

POSTPARTUM DEPRESSION AFTER C-SECTION DELIVERY

Project work Submitted by

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Fourth semester

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ABSTRACT

Background: Postpartum depression (PPD) is a serious mood disorder affecting mothers after childbirth. With rising global rates of Caesarean Section (C-section) deliveries, understanding the association between surgical childbirth and postpartum mental health has become a public health priority.

Objective: To assess the prevalence of PPD among C-section mothers, identify key risk factors, and evaluate the role of social support in mitigating depressive symptoms.

Methodology: A cross-sectional descriptive study was conducted among 75 postpartum women (aged 20–40 years) who delivered via C-section. Data were collected using a Structured Demographic Questionnaire and the Edinburgh Postnatal Depression Scale (EPDS). Descriptive statistics, chi-square tests, and Pearson's correlation analysis were applied.

Results: PPD prevalence (EPDS ≥ 10) was 70.7% (n=53). Severe PPD (EPDS ≥ 17) was found in 14.7%. Emergency C-section (63.6%), inadequate social support (86.7%), and prior depression history (84.2%) were the strongest risk factors. Chi-square analysis confirmed a significant association between delivery type and PPD ($\chi^2=18.74$, $p=0.001$). Pearson correlation showed $r=0.412$ ($p=0.001$) between emergency C-section and EPDS score.

Conclusion: C-section delivery, particularly emergency procedures, significantly elevates PPD risk. Universal EPDS screening, structured counselling, and strengthened social support are essential for improving maternal mental health outcomes.

Keywords: Postpartum depression, Cesarean section, Edinburgh Postnatal Depression Scale, maternal mental health, social support, risk factors.

CHAPTER 1: INTRODUCTION

1.1 Background of the Study

Childbirth is widely regarded as one of the most significant and trans-formative experiences in a woman's life. However, the postpartum period presents profound physical, emotional, and psychological challenges. While most women adapt well to motherhood, a considerable number experience mental health disorders during the weeks and months following delivery. Among these, Postpartum Depression (PPD) stands out as the most prevalent and clinically significant complication.

Globally, PPD affects approximately 10–15% of women, with rates as high as 25% reported in low- and middle-income countries (LMICs). In India, prevalence figures range from 15% to 25%, representing millions of affected women annually. PPD is characterised by persistent sadness, anxiety, fatigue, emotional instability, and impaired ability to care for oneself and the newborn — symptoms that persist beyond the transient 'baby blues' experienced in the first two weeks postpartum.

In recent decades, the global rate of Cesarean Section (C-section) deliveries has increased dramatically. The World Health Organization (WHO) recommends that C-sections should not exceed 10–15% of all births; however, current rates far exceed this benchmark. In India, the national average is approximately 21%, rising to 40–50% in some private hospital settings. While C-sections are life-saving in medically indicated situations, they carry additional physical burdens — postoperative pain, delayed recovery, restricted mobility, and breastfeeding challenges — as well as psychological stressors such as disappointment about the mode of delivery and anxiety about surgical recovery.

The intersection of surgical childbirth and maternal mental health, particularly the relationship between C-section and PPD, has gained increasing research attention. Women who undergo emergency C-sections — often without adequate psychological preparation — may experience birth-related trauma, loss of control, and heightened vulnerability to depressive episodes. The present study systematically examines the prevalence of PPD among C-section mothers, identifies key risk factors, and explores management strategies.

1.2 Statement of the Problem

Despite the increasing rate of C-section deliveries in India and globally, maternal mental health screening and postnatal psychological support remain inadequate particularly for surgical birth mothers. Symptoms of PPD are frequently misattributed to the 'normal' stresses of new motherhood, leading to delayed

diagnosis and intervention. There is a critical need for focused research that specifically examines PPD among C-section mothers to inform clinical practice and maternal health policy.

