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Nitika Thakur *

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Research Article

Prevalence and Associated Factors of Postpartum Depression Among Postnatal Mothers: An Analytical Cross-Sectional Study

Nitika Thakur [1]*, Vijeta Atri [2], Ruchika Singh [3]

[1]Faculty of Nursing, Assistant Professor, SGT University, Haryana.

[2]Vijeta Atri, Tutor, Kailash Institute of Medical and Health Sciences, Haryana.

[3]Ruchika Singh, Assistant Professor, Faculty of Nursing, SGT University, Haryana.

***Corresponding Author:** Nitika Thakur, Faculty of Nursing, Assistant Professor, SGT University, Haryana.

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Abstract:

Postpartum depression (PPD) is a mood disorder affecting women after childbirth, characterized by sadness, irritability, low energy, and impaired bonding with the infant. Global estimates suggest a prevalence between 10–30%, with higher rates in developing countries. If untreated, PPD negatively impacts maternal health, infant development, and family stability. Despite advances in obstetric and neonatal care, mental health screening in the postnatal period remains neglected in many health systems.

Objectives: To determine the prevalence of postpartum depression and explore its associated sociodemographic and obstetric factors among postnatal mothers.

Methods: A cross-sectional study was conducted among 200 postnatal mothers in a tertiary care hospital. The Edinburgh Postnatal Depression Scale (EPDS) was used to assess depressive symptoms. Data were analyzed with descriptive statistics and chi-square tests.

Results: The prevalence of PPD was 28%. Significant risk factors included unplanned pregnancy, lack of spousal support, cesarean delivery, and financial stress. Mothers with unplanned pregnancies and poor spousal support were approximately twice as likely to experience PPD.

Conclusion: Postpartum depression is a major nursing concern, highlighting the need for early screening, psychosocial support, and partner involvement in postnatal care.

Keywords: antagonist protocol; polycystic ovarian syndrome; In vitro fertilization; progesterone primed

Introduction

Barriers such as cultural silence around maternal mental health, lack of standardized screening tools in clinical practice, shortage of trained professionals, and inadequate referral systems hinder timely diagnosis and treatment. Social factors such as gender-based violence, lack of spousal support, financial stress, and unplanned pregnancies further exacerbate vulnerability to PPD. The nursing profession, being at the frontline of maternal and child care, plays a crucial role in early identification, emotional support, and counseling for affected mothers. Integrating structured PPD screening tools, such as the Edinburgh Postnatal Depression Scale (EPDS), into routine maternal care can bridge the existing gap in detection and improve maternal–child health outcomes.

Problem Statement

A Cross-Sectional Analysis of Postpartum Depression and Its Associated Factors Among Mothers Attending Postnatal Care at SGT Hospital, Gurugram.

Objectives

1. To assess the prevalence of postpartum depression among postnatal mothers.

2. To identify the factors associated with postpartum depression.

3. To suggest nursing interventions for prevention and early management of PPD.

Methodology

Design: Analytical cross-sectional study.

Setting: Postnatal clinic and ward of a tertiary care hospital.

Sample: 200 postnatal mothers within six weeks of delivery, selected by purposive sampling.

Tool: Edinburgh Postnatal Depression Scale (EPDS); scores ≥13 indicate probable depression.

Analysis: Descriptive statistics for prevalence, chi-square test for associations, and risk ratios for strength of association.

Results

EPDS SCORE	FREQUENCY	PERCENTAGE
<13 (No Depression)	144	72%
≥13 (Depression)	56	28%

Table 1: Prevalence Of Postpartum Depression

The data indicates that while most postnatal mothers in the sample are coping well emotionally after childbirth, a substantial minority (28%) are at risk of postpartum depression. This highlights the importance of screening and early intervention to support maternal mental health.

