Postpartum depression and Family dynamics

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Abstract— **Background**: Postpartum depression (PPD) is an important public health problem often more influenced by familial factors and the familial factors are poorly researched in medical field. This research objective is to find the prevalence and familial relationship risk factors of PPD. **Methods:** This is a cross sectional study among 2 week postpartum mothers. Sociodemographic and postpartum support questionnaire was used. The EPDS scale was used for postpartum depression. The data were analysed utilising SPSS 22. **Results:** Postpartum depression was identified in 25.5% of new mothers. Conflict with the spouse, conflict with in-laws or parents, and experiences of domestic violence were strongly associated with higher rates of PPD. Lack of emotional support, whether from the husband or from the mother/in-law or from extended family members were associated with higher PPD prevalence. **Conclusion**: Overall, these findings highlight that family-related stressors—such as interpersonal conflicts, domestic violence, and lack of emotional or practical support—play a significant role in the development of postpartum depression. Addressing these familial and social support deficits could be crucial for early identification and intervention in high-risk mothers.

Index Terms— **postpartum, depression, family support, spouse support.**

INTRODUCTION:

During the postpartum period, women experience significant physiological, psychological, and social transformations, marking a crucial phase in maternal healthcare.[1] Although linked to joy and satisfaction, this period also renders individuals more vulnerable to mental health disorders, particularly postpartum depression (PPD). Postpartum depression (PPD) constitutes a substantial public health concern, impacting 10% to 20% of women globally, with a heightened prevalence in low- and middle-income nations.[2-4]

Meta-analyses and systematic reviews indicate that the prevalence among postpartum mothers in India ranges from 11% to 26%, signifying a considerable burden. The initial week postpartum is critical, as early manifestations of depression may emerge rapidly, affecting the mother's health, the maternal-infant bond, and the child's development.[3-5]

The Edinburgh Postnatal Depression Scale (EPDS), the preeminent tool for the early identification of postpartum depression, is among numerous validated measures accessible. Healthcare practitioners can identify at-risk women and facilitate further assessment or mental health referrals as necessary by consistently administering the EPDS within the first week postpartum.[8]

Postpartum depression screening during the initial postnatal period facilitates early detection and therapy. Undiagnosed and untreated postpartum depression (PPD) has several adverse consequences, including chronic mother sickness, hindered cognitive and emotional development in children, heightened risk of child neglect, and dysfunctional family dynamics. Notwithstanding its importance, postpartum depression is frequently overlooked and disregarded[6,7]. The main objective of this study is to determine postpartum depression prevalence and its family relationship determinants

METHODOLOGY:

This cross-sectional descriptive study was conducted in postpartum ward in Obstetric health centre, Chennai from June 2022 to June 2025. The study included postnatal mothers aged 19 to 35 years. A sample size of 144 round was calculated based on a p = 0.59, with a 95% confidence interval and 0.08 precision.[9] Convenience sampling was used to select participants from among mothers attending post-natal OP for 2 weeks postpartum checkup.

Inclusion criteria were postnatal mothers within 2 weeks of delivery, irrespective of medical comorbidities. Exclusion criteria included mothers not given consent, intellectual disability, physical disability or mothers with sick baby with NICU admission needed.

Data were collected after obtaining informed consent. Each participant completed the Edinburgh Postnatal Depression Scale (EPDS) within one week postpartum, administered only once during their hospital stay. The family relation factors data were also collected using a structured questionnaire- post partum support questionnaire. The EPDS, a validated screening tool, was used to assess depressive symptoms. The score more than or equal to 13 were considered to be depressed.[9]

Data were coded and entered in Microsoft Excel and analyzed using SPSS version 22. The chi square test was utilized to compare proportions and $p<0.05$ is considered significant. The descriptive statistics is given in proportions.

RESULTS:

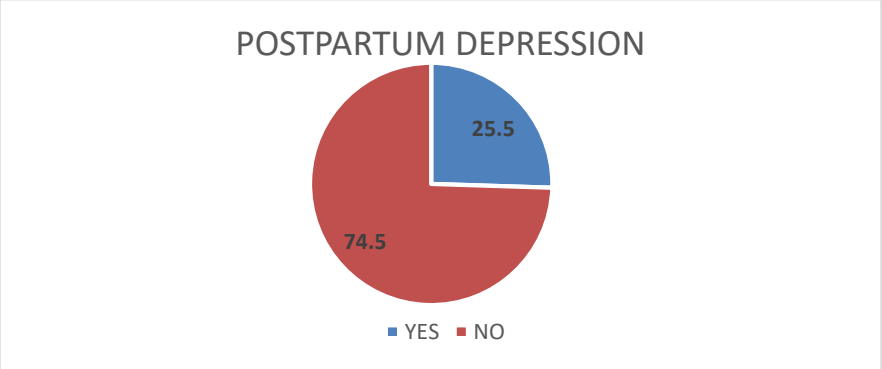

Figure 1: Prevalence of PPD
25.5% had post partum depression (n-37) as in Figure 1.

