nadu.

**Methods:** A **community-based cross-sectional study** was conducted among **600 postpartum women** residing in rural areas of Tamil Nadu. Data were collected using a semi-structured questionnaire assessing sociodemographic, obstetric, and psychosocial variables. Postpartum depression was screened using the **Edinburgh Postnatal Depression Scale (EPDS)**, with a score  $\geq 13$  indicating probable depression. Statistical analyses included chi-square tests for association and multivariate **logistic regression** to identify independent predictors of PPD.

**Results:** The **prevalence of probable postpartum depression** was **36%**, while 25% had possible depression and 39% had minimal or no symptoms. The **mean EPDS score** was **11.1  $\pm$  4.3**. Significant associations were found with **low social support** ( $p < 0.001$ ), **poor partner support** ( $p < 0.001$ ), **antenatal complications** ( $p = 0.008$ ), **domestic violence** ( $p < 0.001$ ), and **history of mental illness** ( $p = 0.004$ ). Logistic regression identified the following as **independent predictors** of PPD: **Domestic violence** (AOR = 7.69,  $p < 0.001$ ); **Low social support** (AOR = 4.39,  $p < 0.001$ ); **Poor partner support** (AOR = 3.74,  $p = 0.004$ ); **History of mental illness** (AOR = 5.54,  $p = 0.002$ ); **Antenatal complications** (AOR = 2.32,  $p = 0.031$ ); **Unplanned pregnancy** (AOR = 2.86,  $p = 0.019$ ).

**Conclusions:** Postpartum depression affects over one-third of mothers in rural Tamil Nadu, representing a substantial mental health burden. Psychosocial stressors such as **domestic violence**, **low social and partner support**, and **previous mental illness** were the most powerful determinants.

Routine mental health screening and early psychosocial interventions during antenatal and postnatal care are essential to mitigate the impact of PPD on mothers and infants.

**Keywords:** *Postpartum depression; EPDS; Social support; Partner support; Domestic violence; Mental health; Rural women; Tamil Nadu; Maternal health; Psychosocial predictors*

## INTRODUCTION

Postpartum depression (PPD) is a major public health concern that affects women during one of the most critical periods of their lives—the transition to motherhood. It is defined as a non-psychotic depressive episode that typically occurs within the first few weeks to six months following childbirth. The condition is characterized by persistent sadness, loss of interest, fatigue, irritability, and feelings of guilt or inadequacy, often interfering with maternal bonding and infant care [1, 2]. Globally, the prevalence of postpartum depression ranges between 10% and 20% [3, 4], but in low- and middle-income countries, including India, reported rates are substantially higher, varying from 15% to 40% depending on cultural, social, and economic contexts [5, 6]. Despite its high prevalence, PPD often remains underdiagnosed due to stigma, lack of awareness, and limited mental health screening in maternal healthcare settings.

In the Indian context, postpartum depression is influenced by a complex interplay of biological, psychological, and sociocultural factors. Previous studies have identified low socioeconomic status, poor spousal and family support, unplanned pregnancy, obstetric complications, and gender preference for the newborn as significant contributors to depressive symptoms. Psychosocial factors, including domestic violence, marital discord, and lack of emotional support, have emerged as stronger predictors of PPD than medical or obstetric conditions [7-10].

Early detection and timely intervention for postpartum depression are crucial, as untreated maternal depression can have profound consequences on the physical and psychological well-being of both the mother and child. It is associated with poor maternal self-care, impaired mother-infant attachment, reduced breastfeeding duration, and long-term cognitive and behavioral effects on the child. The Edinburgh Postnatal Depression Scale (EPDS) is one of the most widely used screening tools for identifying depressive symptoms during the postnatal period. Its ease of administration, cultural adaptability, and validated use in Indian populations make it suitable for both clinical and community-based research [11].

Given these considerations, the present study was undertaken to assess the prevalence of postpartum depression among women in rural tamilnadu, using the EPDS, and to identify the sociodemographic, obstetric, and psychosocial factors associated with depressive symptoms in the postnatal period.

## METHODOLOGY

The present study adopted a cross-sectional, quantitative design to assess the prevalence and determinants of postpartum depression (PPD) among women within six weeks after delivery, using the Edinburgh Postnatal Depression Scale (EPDS) as the principal screening instrument. A total of 600 postpartum mothers were recruited through purposive sampling from SVMCHRI, Elayampalayam, Tamilnadu, India. Inclusion criteria comprised women aged 18 to 40 years who had delivered a live infant within the past six weeks and provided informed consent to participate. Women with a history of severe psychiatric illness, cognitive impairment, or obstetric complications necessitating critical care were excluded.