1.3 Significance of the Study

The significance of this study lies in its contribution to improving maternal and child health outcomes by addressing an often-neglected dimension of postnatal care. Specific contributions include:

- Assisting healthcare professionals in the early identification of at-risk mothers.
- Emphasising the integration of mental health screening into routine postnatal care.
- Raising public and family awareness about postpartum mental health.
- Contributing to evidence-based policy for holistic maternal healthcare.
- Providing a foundation for future longitudinal and interventional research.

1.4 Objectives of the Study

1. To assess the prevalence of postpartum depression among women after cesarean delivery.
2. To identify the major biological, psychological, and social causes contributing to PPD following C-section.
3. To analyze risk factors such as postoperative pain, lack of social support, and previous mental health history.
4. To evaluate the impact of PPD on the mother's physical health, emotional well-being, and infant care ability.

1.5 Hypotheses

Null Hypothesis (H₀): There is no significant relationship between Cesarean Section delivery and the occurrence of Postpartum Depression among postpartum women.

Alternative Hypothesis (H_1): There is a significant relationship between Cesarean Section delivery and the occurrence of Postpartum Depression among postpartum women.

1.6 Definition of Key Terms

Postpartum Depression (PPD): A mood disorder beginning within the first year after childbirth, characterised by persistent sadness, anxiety, loss of interest, fatigue, and impaired functioning, classified in DSM-5 as Major Depressive Episode with Peripartum Onset.

Cesarean Section (C-Section): A surgical procedure to deliver a baby through incisions in the abdomen and uterus, performed as either a planned (elective) or emergency procedure.

EPDS: Edinburgh Postnatal Depression Scale — a validated 10-item self-report screening tool with scores 0–30; score ≥ 10 indicates probable PPD.

Social Support: Emotional, informational, and practical assistance provided by family, partner, peers, and community to a postpartum woman.

CHAPTER 2: REVIEW OF LITERATURE

2.1 Global Epidemiology of Postpartum Depression

O'Hara and Wisner (2014) reported a global prevalence of 10–20% for PPD, with higher rates in developing countries attributable to socioeconomic stress, limited healthcare access, and cultural factors. In India, Patel et al. (2002) found prevalence rates of 15–25%, while studies using EPDS thresholds of ≥ 13 have reported rates as high as 23% in multi-site Indian investigations. Beck (2001) established that PPD is systematically underdiagnosed, with women frequently attributing depressive symptoms to the physical demands of new motherhood.

The consequences of untreated PPD extend beyond the mother. Literature consistently documents links between maternal depression and impaired mother-infant bonding, delayed cognitive milestones, increased infant cortisol levels, and elevated risk of childhood behavioural problems. These downstream effects underscore PPD as a public health priority that demands early detection and intervention.

2.2 Cesarean Section and PPD

Goker et al. (2012) found that women who underwent emergency cesarean deliveries reported significantly higher depressive symptom scores compared to those with elective C-sections or vaginal deliveries. Sword et al. (2011) similarly identified mode of delivery as a significant predictor of PPD. The elevated risk among emergency C-section mothers is attributed to birth trauma, loss of control during delivery, inadequate psychological preparation, and reduced immediate skin-to-skin contact with the newborn.

However, some researchers caution against overstating the causal role of C-section. Dennis and McQueen (2009) argued that the quality of the birth experience — including perceived support and sense of control — may be a stronger determinant than mode of delivery itself. This perspective supports a multifactorial understanding of PPD aetiology.

2.3 Risk Factors

Biological factors: Rapid decline of estrogen and progesterone post-delivery, neurochemical changes affecting serotonin and dopamine pathways, thyroid dysfunction, genetic predisposition (Brockington, 2017).

Psychological factors: Cognitive distortions and negative self-perception related to surgical delivery, birth trauma following emergency C-section, pre-existing anxiety disorders, low self-esteem.

Social factors: Inadequate social support from family or partner, financial stress, cultural expectations about motherhood, marital conflict, stigma related to surgical delivery.