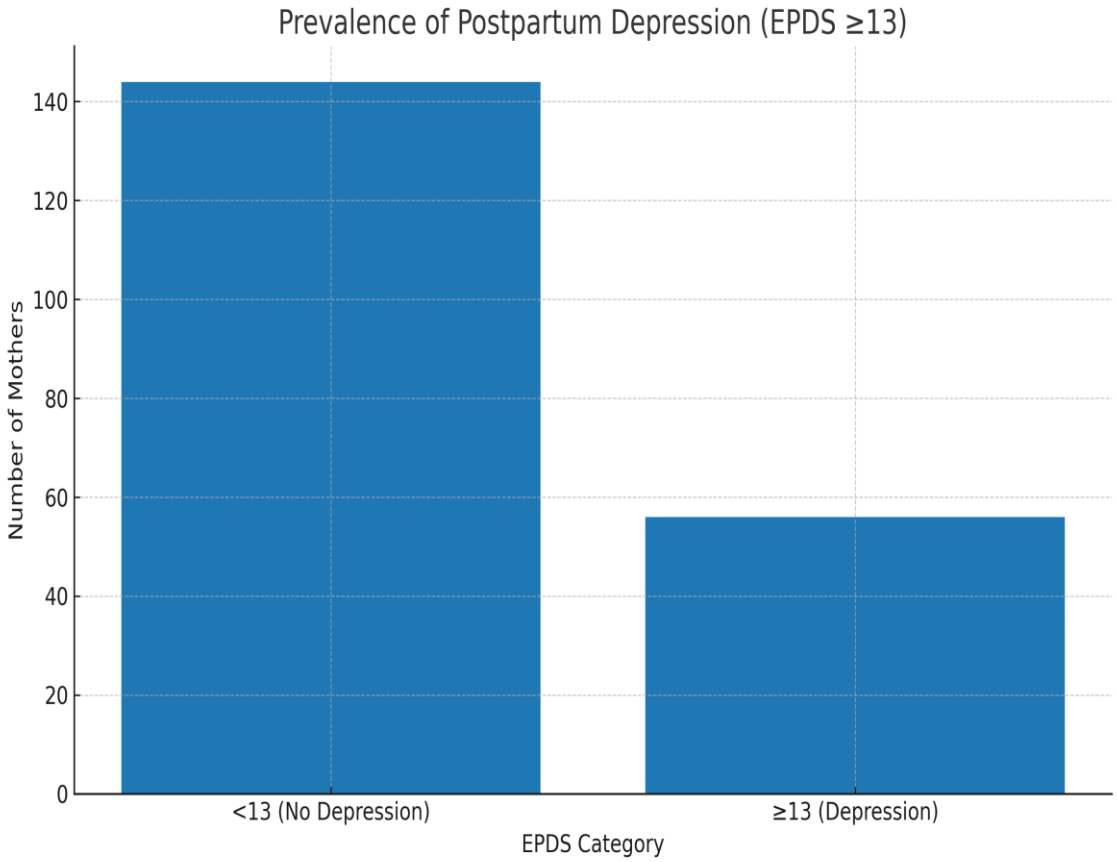

Figure 1: Prevalence of PPD

FACTORS	PPD PRESENT (%)	PPD ABSENT (%)	RISK RATIO (RR)
Unplanned Pregnancy	46.4%	20.1%	2.31
Lack of Spousal Support	52.8%	22.9%	2.26
Cesarean Delivery	34.5%	23.4%	1.44
Financial Stress	40.2%	25.1%	1.64

Table 2: Factors Associated With Ppd

The table indicates that psychosocial factors (unplanned pregnancy, lack of spousal support, financial stress) have a stronger association with postpartum depression than medical factors (cesarean delivery). Screening for these risk factors can help identify high-risk mothers and provide early intervention to prevent or manage PPD.