Ethical approval was obtained from the Institutional Ethics Committee, and all participants provided written informed consent prior to participation. Confidentiality and anonymity were ensured throughout the study process. Data were collected through a structured interviewer-administered questionnaire divided into four sections: sociodemographic characteristics, obstetric and neonatal history, psychosocial parameters, and mental health screening using the EPDS. Sociodemographic variables included age, education, occupation, socioeconomic status, and marital status. Obstetric parameters captured parity, mode of delivery, pregnancy planning, and the presence of antenatal complications. Psychosocial factors such as social support, partner support, domestic violence, and

previous history of mental illness were assessed using standardized and contextually adapted questions. The EPDS, a 10-item validated screening tool for depressive symptoms, was administered in both English and Kannada versions. Each item was scored from 0 to 3, yielding a total score ranging from 0 to 30. A cutoff score of  $\geq 13$  was used to identify probable depression.

All data were entered into a structured database and analyzed using SPSS (version 25.0). Descriptive statistics were employed to summarize baseline characteristics, with continuous variables expressed as mean  $\pm$  standard deviation and categorical variables as frequencies and percentages. Bivariate analysis using the Chi-square test was performed to determine associations between categorical predictors and PPD categories based on EPDS scores. Variables showing  $p$ -values  $< 0.2$  in bivariate analysis were entered into a multivariate logistic regression model to identify independent predictors of postpartum depression. Statistical significance was set at  $p < 0.05$ .

## RESULTS

A total of 600 postpartum women from rural Tamil Nadu participated in the study (Table 1). The majority were aged 25–29 years (35%), followed by those aged 30–34 years (28%). The mean gestational age at delivery was  $38.3 \pm 1.4$  weeks. Nearly half of the participants had attained secondary-level education (46%), while 27% had tertiary education and only 6% were uneducated. Regarding occupational status, 40% were homemakers, 32% unemployed, and 28% employed outside the home. In terms of parity, 45% were multiparous, 40% primiparous, and 15% grand multiparous. The mode of delivery was vaginal in 55% and cesarean section in 45% of cases, consistent with the increasing institutional delivery trend in the region.

Based on the Edinburgh Postnatal Depression Scale (EPDS) (Table 2), the mean score among participants was  $11.1 \pm 4.3$ . Overall, 36% of mothers screened positive for probable postpartum depression ( $EPDS \geq 13$ ), while 25% had possible depression (scores 10–12), and 39% showed no or minimal depressive symptoms ( $\leq 9$ ). This indicates that nearly two in five rural mothers exhibited significant depressive symptoms in the postnatal period.

As shown in Table 3, the most frequent risk factors among mothers with probable PPD included low social support (18%), poor partner support (16%), and antenatal complications (16%). A notable 13% of mothers reported exposure to domestic violence, while 7% had a prior history of mental illness. The analysis in Table 4 demonstrated statistically significant associations between postpartum depression and key psychosocial and clinical factors. Low social support showed a strong relationship, with 72.1% of women in this group scoring for probable PPD ( $p < 0.001$ ). Similarly, poor partner support was significantly associated ( $p < 0.001$ ), with 62.1% of women reporting depressive symptoms. Women with antenatal complications had higher rates of depression (54.5%,  $p = 0.008$ ). Exposure to domestic violence was one of the most potent correlates, with 71.8% of affected women exhibiting probable PPD ( $p < 0.001$ ). A history of mental illness also predicted higher risk (70%,  $p = 0.004$ ). These findings highlight the interplay between psychosocial stressors and maternal mental health in rural Tamil Nadu.

Multivariate logistic regression (Table 5) identified domestic violence, low social support, and history of mental illness as the strongest independent predictors of postpartum depression. Domestic violence increased the odds of PPD nearly eightfold (AOR = 7.69, 95% CI: 2.84–12.15,  $p < 0.001$ ). Women with low social support were over four times more likely to develop depression (AOR = 4.39, 95% CI: 1.83–9.27,  $p < 0.001$ ). Poor partner support (AOR = 3.74,  $p = 0.004$ ), history of mental illness (AOR = 5.54,  $p = 0.002$ ), and antenatal complications (AOR = 2.32,  $p = 0.031$ ) were also significant predictors. Additionally, unplanned pregnancy emerged as a modest but notable risk (AOR = 2.86,  $p = 0.019$ ).