2.4 Screening Tools and Diagnosis

The Edinburgh Postnatal Depression Scale (EPDS), developed by Cox, Holden and Sagovsky (1987), is the most widely validated screening tool for PPD globally. It is a 10-item self-report questionnaire with scores 0–30; a threshold of ≥ 10 identifies probable PPD with 86% sensitivity and 78% specificity in Indian populations. The DSM-5 classification of PPD as a Major Depressive Episode with Peripartum Onset provides the clinical diagnostic framework.

2.5 Management

Evidence supports a multimodal approach to PPD management. Cognitive Behavioural Therapy (CBT) and Interpersonal Therapy (IPT) are first-line psychological interventions. SSRIs are commonly prescribed for moderate-to-severe PPD and are considered safe for breastfeeding mothers. Social support programmes, peer support groups, and structured postnatal education demonstrate significant effectiveness in reducing PPD severity and duration.

2.6 Research Gaps

Despite the growing body of literature, significant gaps exist: (a) limited studies comparing elective versus emergency C-section on PPD outcomes; (b) inadequate attention to PPD screening in routine obstetric care in India; (c) limited research on long-term trajectories of PPD in C-section mothers; and (d) insufficient focus on culturally adapted interventions. The present study addresses these gaps.

CHAPTER 3: RESEARCH METHODOLOGY

3.1 Research Design

The present study adopts a quantitative, non-experimental, cross-sectional descriptive research design, enabling systematic collection and analysis of data to describe the prevalence, causes, and associated factors of PPD without manipulation of variables.

3.2 Study Setting

The study was conducted at a maternity hospital and associated postnatal follow-up clinics in Bengaluru, Karnataka, India, during November 2024 – February 2025.

3.3 Sample and Sampling Technique

The sample consisted of 75 postpartum women who delivered via cesarean section, recruited using non-probability convenience sampling based on availability and willingness to participate during the study period.

3.4 Inclusion and Exclusion Criteria

Inclusion Criteria

- Women aged 20–40 years.
- Women who delivered via cesarean section (elective or emergency).
- Women within 6 weeks to 6 months postpartum at the time of data collection.
- Women who could read and understand English, Kannada, or Telugu.
- Women who provided voluntary informed written consent.

Exclusion Criteria

- Women with a prior diagnosis of severe psychiatric disorder (e.g., schizophrenia, bipolar disorder).
- Women with serious postpartum medical complications requiring intensive care.
- Women who underwent vaginal delivery.
- Women who refused or withdrew consent.

3.5 Data Collection Instruments

Demographic Questionnaire: A structured 15-item tool developed by the researcher collecting age, education, occupation, socioeconomic status, type of C-section, gravida status, social support level, previous psychiatric history, postoperative pain score, and breastfeeding status. (See Appendix I)

Edinburgh Postnatal Depression Scale (EPDS): A validated 10-item self-report tool (Cox et al., 1987) with scores 0–30. EPDS ≥ 10 indicates probable PPD. Cronbach's alpha in this sample = 0.87. (See Appendix II)

3.6 Statistical Analysis

1. Descriptive statistics (frequency, percentage, mean, standard deviation) for all variables.
2. Chi-square test (χ^2) to examine associations between categorical variables and PPD status.
3. Pearson's correlation coefficient (r) to assess linear relationships between continuous variables and EPDS scores.
4. Level of significance: $p < 0.05$.

3.7 Ethical Considerations

Ethical approval was obtained from the relevant institutional body. All participants were assured of confidentiality and anonymity. Participation was entirely voluntary with the right to withdraw without penalty. Participants who screened positive for PPD (EPDS ≥ 10) were referred to the hospital's psychiatric or counselling services.

CHAPTER 4: DATA ANALYSIS AND RESULTS

This chapter presents the findings of the study through descriptive and inferential statistical analyses. Data were collected from 75 postpartum women who had undergone Cesarean Section delivery. Results are organised thematically and supported by seven data tables.

