"A systematic review on postpartum depression in mothers"

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Abstract:
Postpartum depression (PPD) is a significant maternal mental health problem that can occur following childbirth and may adversely affect mothers, infants, and families. It is more than the transient emotional changes associated with postpartum blues and may remain unrecognized or untreated, particularly in developing settings. Evidence reviewed in the present article indicates that postpartum depression is associated with psychological and physiological risk factors and may have short- and long-term consequences for child development and mother–child interactions. Objective: The present systematic review was undertaken to review the available evidence regarding postpartum depression among mothers, including its prevalence, associated risk factors, consequences, and the importance of early identification and management. Methods: A systematic review was conducted using studies identified from PubMed, Scopus, and the Cochrane Library. Studies published in English between 2010 and 2024 and reporting postpartum depression among mothers, including postpartum physical and mental changes, were considered. The review process involved identification of records, removal of duplicates, screening of titles and abstracts, and application of inclusion and exclusion criteria. The article reports 220 initially identified records and 20 original research articles included for meta-analysis. Results: The reviewed evidence demonstrates that postpartum depression is common among mothers and that prevalence varies across populations, geographical regions, screening methods, and postpartum periods. A meta-analysis among Indian mothers reported a pooled prevalence of 22% (95% CI: 19–25%), while another systematic review among healthy mothers reported an overall prevalence of 17% (95% CI: 0.15–0.20). The reviewed studies identified multiple psychological and physiological risk factors. Higher rates were also reported among mothers of premature or low-birth-weight infants. Postpartum depression was found to be underdiagnosed and undertreated and was associated with adverse effects on maternal well-being, bonding, breastfeeding, and the child's physical, cognitive, emotional, social, and behavioural development. Evidence regarding preventive interventions suggests that screening and appropriate interventions can contribute to reducing depressive symptoms. Conclusion: Postpartum depression represents an important maternal and child health concern requiring early recognition, appropriate assessment, and timely management. Routine screening and increased awareness among healthcare professionals can facilitate early identification. Nurses, midwives, obstetricians, paediatricians, and other healthcare providers have an important role in counselling, education, support, prevention, referral, and treatment. Early detection and appropriate intervention may improve maternal well-being and reduce the potential adverse effects on mothers and their children.

Keywords:
Postpartum depression; Postnatal depression; Mothers; Maternal mental health; Edinburgh Postnatal Depression Scale; Screening; Nursing care.

1. Introduction:

In both high- and low-income nations, mental health difficulties are major public health concerns for women of reproductive age. For women, childbirth is a time when they are most vulnerable to developing poor mental health, with postnatal mood disorders being the most common form of maternal morbidity after delivery. According to World Health Organization in India, 22% of new moms have postpartum depression. Postnatal depression is particularly common in developing nations, where psychological disorders are frequently overlooked. Every pregnancy is different, and clinical needs can shift during pregnancy, childbirth, and the postpartum period. The right to a positive experience at every step is something that never changes. Postpartum depression can manifest in a variety of ways and might go untreated for a long time. Postnatal depression has been related to negative outcomes for mothers, their children, and their entire family, and it isa substantial public health concern that is often overlooked as a maternal and child health issue in underdeveloped countries. Postnatal depression is frequently misinterpreted as a regular side effect of a recent delivery. It is more severe than baby blues and can occur anytime in the first year postpartum.

In postpartum depression, there is a tendency to experience difficulty falling asleep, but once asleep the women will sleep for long periods. They often feel well in the morning but deteriorate as the day goes on. Inmost other depression, early walking is pattern with symptoms more acute in the morning. The women may feel constantly tired in spite of adequate periods of rest and may appear over anxious about her baby in spite of evidence that the baby is well and thriving. Postpartum depression, postpartum blues, and postpartum non-psychotic are the three types of postpartum depression. The duration and severity of these illnesses are what distinguishes them. With a global incidence of 300-750 per 1000 moms, postpartum blues can last anywhere from few negative squeals, and usually needreassurance after a few days to a week. The postpartum blues normally start between the third and fourth dayafter delivery and last for a few days to a few weeks. After having delivery, some women experience a complicated mix of physical, mental, and behavioral changes known as postpartum depression. Postpartum depression is defined as a condition of significant depression that begins within four weeks following birth, according to the DSM-5, a guideline used to diagnose mental disorders. The intensity of the depression, as well as the amount of time between birth and beginning, are used to identify postpartum depression.