## DISCUSSION

The present study assessed the prevalence and determinants of postpartum depression among 600 postpartum women residing in rural areas of Tamil Nadu. The findings indicate that more than one-third of participants (36%) experienced probable postpartum depression (PPD), while 25% had possible depression and 39% reported none or minimal depressive symptoms. The mean EPDS

score was  $11.1 \pm 4.3$ , suggesting a considerable emotional health burden during the postpartum period. Sociodemographically, the majority of women were aged between 25–29 years (35%), reflecting the typical reproductive age group. Most participants had secondary education (46%), and 40% were homemakers, indicating limited formal employment opportunities in the rural context. Almost 45% were multiparous, and 55% delivered vaginally, whereas 45% underwent cesarean section. These characteristics represent the typical maternal profile of the rural Tamil Nadu population and provide the contextual background for interpreting depression risk. In comparison, Sri Kiruba Nandini [12]’s study included 204 postpartum women, predominantly well-educated (99.5%) and from upper socioeconomic status (87.8%). Sita V.K [13]. included 56 women, most of whom were aged 20–30 years (87.8%), from nuclear families (61.5%), and of Hindu faith (80%). Shriram V [14]. evaluated 365 women with a mean age of 24.5 years, where 92.3% were literate and 95.6% were housewives, reflecting a largely homemaker population with strong institutional delivery coverage (97.8%).

### Prevalence and Pattern of Postpartum Depression

The observed prevalence of probable PPD (36%) in the present study highlights that postpartum depression is a significant public health concern among rural mothers. The findings suggest that a substantial proportion of women experience psychological distress that often goes undetected or untreated in primary care settings. The relatively high prevalence also reflects the combined influence of psychosocial vulnerability, domestic violence, and obstetric complications on maternal mental health in rural communities. In the study done by Sri Kiruba Nandini [12], the prevalence of PPD was 13.7% (28 of 204 women), with depression more common among employed women, primiparous mothers, and those with unplanned pregnancies. In the study by Sita V.K [13]., the prevalence was 19.23%, with 14.1% having major depression requiring clinical attention. The lower rates compared to the present study may be attributed to higher education levels and better healthcare access. Shriram V [14]. reported an even lower prevalence of 11% ( $EPDS \geq 10$ ) and 7.4% major depression ( $EPDS \geq 13$ ), where 42.5% had a prior history of depression, and most symptoms began within the first three days postpartum. Similarly, Nidheesha C [17].V. reported that 21.4% of mothers experienced depressive symptoms, while 78.6% were symptom-free, consistent with milder prevalence in better-resourced or semi-urban settings. Conversely, Singh R [15]. observed a much higher prevalence (54.94%) of depression at initial screening, though most cases (81.5%) resolved spontaneously by the four-week follow-up, suggesting transient mood disturbance in many. Lanjewar S [16]. reported a 26.3% prevalence, emphasizing psychosocial contributors rather than demographic factors. Overall, these studies demonstrate that postpartum depression prevalence across Indian settings ranges between 11% and 55%, influenced largely by education, socioeconomic status, social support, and contextual stressors.

### Association Between Risk Factors and Depression

The present study demonstrated statistically significant associations between key psychosocial and obstetric factors and postpartum depression. Low social support was the most influential factor, with 72.1% of affected women showing probable PPD ( $p < 0.001$ ). Poor partner support was also strongly linked, with 62.1% of these women scoring above the threshold ( $p < 0.001$ ). Other important correlates included antenatal complications ( $p = 0.008$ ), domestic violence ( $p < 0.001$ ), and a prior history of mental illness ( $p = 0.004$ ). These findings emphasize that emotional and relational stressors have a greater impact on postpartum mental health than demographic or obstetric characteristics. Comparable results were reported in several Indian studies. In the study by Sri Kiruba Nandini [12], postpartum depression was significantly associated with unplanned pregnancy, poor spousal support, strained family relationships, lack of parental support, and NICU admission of the newborn ( $p < 0.01$ ). Similarly, Sita V.K [13]. identified significant associations with educational status, socioeconomic class, and parity ( $p < 0.05$ ), with depression more frequent among middle-income and multigravida women. In contrast, Shriram V [14]. found no significant association between demographic variables and PPD but reported higher prevalence among women with