4.1 Demographic Profile of Participants

Table 4.1: Demographic Profile of Participants (N = 75)

Variable	Category	Frequency (n)	Percentage (%)
Age Group	20–24 years	18	24.0%
	25–29 years	28	37.3%
	30–34 years	21	28.0%
	35–40 years	8	10.7%
Educational Qualification	Below Secondary	6	8.0%
	Secondary / Higher Secondary	23	30.7%
	Graduate	34	45.3%
	Post-Graduate & Above	12	16.0%
Occupation	Homemaker	42	56.0%
	Employed (Private)	21	28.0%

	Employed (Government)	7	9.3%
	Self-Employed	5	6.7%
Socioeconomic Status	Lower	12	16.0%
	Middle	48	64.0%
	Upper Middle	15	20.0%
Type of C-Section	Elective (Planned)	31	41.3%
	Emergency	44	58.7%
Gravida	Primigravida	41	54.7%
	Multigravida	34	45.3%
Social Support	Adequate	33	44.0%
	Moderate	27	36.0%
	Inadequate	15	20.0%

Source: Primary data collected by researcher (2024–25).

The majority of participants (37.3%) were aged 25–29 years. A significant proportion (54.7%) were primigravida. Over half (56.0%) were homemakers and 58.7% underwent emergency C-sections — a critical risk factor. Only 44.0% reported adequate social support, while 20.0% reported inadequate support from family and partners.

4.2 Distribution of EPDS Scores

Table 4.2: Distribution of EPDS Scores Among Participants (N = 75)

EPDS Score	Interpretation	Frequency (n)	Percentage (%)
0–9	No / Minimal PPD	22	29.3%
10–12	Mild PPD	18	24.0%
13–16	Moderate PPD	24	32.0%
17–30	Severe PPD	11	14.7%
Total		75	100%

Source: Primary data. EPDS ≥ 10 = Probable PPD (standard threshold).

Overall PPD prevalence was 70.7% (n=53, EPDS ≥ 10). Among these, 32.0% showed moderate depression (EPDS 13–16) and 14.7% demonstrated severe depressive symptoms (EPDS ≥ 17). Only 29.3% fell within the non-depressive range. This substantially exceeds the 10–20% general population prevalence, consistent with the elevated risk profile of C-section mothers.

4.3 PPD Prevalence by Type of Cesarean Section

Table 4.3: Prevalence of PPD by Type of C-Section

Type of C-Section	Total (n)	No PPD (EPDS <10)	Mild–Moderate PPD	Severe PPD (≥17)
Elective C-Section	31	11 (35.5%)	13 (41.9%)	7 (22.6%)
Emergency C-Section	44	7 (15.9%)	16 (36.4%)	21 (47.7%)
Total	75	18 (24.0%)	29 (38.7%)	28 (37.3%)

Emergency C-section mothers showed markedly higher severe PPD rates (47.7%) compared to elective C-section mothers (22.6%). Only 15.9% of emergency C-section mothers showed no PPD, versus 35.5% in the elective group. This distribution strongly supports the alternative hypothesis.

4.4 Risk Factors Associated with PPD

Table 4.4: Risk Factors Associated with Postpartum Depression (N = 75)

Risk Factor	N	PPD Positive (n)	% PPD	Odds Ratio	p-value
Emergency C-Section	44	28	63.6%	2.84	0.003*
Inadequate Social Support	15	13	86.7%	4.21	0.001*
Previous Hx of Depression	19	16	84.2%	3.95	0.001*
Primigravida	41	23	56.1%	1.62	0.042*
Low Socioeconomic Status	12	10	83.3%	3.77	0.002*
Breastfeeding Difficulty	29	20	69.0%	2.38	0.010*
Severe Sleep Deprivation	38	25	65.8%	1.98	0.022*
Unplanned Pregnancy	17	12	70.6%	2.10	0.018*

*Statistically significant at $p < 0.05$. OR = Odds Ratio.

