Journal of Neonatal Surgery
ISSN(Online): 2226-0439
Vol. 14, Issue 5s (2025)
https://www.jneonatalsurg.com

OPEN ACCESS

Prevalence and Correlates of Postpartum Depression (PPD) In India: Literature Review-Based Study

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Cite this paper as: Dr. Yamini Upalkar, (2025) Prevalence and Correlates of Postpartum Depression (PPD) In India: Literature Review-Based Study. *Journal of Neonatal Surgery*, 14 (5s), 81-85.

ABSTRACT

Background: Despite being the most prevalent consequence, postpartum depression is abnormal, impacting the majority of new moms and playing a major role in maternal morbidity.

Objective: This research work aims to examine the prevalence and analyse the correlates of PDD in India.

Methodology: A search of PsycINFO, Google Scholar, and PubMed (2015-2023) yielded studies examining the prevalence of postpartum depression, family health, maternal mental health, and the links between postpartum depression and both socioeconomic status and psychological factors.

Result: The most significant elements that lead to PDD are those that are associated with biology, psychology, and society. A mother's mental health was most negatively impacted by her incapacity or short duration of nursing in the immediate postpartum period. Premature birth, adverse birth experiences, (biological variables), an infant's excessive crying, low maternal self-efficacy, and a lack of support from partners, family, and the community are other factors.

Conclusion: There is strong evidence that postpartum depression hinders both the parents and children's ability to thrive in their new environments. To prevent negative consequences, it appears crucial to detect and treat postpartum depression promptly.

Keywords: *Postpartum Depression, Maternal and Paternal postpartum depression, Family health, Maternal mental health and psychological and socioeconomic correlates of PPD etc*

1. INTRODUCTION

The World Health Organisation (WHO) describes **postpartum depression (PPD)** as "a specific state of mental illness and a type of depression."[1]

The Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision (DSM-IV-TR) states that PDD is a clinical disorder that lasts at least two weeks, significantly impairs functioning, and typically requires specialised treatment; Am. Psychiatr. Assoc. 2000].[2] The American Psychological Association (APA) characterises PDD as "a significant mental health issue marked by extended emotional turmoil that arises during a phase of substantial life transition or heightened responsibilities associated with caring for a newborn."[3] There are three distinct categories that can be used to classify postpartum mental disorders:[5,6] In addition to **postpartum depression** and **postpartum psychosis**, there is also **postpartum blues**. It is estimated that between 300 and 750 moms in the world experience postpartum blues on a daily basis.[5] Postpartum mental illness has a global sickness rate on a beach that ranges from 0.89 to 2.6 per birth of 1000 years, but it is a significant challenge that begins within four weeks after delivery and requires hospitalisation.[4,7] It is necessary to seek treatment for postnatal depression, which can manifest itself either shortly after giving birth or as a consequence of prenatal depression.[5] According to estimates, the prevalence of postpartum depression around the world ranges from 100 to 150 cases per 1,000 births.[8]

Postpartum depression (PPD) manifests in various ways, including trouble sleeping, shifting moods, changes in eating habits, fear for the baby's safety, overwhelming anxiety about the infant, persistent feelings of sadness or frequent crying spells, feelings of inadequacy, remorse, and hopelessness, trouble concentrating, a lack of interest in things that were once pleasurable, and recurring thoughts of death or self-harm.[9] These symptoms can have a detrimental effect on a newborn's growth and development.[10] Regrettably, PPD frequently goes unacknowledged and consequently, individuals

do not receive treatment. If left unaddressed, PPD can become a long-term condition for the mother, potentially causing emotional, behavioral, thinking, and social problems for the child as they grow.[10]

In the year 2020, **Srinivasan et al.** Through their research, they have demonstrated that there is evidence to support the hypothesis that there is a connection between a mother's postnatal depression and the psychotic experiences of kids around the age of 18.[12]

A study by Van et al. (2021) explored various risk factors for depression and anxiety during the perinatal period. They found that depression was more likely among mothers who spoke a language other than the dominant language at home, had a prior episode of depression, felt less confident in their parenting abilities, experienced poor health, and did not breastfeed (particularly if they did not start breastfeeding within three weeks of giving birth). Factors increasing the likelihood of anxiety included advanced education, a history of depression, giving birth prematurely, difficult experiences during labor and delivery and the week immediately following birth, a baby who cried excessively, low maternal self-efficacy, insufficient support from a partner, and poor maternal health.[13]

According to **GOODMAN (2004)**, data suggests that mother postpartum depression (PPD) adversely affects fathers, and if a female partner is having PPD, men are significantly more prone to experience depression and psychological distress. The parent's depression was determined to be the most significant predictive component of his father's depression throughout the delivery time.[14]

2. PREVALENCE OF PPD

Postpartum blues affects 30-75% of mothers per 1000 moms. but postpartum psychosis occurs at a rate of 0.89 to 2.6 occurrences per 1000 births. Postpartum depression (PPD) impacts 100-150 new mothers per 1,000 newborns, with a global prevalence potentially surpassing 25%.[28]

The prevalence of Post Partum Depression (PPD) varies from 3% in Singapore to 38% in Chile, resulting in a global cumulative prevalence of 17.7%.12 The overall prevalence in India is 22%.[4] Upadhyay et al. did a systematic study and found that 22% of people in India had PPD, with rates ranging from 13% to 60%.[4]

The prevalence of postpartum depression (PPD) was shown to vary across different geographical regions and study settings, according to the findings of Panolan S. and Thomas BM's research, 22% of people in India are affected by postpartum depression (PPD). On the other hand, the presence of the disease was shown to be most prevalent in the southern region and the least prevalent in the northern region .[29]

Using the Edinburgh Postnatal Depression Scale (EPDS) Aslam et al showed that the prevalence of postpartum depression (PPD) was 9.5% (29 out of 304) when screening with the EPDS. The same number of individuals were diagnosed with PPD using the ICD-10 criteria. In urban regions, the prevalence was 9.4% (16 out of 170), whereas in rural areas, it was nine percent (13 out of 134).[15]

The researchers Zaidi and colleagues observed that the prevalence of postpartum depression (PDD) among women in Delhi was 12.75 percent in New Delhi. 2017.[16]

In Gujarat, a study found that the frequency was 15.8% of the population.