antenatal anemia, female infants, and vaginal deliveries ( $p < 0.05$ ). Women in that study commonly cited poverty, family conflict, and lack of support as reasons for distress. Singh R [15]. found previous miscarriage to be a statistically significant correlate ( $p = 0.042$ ), while relationship quality and education showed non-significant but relevant trends. Finally, Lanjewar S [16]. reported that low social support (AOR = 3.04) and poor partner support (AOR = 4.98) were the strongest correlates of PPD, whereas demographic characteristics were not significant. Overall, the findings across studies consistently reinforce that psychosocial factors—particularly social isolation, partner neglect, and family tension—are more critical determinants of postpartum depression than age, education, or obstetric profile.

### Predictors of Postpartum Depression

Multivariate analysis in the present study identified several independent predictors of postpartum depression (EPDS  $\geq 13$ ). The strongest predictor was domestic violence, which increased the likelihood of depression nearly eightfold (AOR = 7.69,  $p < 0.001$ ). Other significant predictors included low social support (AOR = 4.39,  $p < 0.001$ ), poor partner support (AOR = 3.74,  $p = 0.004$ ), history of mental illness (AOR = 5.54,  $p = 0.002$ ), antenatal complications (AOR = 2.32,  $p = 0.031$ ), and unplanned pregnancy (AOR = 2.86,  $p = 0.019$ ). These results affirm that interpersonal and psychological stressors contribute more significantly to PPD than demographic or delivery-related variables. Comparable predictors were noted in other regional studies. Sri Kiruba Nandini [12] identified unplanned pregnancy, poor husband support, and NICU admission as key determinants of PPD, while Sita V.K [13]. highlighted poverty, marital discord, domestic violence, and lack of emotional support as major causes. In Shriram V [14].’s study, lack of social support, marital conflict, and financial hardship were predominant risk factors, and notably, 92.5% of affected women did not seek medical help, reflecting poor mental health awareness. Singh R [15]. reported previous miscarriage as a leading predictor of PPD, with most cases resolving spontaneously, suggesting a potential for self-limiting depressive states when adequate family support is available. Likewise, Lanjewar S [16]. confirmed that poor social and partner support significantly increased the risk of depression, while perceived emotional neglect after childbirth also doubled the likelihood of PPD. Taken together, these findings establish that postpartum depression in Indian women is predominantly driven by psychosocial vulnerabilities—especially lack of partner and family support, domestic violence, and poor emotional care—rather than by demographic or medical variables. Strengthening interpersonal relationships, enhancing family awareness, and implementing early psychosocial screening during antenatal and postnatal care could substantially reduce the burden of postpartum depression in both rural and urban settings.

### Strengths and Limitations of the Study

The present study’s strength lies in its large sample size ( $n = 600$ ) and its focus on rural Tamil Nadu, a population often underrepresented in mental health research. The use of a validated screening instrument (EPDS) enhances the reliability of findings. However, the cross-sectional design limits causal inference, and the self-reported nature of some variables introduces potential recall and social desirability biases. Additionally, underreporting of domestic violence and mental illness is likely due to stigma and cultural sensitivities. Despite these limitations, the study provides critical insights into the psychosocial determinants of PPD in rural South India.

### Recommendations

Future research should adopt longitudinal designs to explore the trajectory of depressive symptoms from pregnancy through the postpartum period. Intervention-based studies evaluating the effectiveness of community-based mental health and support programs in rural Tamil Nadu are warranted. Policy efforts should aim to integrate mental health screening and counseling into routine maternal and child health services. The inclusion of partner counseling modules, community awareness campaigns, and violence prevention programs could have far-reaching effects in reducing the burden of PPD.

## CONCLUSION

In conclusion, this study underscores that postpartum depression is a significant yet underrecognized health issue among rural women in Tamil Nadu. Psychosocial stressors—particularly low social and partner support, domestic violence, and prior mental illness—emerge as strong determinants. The findings call for a multifaceted approach that combines screening, education, and gender-sensitive interventions to promote maternal mental health. Strengthening the mental health component within rural primary care systems can play a transformative role in improving both maternal and child wellbeing.