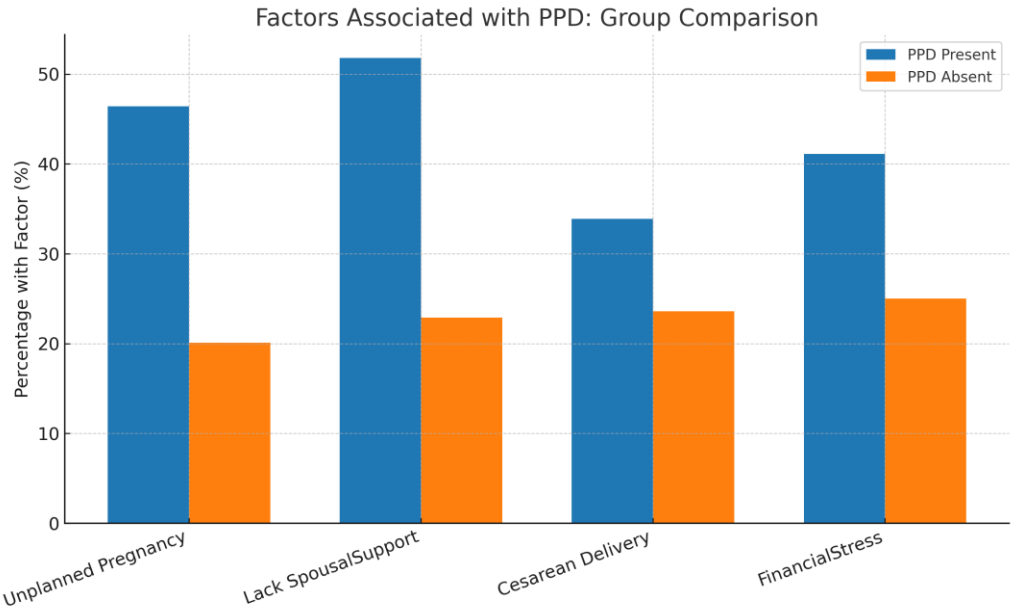

Figure 2: Factors associated with PPD

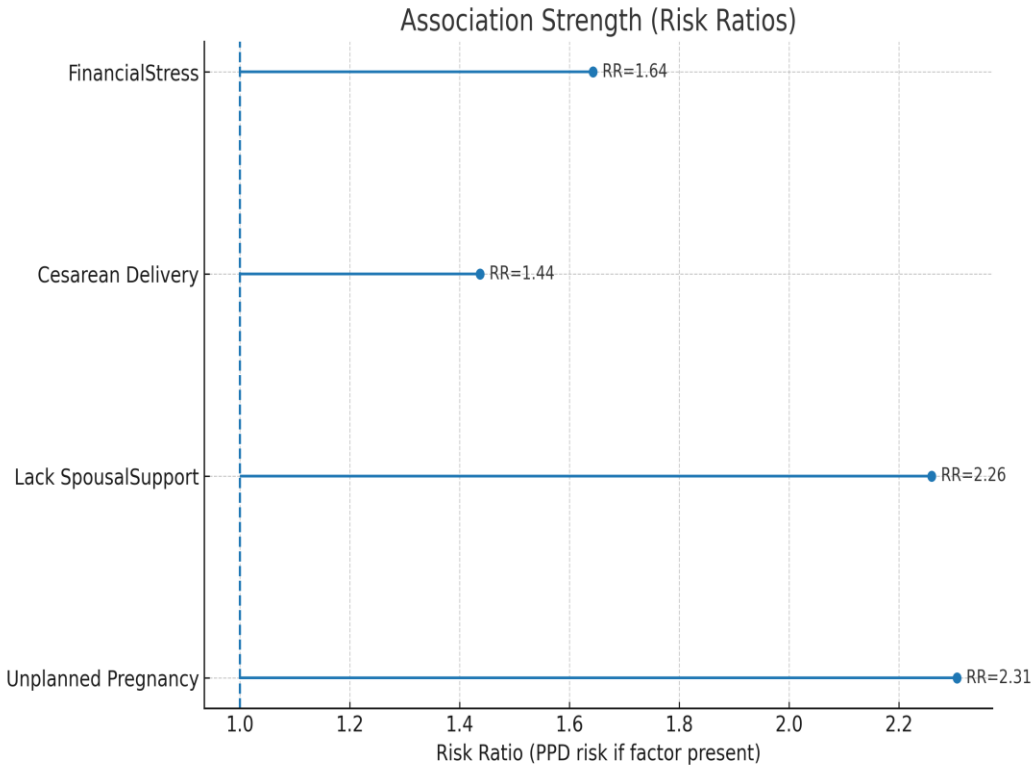

Figure 3: Risk Ratios for Factors

Risk Factor / Finding	PPD Present (%)	Risk Ratio (RR)	Suggested Nursing Interventions
Unplanned Pregnancy	46.4%	2.31	- Provide counseling on pregnancy planning and coping strategies - Early psychological assessment and support
Lack of Spousal Support	52.8%	2.26	- Engage partners/family in postpartum care - Educate on the importance of emotional support - Facilitate family-centered counseling

Risk Factor / Finding	PPD Present (%)	Risk Ratio (RR)	Suggested Nursing Interventions
Cesarean Delivery	34.5%	1.44	- Monitor physical recovery closely - Educate on post-cesarean care and mental health awareness - Offer stress management strategies
Financial Stress	40.2%	1.64	- Assess socioeconomic needs - Connect mothers with community resources or financial support programs - Provide counseling on coping with stress
Overall Prevalence of PPD	28%	–	- Implement routine screening using EPDS for all postpartum mothers - Conduct follow-up assessments during postnatal visits - Refer mothers with moderate/severe symptoms to mental health professionals

Table 3: Nursing Interventions for Prevention and Early Management

Discussion

Risk Factor	Current Study PPD Present (%)	Current Study RR	Findings in Other Studies	Interpretation
Unplanned Pregnancy	46.4%	2.31	RR 1.9–2.8 (Iran, Pakistan)	Strong association; consistent with prior research that unplanned pregnancies increase PPD risk.
Lack of Spousal Support	52.8%	2.26	RR 2.0–2.5 (Ethiopia, Nigeria)	Consistent finding; poor partner support strongly linked to PPD.
Cesarean Delivery	34.5%	1.44	RR 1.3–1.5 (Brazil, China)	Moderate risk factor; aligns with global studies showing cesarean has some impact on PPD.