Table.1: Sociodemographic distribution

Variable	Category	n	%
Age (years)	<20	48	33.3
	20–30	60	41.7
	>30	36	25
Socioeconomic status	Upper	24	16.7
	Middle	50	34.7
	Lower	70	48.6
Parity	1	46	31.9
	≥2	98	68.1

The demographic profile of the study population shows that the majority of participants were aged 20–30 years and of lower socioeconomic group (48.6%).(Table 1).

Table 2: Family relations and dynamics and Post partum depression (PPD)

Variable	Category	PPD n	PPD %	NO PPD n	NO PPD %	p-value
Spouse conflict	Yes	24	43.6%	31	56.4%	0.0034
	No	13	14.5%	77	85.5%	
Parent/in law conflict	Yes	30	50.0%	30	50.0%	<0.001
	No	7	8.2%	78	91.8%	
Domestic violence	Yes	17	48.6%	18	51.4%	<0.001
	No	21	18.9%	90	81.1%	
Emotional support from husband	Yes	11	16.9%	54	83.1%	0.001
	No	26	32.5%	54	67.5%	
Emotional support from mother/in-law	Yes	11	13.8%	69	86.2%	<0.001
	No	26	40.0%	39	60.0%	
Relatives support	Yes	12	15%	68	85%	0.002
	No	25	38.5%	40	61.5	
No household help from family members or house helpers	Yes	26	40%	39	60%	0.006
	No	11	13.75%	69	86.25%	
No childcare help by spouse	Yes	21	33.3%	42	66.7%	0.048
	No	16	19.51%	66	80.49%	

Analysis of family relations and dynamics revealed several significant associations with postpartum depression (PPD). Conflict with the spouse, conflict with in-laws or parents, and experiences of domestic violence were strongly associated with higher rates of PPD. Lack of emotional support, whether from the husband or from the mother/in-law or from extended family members were significant risk factors in this study.(Table 2)

DISCUSSION:

25.5% had postpartum depression as in current study. This is in consistent with previous studies.[2,3] The predominant age group of participants in our study was 20–30 years, comprising 41.7%, while 33.3% were under 20 years and belonged to a lower socioeconomic level, consistent with findings from prior studies [10-12].

Familial relationships and dynamics significantly impacted the likelihood of postpartum depression (PPD). Marital conflict was substantially correlated with elevated depression rates in our study (43.6% vs. 14.5%, $p = 0.0034$), aligning with previous studies indicating that marital discord exacerbates maternal stress and depressive symptoms [13]. Disputes with in-laws or parents (50% vs. 8.2%, $p < 0.001$) and exposure to domestic violence (48.6% vs. 18.9%, $p < 0.001$) were significantly correlated with postpartum depression (PPD), corroborating findings from studies conducted in Bangladesh and India that indicate similar relationships between interpersonal conflicts, domestic violence, and postpartum depressive symptoms [14,15].

Emotional support from husbands and mothers/in-law was protective: women with sufficient spousal support had a decreased prevalence of postpartum depression (16.9% vs. 32.5%, $p = 0.001$), while maternal/in-law support similarly diminished risk (13.8% vs. 40%, $p < 0.001$). The findings align with Surati et al., who indicated that inadequate social support markedly elevates the likelihood of postpartum depression, underscoring the protective function of familial support [10]. Practical support was similarly significant: insufficient assistance with household tasks (40% vs. 13.75%, $p = 0.006$) and spousal child care support (33.3% vs. 19.51%, $p = 0.048$) correlated with increased prevalence of postpartum depression, reflecting findings from previous cohort studies in Asia that highlight the importance of instrumental support in alleviating postpartum stress [16,17]. Likewise, insufficient support from extended family members heightened the incidence of postpartum depression (38.5% vs. 15%, $p = 0.002$), aligning with cross-cultural studies that demonstrate the significant impact of extended family engagement on maternal mental health [18].

The results of our study and comparative literature highlight that postpartum depression (PPD) is multifaceted, with risk influenced by a confluence of sociodemographic characteristics, familial dynamics, and the accessibility of emotional and practical support. Our numerical results, in comparison to global and regional research, are situated at the upper end of reported prevalence, possibly due to the cumulative impact of low socioeconomic level, high parity, and insufficient family assistance. These findings underscore the necessity for early screening, family-oriented interventions, and culturally attuned support networks to reduce the incidence of PPD. Incorporating mental health counselling into standard maternal care and informing families about emotional and practical assistance might markedly enhance mother outcomes and alleviate the impact of postpartum depression [19-21].

This single-center study used a modest sample size and self-reported measures, which may introduce bias.

CONCLUSION:

Overall, these findings highlight that family-related stressors—such as interpersonal conflicts, domestic violence, and lack of emotional or practical support—play a significant role in the development of postpartum depression. Addressing these familial and social support deficits could be crucial for early identification and intervention in high-risk mothers.

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