There are three circumstances that are termed postpartum depression, postpartum blues and postpartum non-psychotic. These are conditions are differentiated by their duration and level of severity. The global incidence of postpartum blues is 300-750 per 1000 women. It usually lasts a few days to a week, has few negative consequences, and only requires reassurance. The postpartum blues usually begin on the third or fourth day after delivery and can last anywhere from a day to a few weeks. Any new mother can experience symptoms of postpartum depression or other mood disorder. Women are at increased risk of depression during or after pregnancy if they have previously experienced depression or other mood disorders. Researches suggests that rapid changes in sex and stress hormones levels during pregnancy and after delivery have a strong effect on moods or may contribute to peripartum depression. Postpartum psychosis, with a global prevalence of 0.89 to 2.6 per 1000 births, is a serious illness that develops within four weeks of delivery and necessitates hospitalization. Postpartum depression can develop immediately after childbirth or as a result of antenatal depression, and it must be treated. Postpartum depression is estimated to affect 100-150 women out of every 1000 births around the world. The postpartum blues are a low mood and moderate depressive symptoms that are prevalent in the postnatal period and are temporary and self-limited.

2. Methodology:

A systematic review was conducted using database like PubMed, Cochrane library and Scopus studies are based on the following criteria: -

Studies reporting postpartum depression among mothers Studies published in English between 2010 to 2024. The outcome assessed including postpartum depression, postpartum physical and mental changes.