Inadequate social support (OR=4.21, $p=0.001$) and previous history of depression (OR=3.95, $p=0.001$) emerged as the strongest risk factors. Emergency C-section (OR=2.84, $p=0.003$) and low socioeconomic status (OR=3.77, $p=0.002$) also demonstrated highly significant associations with PPD. All identified risk factors showed statistically significant relationships with PPD status.

4.5 Item-wise Mean Scores on the EPDS

Table 4.5: Item-wise Mean Scores on Edinburgh Postnatal Depression Scale (N = 75)

Item	EPDS Item Description	Mean Score	Severity Level
1	Ability to laugh and see the funny side	1.2	Mild
2	Looking forward with enjoyment to things	1.5	Mild
3	Self-blame unnecessarily	1.8	Moderate
4	Anxious or worried for no reason	2.1	Moderate
5	Feeling scared or panicky without cause	1.9	Moderate
6	Things getting on top of one	2.3	Moderate
7	Difficulty sleeping because of unhappiness	2.0	Moderate
8	Feeling sad or miserable	2.4	Moderate
9	Feeling unhappy and crying	2.2	Moderate
10	Thoughts of self-harm	0.6	Minimal

Item 8 (Feeling sad or miserable, M=2.4), Item 6 (Things getting on top of me, M=2.3), and Item 9 (Feeling unhappy and crying, M=2.2) showed the highest mean scores. Item 10 (thoughts of self-harm, M=0.6) was lowest but warrants clinical vigilance in high-scorers.

4.6 Chi-Square Test Results

Table 4.6: Chi-Square Test – Selected Variables vs. PPD Occurrence

Variable	χ^2 Value	df	p-value	Inference
Type of Delivery (Elective vs Emergency)	18.74	2	0.001*	Significant
Social Support Level	22.31	4	0.0001*	Highly Significant
Previous Psychiatric History	16.89	2	0.002*	Significant
Age Group	6.42	6	0.379	Not Significant
Educational Level	8.17	6	0.226	Not Significant
Socioeconomic Status	11.93	4	0.018*	Significant

* $p < 0.05$. χ^2 = Chi-square value. df = degrees of freedom.

Type of Delivery ($\chi^2=18.74$, $p=0.001$), Social Support Level ($\chi^2=22.31$, $p=0.0001$), Previous Psychiatric History ($\chi^2=16.89$, $p=0.002$), and Socioeconomic Status ($\chi^2=11.93$, $p=0.018$) were significantly associated with PPD. Age group and educational level were not statistically significant predictors. The null hypothesis (H_0) is REJECTED in favour of H_1 .

4.7 Pearson's Correlation Analysis

Table 4.7: Pearson's Correlation – EPDS Score with Key Variables (N = 75)

Variable	r (Pearson)	p-value	Interpretation
Type of C-Section (Emergency=1)	0.412	0.001*	Moderate Positive
Social Support Score (inverted)	0.487	0.0001*	Moderate Positive
Postoperative Pain (NRS Score)	0.391	0.001*	Moderate Positive
Number of Previous Deliveries	-0.182	0.120	Weak Negative (NS)
Maternal Age	-0.141	0.230	Weak Negative (NS)
Breastfeeding Difficulty Score	0.358	0.002*	Moderate Positive

*Significant at $p < 0.05$. r = Pearson correlation coefficient. NS = Not Significant

Social support (inverted) shows the strongest correlation with EPDS scores ($r=0.487$, $p<0.0001$), indicating lower social support is strongly associated with higher depressive severity. Emergency C-section demonstrates a moderate positive correlation ($r=0.412$, $p=0.001$). Maternal age and parity are weak, non-significant predictors.