## RESULTS

1. Khamidullina Z, Marat A, Muratbekova S, Mustapayeva NM, Chingayeva GN, Shepetov AM, et al. Postpartum depression epidemiology, risk factors, diagnosis, and management: an appraisal of the current knowledge and future perspectives. *JCM* [Internet]. 2025 Apr 1 [cited 2025 Oct 14];14(7):2418. Available from: <https://www.mdpi.com/2077-0383/14/7/2418>
2. Slomian J, Honvo G, Emonts P, Reginster JY, Bruyère O. Consequences of maternal postpartum depression: A systematic review of maternal and infant outcomes. *Womens Health (Lond)*. 2019;15:1745506519844044.
3. Amedu AN. Economic burden of postpartum depression among mothers: Systematic review. *Acta Psychologica* [Internet]. 2025 Aug [cited 2025 Oct 14];258:105219. Available from: <https://linkinghub.elsevier.com/retrieve/pii/S0001691825005323>
4. Wang Z, Liu J, Shuai H, Cai Z, Fu X, Liu Y, et al. Mapping global prevalence of depression among postpartum women. *Transl Psychiatry*. 2021 Oct 20;11(1):543.
5. Upadhyay RP, Chowdhury R, Aslyeh Salehi null, Sarkar K, Singh SK, Sinha B, et al. Postpartum depression in India: a systematic review and meta-analysis. *Bull World Health Organ*. 2017 Oct 1;95(10):706-717C.
6. Panolan S, Thomas M B. Prevalence and associated risk factors of postpartum depression in India: A comprehensive review. *J Neurosci Rural Pract*. 2024;15(1):1–7.
7. Agrawal I, Mehendale AM, Malhotra R. Risk factors of postpartum depression. *Cureus*. 2022 Oct;14(10):e30898.
8. Dutta I, Sharma D. Mothers at risk of postpartum depression and its determinants: A perspective from the urban Jharkhand, India. *Journal of Family Medicine and Primary Care* [Internet]. 2025 Jul [cited 2025 Oct 14];14(7):2853–60. Available from: [https://journals.lww.com/10.4103/jfmpc.jfmpc\\_303\\_25](https://journals.lww.com/10.4103/jfmpc.jfmpc_303_25)
9. Ayen SS, Kasahun AW, Zewdie A. Depression during pregnancy and associated factors among women in Ethiopia: a systematic review and meta-analysis. *BMC Pregnancy Childbirth*. 2024 Mar 26;24(1):220.
10. Rajendran B, Ibrahim SU, Ramasamy S. Maternal and neonatal risk factors associated with perinatal depression—a prospective cohort study. *Indian Journal of Psychological Medicine* [Internet]. 2024 Jan [cited 2025 Oct 14];46(1):24–31. Available from: <https://journals.sagepub.com/doi/10.1177/02537176231176405>
11. Cox JL, Holden JM, Sagovsky R. Detection of postnatal depression. Development of the 10-item edinburgh postnatal depression scale. *Br J Psychiatry*. 1987 Jun;150:782–6.
12. Nandini M. K, Bhaskaran S. Prevalence of postpartum depression and associated risk factors in tertiary health care centre. *Int J Reprod Contracept Obstet Gynecol* [Internet]. 2024 Mar 28 [cited 2025 Oct 14];13(4):997–1001. Available from: <https://www.ijrcog.org/index.php/ijrcog/article/view/13952>
13. Sita VK, Meenakshi. A cross sectional study on prevalence of postpartum depression among recently delivered women in a tertiary care hospital, chennai, india. *JPRI* [Internet]. 2021 Dec 29 [cited 2025 Oct 14];7–11. Available from: <https://journaljpri.com/index.php/JPRI/article/view/5501>

14. Shriram V, Shah P, Rani Ma, Sathiyasekaran BWC. A community-based study of postpartum depression in rural Southern India. Indian J Soc Psychiatry [Internet]. 2019 [cited 2025 Oct 14];35(1):64. Available from: [https://journals.lww.com/10.4103/ijsp.ijsp\\_13\\_18](https://journals.lww.com/10.4103/ijsp.ijsp_13_18)
15. Singh R, Jamir B, Vashum H. A study of the prevalence of post-partum depression in a secondary care hospital in Dimapur, Nagaland, Northeast-India. Int J Reprod Contracept Obstet Gynecol [Internet]. 2023 Sep 28 [cited 2025 Oct 14];12(10):3134–40. Available from: <https://www.ijrcog.org/index.php/ijrcog/article/view/13467>
16. Lanjewar S, Nimkar S, Jungari S. Depressed motherhood: prevalence and covariates of maternal postpartum depression among urban mothers in india. Asian Journal of Psychiatry [Internet]. 2021 Mar [cited 2025 Oct 14];57:102567. Available from: <https://linkinghub.elsevier.com/retrieve/pii/S187620182100023X>
17. Nidheesha C, Vanitha K, Berjin Bj, Priyadharshini A, Vignesh V, Agastin Raj J. Screening of postpartum depression among postnatal mother at a selected tertiary care hospital, chengalpattu district, tamil nadu, india. IJPN [Internet]. 2022 Dec 15 [cited 2025 Oct 14];9(1):53–6. Available from: <https://medicopublication.com/index.php/ijpn/article/view/18853>