3. CORRELATES OF PPD

Biological Correlates

When the baby is delivered and the placenta is released, the delicate equilibrium that had been necessary to maintain the link between the mother, the placenta, and the foetus during the pregnancy is no longer required. Additionally, substantial biological changes take place in the mother's body during the first few days after the baby is born. The amount of time it takes for the body to achieve a new equilibrium outside of pregnancy can range anywhere from a few months to a longer period of time, depending on how long the mother breastfeeds her child. The mental health of the mother may also be affected by these physiologic changes, which the mother may experience.[2]

The hormones that are responsible for reproduction not only play a significant part in the regulation of pregnancy, labour, and birth, but they may also play a role in postpartum depression. Mood problems have been linked to rapid withdrawal of estrogen, changes in estrogen levels, and sustained estrogen shortage, according to a study of the literature that spans thirty years.[17]

In a similar way progesterone is thought to defend against depression due to the anaesthetic and anaesthesia properties that it possesses[18,19] moreover, due to the fact that it influences serotonergic receptors.[20] The onset of postpartum depression (PPD) may therefore be influenced by fluctuations in oestrogen and progesterone levels that occur throughout pregnancy and after birth.[21]

The research conducted by Bloch and colleagues provides the most compelling evidence to support the hypothesis that

oestrogen withdrawal is a causative factor in the development of postpartum depression.[21]

Antenatal anemia: A meta-analysis showed a strong link between anemia, both during and after pregnancy, and an increased risk of postpartum depression. Therefore, it is essential to prevent, detect, and treat anemia in pregnant women.

The decrease in hemoglobin can change the functions of the neurotransmitter, and then modify the metabolism of cells, oxide, and thyroid hormones. In addition, the decrease in inflammatory cytokines such as interloykin 2 as an anemic agent can lead to the effects of depression. Therefore, anemia during and after pregnancy may be one of the causes of depression by altering inflammatory cytokines.[23]

4. PSYCHOLOGICAL CORRELATES

Breastfeeding: Initially, it was hypothesised that the connection between breastfeeding and postpartum depression was unidirectional, meaning that postpartum depression would result in a decrease in the number of breastfeedings that were initiated and early discontinuation of lactation.[24] Recent research, on the other hand, imply that this link may be of a bidirectional character, meaning that postpartum depression may reduce the frequency of breastfeeding while no breastfeeding can increase the incidence of postpartum depression. Furthermore, there is evidence to suggest that nursing may speed up recovery from symptoms of postpartum depression or prevent the development of the condition altogether.[25]

Breastfeeding is an extremely effective method for lowering stress, but stress may be increased by breastfeeding difficulties. It is essential that women who wish to nurse their children have the appropriate support in order to achieve their goals.[26]

It was suggested in two early reports that moms who breastfeed their children have an increased chance of developing depression.[25] In contrast, a number of studies that were conducted more recently have shown that mothers who breastfeed their children have lower incidence of depression compared to women who formula feed their children.[25]

Trimester Conditions, History and Family Conditions: Significant risk factors for postpartum depressive symptoms included having a depressed mood throughout the final trimester of pregnancy, having support from family and friends, receiving care and support from one's spouse, having a known history of depression, and having an unplanned pregnancy.[27]

Researchers are now focussing more of their attention on the role that psychosocial factors play in postpartum depression of women, rather than the function that physiological factors play. Both of these characteristics, in addition to those that are specific to the genus, have the potential to influence the mental health of men as well.[31]

5. SOCIAL CORRELATES

Several social issues can make postpartum depression (PPD) more likely. These include a partner's drug or alcohol addiction, problems in the marriage, and difficult relationships with the husband's family. Therefore, programs supporting the health of mothers and children should include screening for these issues to help identify and treat PPD early. Studies have demonstrated significant connections between PPD and prior abortions and a partner's substance abuse.[32] Additional factors identified as increasing the risk of PPD are unintended pregnancies, financial hardship, a bad relationship with the mother-in-law, giving birth to a female infant, mental health issues before childbirth, the baby needing hospital care, the husband being unemployed, and insufficient social support.[33,34,35] Research by Turkcapar et al. also indicated that women with a history of PPD, suicidal thoughts during pregnancy, or experiences of domestic violence have a greater chance of developing PPD.[36]

6. FURTHER RESEARCH

A growing body of research suggests that it is essential to investigate the ways in which the health of a spouse and the quality of the relationship may act as predictors of maternal depression after the delivery of a child. In addition, there is a requirement for a more in-depth comprehension of the elements that are connected with depression in the partner or the father during the postpartum period.[37]

The fact that there is a strong association between father postpartum depression and maternal postpartum depression, as discovered by Goodman (2004), has important repercussions for the health and well-being of families. It is necessary for future research and practice surrounding reproductive families to take into consideration postpartum depression in both mothers and fathers, as well as the co-occurrence of depression among couples. This is because depression is present in both the mother and the father.[38]

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