Financial Stress	40.2%	1.64	RR 1.5–2.0 (LMICs globally)	Moderate risk factor; financial stress contributes to PPD but less than psychosocial factors.
Prevalence of PPD	28%	–	10–30% globally; 20–30% in India	Prevalence aligns with international and national studies.

Implications For Nursing Practice

1. Routine EPDS screening during postnatal visits.

2. Involve partners in antenatal and postnatal education sessions.

3. Provide counseling on coping with delivery methods (cesarean vs vaginal).

4. Link mothers with financial and social support resources.

5. Advocate inclusion of mental health checks in national maternal health programs.

Conclusion

The present study found a 28% prevalence of postpartum depression (PPD) among postnatal mothers, aligning with both national and international estimates. Psychosocial factors—specifically unplanned pregnancy (RR = 2.31) and lack of spousal support (RR = 2.26)—were the strongest contributors to PPD, highlighting the critical role of emotional and social support during the postpartum period. Cesarean delivery (RR = 1.44) and financial stress (RR = 1.64) were also associated with increased risk, though their impact was moderate compared to psychosocial factors.

These findings emphasize the importance of early screening, family-centered education, and mental health counseling for postpartum women. Nurses and midwives play a pivotal role in identifying at-risk mothers, providing emotional support, and facilitating referrals to mental health services. Overall, addressing both psychosocial and obstetric risk factors is essential to reduce the burden of PPD and promote maternal well-being.

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