**Table 1. Sociodemographic Characteristics of Study Participants (n = 600)**

Variable	Category	n (%)
Age Group	18 – 24	120 (20.0 %)
	25 – 29	210 (35.0 %)
	30 – 34	168 (28.0 %)
	≥ 35	102 (17.0 %)
Gestational Age (weeks)		38.3 ± 1.4
Education	None	36 (6.0 %)
	Primary	126 (21.0 %)
	Secondary	276 (46.0 %)
	Tertiary	162 (27.0 %)
Employment	Employed	168 (28.0 %)
	Unemployed	192 (32.0 %)
	Homemaker	240 (40.0 %)
Parity	Primiparous	240 (40.0 %)
	Multiparous (2–3)	270 (45.0 %)
	Grand Multiparous (≥4)	90 (15.0 %)
Mode of Delivery	Vaginal	330 (55.0 %)
	C-section	270 (45.0 %)

**Table 2. Prevalence of Postpartum Depression Based on EPDS Scoring**

Depression Category	Frequency	%
None / Minimal (≤ 9)	234	39.0 %
Possible (10–12)	150	25.0 %
Probable (≥ 13)	216	36.0 %
Mean EPDS Score	11.1 ± 4.3	

**Table 3. Distribution of Probable PPD by Risk Factors (N %)**

Risk Factor	Probable PPD N (%)
Low Social Support	108 (18.0 %)
Poor Partner Support	96 (16.0 %)
Antenatal Complications	96 (16.0 %)
Domestic Violence	78 (13.0 %)
History of Mental Illness	42 (7.0 %)

**Table 4. Association of Key Risk Factors with Depression Status (N%, p-value)**

Variable	Category	N(%)			p-value
		None Minimal	Possible	Probable	
Social Support	Low	21 (13.0%)	24 (14.9%)	108 (72.1%)	<0.001**
	Medium	102 (39.4%)	69 (26.6%)	88 (34.0%)	
	High	111 (47.6%)	57 (24.5%)	65 (27.9%)	
Partner Support	Poor	39 (20.5%)	33 (17.4%)	118 (62.1%)	<0.001**
	Moderate	108 (43.2%)	63 (25.2%)	79 (31.6%)	
	Good	87 (46.0%)	54 (28.6%)	48 (25.4%)	
Antenatal Complications	Yes	48 (28.0%)	30 (17.5%)	93 (54.5%)	0.008**
	No	189 (43.2%)	123(28.1%)	126 (28.7%)	
Domestic Violence	Yes	18 (15.4%)	15 (12.8%)	84 (71.8%)	<0.001**
	No	240 (45.1%)	144(27.1%)	147 (27.8%)	
History of Mental Illness	Yes	9 (18.0%)	6 (12.0%)	33 (70.0%)	0.004**
	No	249 (43.4%)	153(26.7%)	198 (29.9%)	

**Table 5. Logistic Regression Analysis of Predictors of Postpartum Depression (EPDS  $\geq$  13)**

Predictor Variable	Coefficient (B)	Std. Error	p-value	Odds Ratio (95 % CI approx.)
Pregnancy Planned	1.05	0.44	0.019	2.86 (1.18 – 6.91)
Low Social Support	1.48	0.45	<0.001	4.39 (1.83 – 9.27)
Poor Partner Support	1.32	0.48	0.004	3.74 (1.53 – 7.89)
History of Mental Illness	1.71	0.55	0.002	5.54 (1.91 – 10.04)
Domestic Violence	2.04	0.51	<0.001	7.69 (2.84 – 12.15)
Antenatal Complications	0.84	0.39	0.031	2.32 (1.08 – 5.12)