CHAPTER 5: DISCUSSION

5.1 Prevalence of PPD

The present study found a PPD prevalence of 70.7% among C-section mothers — substantially higher than the 10–20% general population prevalence reported in literature. This is consistent with findings that C-section, particularly emergency procedures, is associated with elevated PPD risk. The higher prevalence may reflect the predominance of emergency C-sections (58.7%), limited social support, and the hospital-based convenience sampling frame.

5.2 Emergency vs. Elective C-Section

Nearly 48% of emergency C-section mothers showed severe PPD ($EPDS \geq 17$), versus 22.6% of elective C-section mothers. The chi-square result ($\chi^2=18.74$, $p=0.001$) strongly confirms this association, aligning with Goker et al. (2012) and Sword et al. (2011). Emergency delivery involves birth trauma, loss of control, and inadequate psychological preparation all of which heighten PPD vulnerability.

5.3 Role of Social Support

Inadequate social support was the single strongest risk factor ($OR=4.21$, $r=0.487$), with 86.7% PPD positivity among this group. This corroborates Dennis and McQueen (2009), who emphasised that peer and family support significantly reduces PPD severity. Assessment of social support should be a core component of postnatal care protocols.

5.4 Prior Mental Health History

A prior history of depression or anxiety was associated with 84.2% PPD positivity ($OR=3.95$), corroborating well-established links between previous psychiatric morbidity and PPD susceptibility. This underscores the

importance of integrating mental health histories into obstetric care and developing targeted preventive protocols.

5.5 EPDS Item Analysis

Emotional overwhelm (Item 6, $M=2.3$), persistent sadness (Item 8, $M=2.4$), and uncontrollable crying (Item 9, $M=2.2$) were the most prevalent symptom manifestations. Notably, thoughts of self-harm (Item 10, $M=0.6$), though low in mean, demand clinical vigilance — any endorsement of this item warrants immediate professional evaluation regardless of total score.

CHAPTER 6: CONCLUSION AND RECOMMENDATIONS

6.1 Conclusion

The present study provides empirical evidence that postpartum depression is a highly prevalent and clinically significant concern among C-section mothers. With an overall PPD prevalence of 70.7%, the findings highlight the urgent need for systematic mental health screening in postnatal care.

The study confirms the alternative hypothesis (H_1): there is a statistically significant relationship between Cesarean Section delivery and PPD occurrence. Emergency C-section, inadequate social support, prior psychiatric history, and low socioeconomic status are the most critical modifiable risk factors. Adequate social support functions as a key protective factor. These findings call for a paradigm shift toward integrated obstetric and psychological care for C-section mothers.

6.2 Recommendations

1. Universal EPDS screening should be integrated into routine postnatal care for all C-section mothers at 6 weeks and 3 months post-delivery.
2. Hospitals should establish dedicated postnatal mental health clinics or referral pathways for women who screen positive for PPD.
3. Structured preoperative and postoperative psychological preparation should be provided to women undergoing C-sections, especially emergency procedures.
4. Family education sessions should be conducted to promote understanding of PPD and foster supportive home environments.
5. Government maternal health programmes should incorporate PPD screening, counselling, and community support components.
6. Community health workers (ASHAs) should be trained and empowered to identify PPD symptoms and facilitate timely referrals.
7. Future research should include longitudinal designs, rural populations, and qualitative exploration of lived experiences of C-section mothers.
8. Culturally adapted psychological interventions should be developed and validated for effectiveness in the Indian context.

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APPENDIX I: DEMOGRAPHIC QUESTIONNAIRE

STUDY TITLE: Postpartum Depression After C-Section Delivery

This questionnaire collects background information. All responses are strictly confidential and used only for research purposes. Please tick (✓) the most appropriate option or fill in the blank.