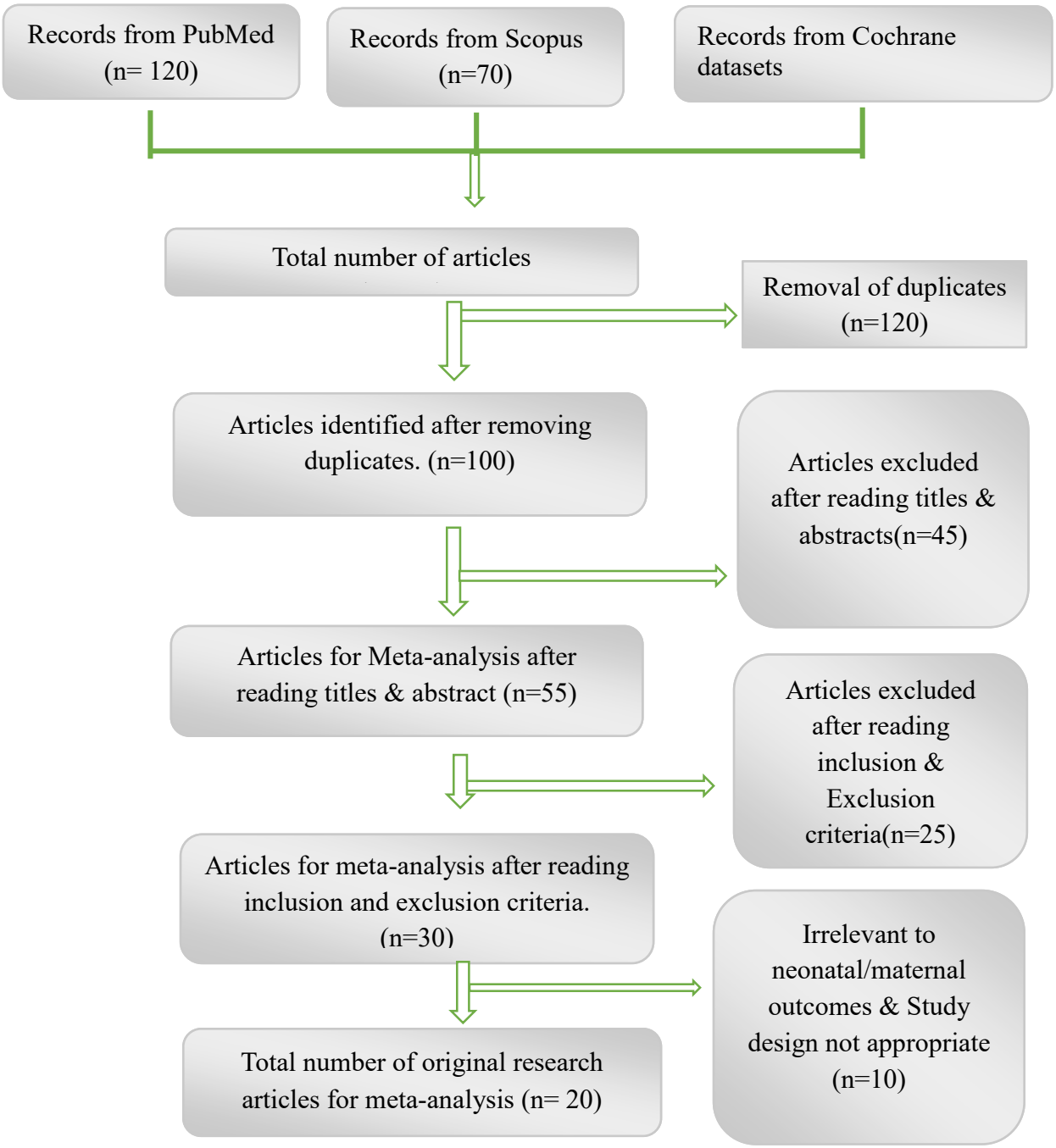

Figure. 1: PRISMA flowchart showing the selection of included studies

3. Results:

Studies consistently shows that Postpartum depression affects a large percentage of women, and various psychosocial factors are linked to it. A Cochrane review involving 4,740 women founding that the prevalence rate of postpartum depression is relatively high, that it varies widely, that the prevalence of depression decreased as more time elapsed after childbirth, and that it is linked to a variety of circumstances.

Several psychological and physiological risk factors for PPD have been found in recent studies. The short- and long-term harmful impacts on child development are extensively documented. Postpartum depression is both underdiagnosed and undertreated. The obstetrician and paediatrician can both help with postpartum depression screening and treatment. More research is needed to look at the short- and long-term effects of drug exposure through breastfeeding on newborn and child development in a systematic way.

Using the EPDS, researchers investigated the efficacy of a wide range of preventiveinterventions aimed at reducing the severity of postpartum depressive symptoms or lowering the prevalence of postpartum depressive episodes. 37 randomised or quasi-randomized controlled studiesin which an intervention was compared to a

control condition were found in a systematic review. Separate analyses were conducted to compare the levels of depressed symptoms and the prevalenceof depressive episodes in the treatment and control groups at 6 months postpartum. In all studies, later postpartum evaluation was linked to smaller differences between intervention and control conditions.

4. Discussion:

Zekiye. Oban, Burcu Akbaş, and Erdem Karabulut Karaçam, Ayden used the EdinburghPostpartum Depression Scale to perform a study on the status of postpartum depression in Turkey. The results showed that 4,740 women out of 18,780 were at risk for postpartum depression based on the scans performed. According to the calculations based on these data, the consolidated prevalence of postpartum depression was 24 percent (21 percent -27 percent at a 95 percent confidence interval) and that this rate varied between 9 and 51 percent. It was found that the prevalence rate of postpartum depression is relatively high, that it varies widely, that the prevalence of depression decreased as more time elapsed after childbirth, and that it is linked to a variety of circumstances.

Howard M Salisbury A According to a study, up to 15% of moms suffer from postpartum depression (PPD). Several psychological and physiological risk factors for PPD have been found in recent studies. The short- and long-term harmful impacts on child development are extensively documented. Postpartum depression is both underdiagnosed and undertreated. The obstetrician and paediatrician can both help with postpartum depression screening and treatment. More research is needed to look at the short- and long-term effects of drug exposure through breastfeeding on newborn and child development in a systematic way.

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ShefalyShorey, Cornelia Yin Ing Chee, Esperanza Debby Ng et al. November 2017 conducted a study on the prevalence and incidence of postpartum depression among healthy moms. The study found that among healthy mothers without a history of depression, the incidence of postpartum depression was 12 percent [95 percent CI 0.04-0.20], while the overall prevalence of depression was 17 percent [95 percent CI 0.15-0.20]. Regardless of the diagnostic technique utilised, prevalence was similar; however, there were statistical disparities in frequency between geographical locations, with the Middle East having the highest prevalence (26 percent, 95 percent CI 0.13-0.39) and Europe has the lowest unemployment rate (8 percent, 95 percent CI 0.05-0.11). There was no significant difference in prevalence between different screening time points, although after six months postpartum, there was an increase in prevalence.