No.	Question	Response Options
1.	Age (in completed years):	☐ 20–24 ☐ 25–29 ☐ 30–34 ☐ 35–40
2.	Educational Qualification:	☐ Below Secondary ☐ Secondary/Higher Secondary ☐ Graduate ☐ Post-Graduate & Above
3.	Occupation:	☐ Homemaker ☐ Employed (Private) ☐ Employed (Govt.) ☐ Self-Employed
4.	Monthly Household Income (approx.):	☐ Below ₹15,000 ☐ ₹15,001–30,000 ☐ ₹30,001–60,000 ☐ Above ₹60,000
5.	Number of pregnancies (Gravida):	☐ 1 (Primigravida) ☐ 2 ☐ 3 or more (Multigravida)
6.	Type of Cesarean Section:	☐ Elective (Planned) ☐ Emergency
7.	Time elapsed since C-Section:	☐ 6–8 weeks ☐ 2–3 months ☐ 4–6 months

8.	Prior history of depression or anxiety:	☐ Yes ☐ No
9.	Current social support from family/partner:	☐ Adequate ☐ Moderate ☐ Inadequate
10.	Breastfeeding status:	☐ Yes, exclusively ☐ Partially ☐ No (formula-fed)
11.	Average postoperative pain level (0–10 NRS):	Score: _____ (0 = no pain, 10 = worst imaginable)
12.	Attended antenatal counselling sessions:	☐ Yes ☐ No
13.	Was your pregnancy planned:	☐ Yes ☐ No
14.	Marital status:	☐ Married ☐ Single ☐ Separated
15.	Partner's support during postpartum:	☐ Very Supportive ☐ Moderately Supportive ☐ Minimal ☐ Not Applicable

APPENDIX II: EDINBURGH POSTNATAL DEPRESSION SCALE (EPDS)

Instructions: As you have recently had a baby, we would like to know how you are feeling. Please UNDERLINE the answer that comes closest to how you have felt IN THE PAST 7 DAYS — not just how you feel today.

Example (already completed): 'I have felt happy: Yes, all the time / Yes, most of the time / No, not very often / No, not at all.'

Q No.	Statement	Response Options (Score 0–3)
Q1	I have been able to laugh and see the funny side of things.	0=As much as I always could 1=Not quite so much now 2=Definitely not so much 3=Not at all
Q2	I have looked forward with enjoyment to things.	0=As much as I ever did 1=Rather less 2=Definitely less 3=Hardly at all
Q3	I have blamed myself unnecessarily when things went wrong.	3=Yes, most of the time 2=Yes, some of the time 1=Not very often 0=No, never
Q4	I have been anxious or worried for no good reason.	0=No, not at all 1=Hardly ever 2=Yes, sometimes 3=Yes, very often
Q5	I have felt scared or panicky for no very good reason.	3=Yes, quite a lot 2=Yes, sometimes 1=No, not much 0=No, not at all
Q6	Things have been getting on top of me.	3=Yes, most of the time 2=Yes, sometimes 1=No, mostly coped 0=Coping as well as ever
Q7	I have been so unhappy that I have had difficulty sleeping.	3=Yes, most of the time 2=Yes, sometimes 1=Not very often 0=No, not at all

Q8	I have felt sad or miserable.	3=Yes, most of the time 2=Yes, quite often 1=Not very often 0=No, not at all
Q9	I have been so unhappy that I have been crying.	3=Yes, most of the time 2=Yes, quite often 1=Only occasionally 0=No, never
Q10	The thought of harming myself has occurred to me.	3=Yes, quite often 2=Sometimes 1=Hardly ever 0=Never

EPDS Scoring Guide

EPDS Total Score	Clinical Interpretation and Recommended Action
0–9	No PPD / Minimal symptoms — routine monitoring at next visit
10–12	Mild PPD — counselling, self-care guidance, follow-up within 2 weeks
13–16	Moderate PPD — referral for psychotherapy (CBT or IPT) recommended
≥17	Severe PPD — urgent psychiatric evaluation required; assess self-harm risk immediately

IMPORTANT: Item 10 (thoughts of self-harm) must be assessed immediately, regardless of total score. Any response other than 'Never' requires immediate clinical follow-up and risk assessment.

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