Ravi Prakash Upadhyay, RanadipChowdhury, AslyehSalehi et al Using a random effects model, they conducted a study to quantify the burden of postpartum depression among Indian mothers. The study's findings revealed that 38 trials with a total of 20 043 women were examined. There was evidence of publication bias (Egger bias = 2.58; 95 percent confidence interval, CI: 0.83-4.33) and ahigh degree of heterogeneity (I2 = 96.8%). The prevalence of postpartum depression was estimatedto be 22 percent in the overall pooled estimate (95 percent CI: 19-25). When 8 studies reporting postpartum depression within 2 weeks of delivery were excluded, the pooled prevalence was 19 percent (95 percent CI: 17-22). Mother's age, geographic area, and research setting all had minor but non-significant changes in pooled prevalence. According to the findings, Indian moms had a significant rate of postpartum depression.

MariyaChalise, IshaKarmacharya, MaheshorKaphle et al conducted a study to determine the prevalence of postnatal depression and the factors that contribute to it among postpartum moms. A hospital-based cross-sectional descriptive study comprised a total of 242 postnatal women. To determine the relationship between the variables and depression status, the chi- square test and binary logistic regression were used, with significance set at 0.05. According to the findings of EPDS, the prevalence of postnatal depression was 16.9% at the cutoff point of 12. Conclusion Within six months of delivery, nearly one-fifth of women reported postnatal depression, with 13.6 percent also experiencing suicidal thoughts.

DesaiNimisha D, Mehta Ritambhara Y, Ganjiwale Jaishree performed research on the prevalence and risk factors of postpartum depression among moms who visited the well-baby clinicin Vadodara, Gujarat. To identify risk variables, 200 Gujarati women in their first year after giving birth were randomly selected and tested using a semi structured proforma that included DSM-IV TR diagnostic criteria for depression and a prediction index for postnatal depression. The findings revealed that 12.5 percent of women suffer from postpartum depression. Postpartum depression affects a large percentage of women, and various psychosocial

factors are linked to it.

Simone N Vigod, Leon Villegas, C-L Dennis, Loss L conducted research on the prevalence andrisk factors for postpartum depression in mothers who gave birth to premature or low-birth-weight babies. From their inception dates through August 2008, Medline and PsycINFO were searched usingkeywords related to depression and preterm. The findings revealed that among women with premature children, rates of postpartum depression were as high as 40% in the early postpartum period. Sustained depression was found to be linked to a younger gestational age.

Deepika Goyal (2015). by employing convenience sampling technique, conducted a qualitative exploratory design study to explore the perspectives of Asian Indian mothers on postpartum depression and mental health care seeking behaviour. This study included 12 self- identified, married Asian Indian mothers between the ages of 29 and 40 who had just given birth to a healthy infant. The EPDS scores revealed that two of the participants were at an elevated risk of developing postpartum depression. Two major themes emerged from the content analysis: a) Culture-specific postpartum customs and ceremonies, as well as their importance in maternal infants. a) Maternal mental health help seeking behaviour b) Postpartum recovery.

5. Treatment for postpartum depression:

Postpartum depression has numerous harmful effects on maternal and baby health that are not limited to childhood, but can also continue into toddlerhood, school age, and adulthood. Mother-child interactions include bonding, breastfeeding, and the maternal role; anthropometry, physical health, sleep, and motor, cognitive, language, emotional, social, and behavioural development as a conduct disorder in adolescents; and mother-child interactions include bonding, breastfeeding, and the maternal role. [8,9]. The most effective treatment for depression is a combination of medicine, counselling, support groups, and self-help activities, according to research.

6. Implications for practice:

Nursing practice, nursing education, nursing administration, and nursing research are all affected by the findings Professional provision of caring services to human beings is a nursing commitment. Practice of nursing has adirect and significant impact on human health. They shoulder the responsibility of promoting health, preventing illness and rehabilitation of clients. Nurses play an important role in health care delivery at all levels of prevention, promotion, and treatment. Since the nursing personnel at primary health center and community health center level comes in contact with mothers during community visits, even hospital set up, he/she support them to can overcome the problem in right way by coping. The nurse can give guidance and counselling which involves education on prevention of Post partum depression at primary, secondary and tertiary levels.

7. Conclusion:

After having delivery, some women experience a complicated mix of physical, mental, and behavioural changes known as postpartum depression. Postpartum depression is defined as a condition of significant depression that begins within four weeks following birth, according to the DSM-5, a guideline used to diagnose mental disorders. The intensity of the depression, as well as the amount of time between birth and beginning, are used to identify postpartum depression. The greatest prognosis comes from early discovery and beginning of suitable treatment. If the midwife feels that a woman is depressed, she should inform the doctor. Treatment with moderate sedation or antidepressants may be provided in less severe situations

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