WE AVEC U PUBLICATION

International Journal of Spirituality and Cognition
An Open Access Peer Reviewed Journal

Jan-Mar 2025, VOL 03, NO. 01, P. 33-42

ISSN: 2584-2315 (online)

Beyond The Baby Blues: Investigating Postpartum Depression in New Mothers

[1]Deepanjali Sharma and [2]Dr. Alka Pandey

[1]Undergraduate Fellow, Department of Psychology, School of Liberal Education, Galgotias University, Uttar Pradesh, Plot No-2, Sector 17-A, Yamuna Expressway Greater Noida, Distt- Gautam Buddh Nagar 203201, India. Deepanjalisharma3226@gmail.com

[2]Assistant Professor, Department of Psychology, School of Liberal Education, Galgotias University, Uttar Pradesh, Plot No-2, Sector 17-A, Yamuna Expressway Greater Noida, Distt- Gautam Buddh Nagar-203201, India. alka.tripathi86@gmail.com

Abstract

Background: Postpartum depression (PPD) is a significant mental health issue affecting many new mothers globally. Despite growing awareness, gaps remain in understanding its risk factors, early symptoms, and impact on maternal and infant health. Previous studies have emphasized the need for early detection and comprehensive care models, but research integrating empirical findings with practical interventions remains limited. This study addresses these gaps by exploring the prevalence, risk factors, and consequences of PPD, while evaluating the effectiveness of available support systems.

Aim: The primary objective of this study is to examine the prevalence, risk factors, clinical presentation, and effects of postpartum depression on mothers and infants, and to assess the role of interventions and support structures in improving outcomes.

Method: A cohort study design combined with a survey method was employed to investigate different hypotheses related to PPD. The sample consisted of 60 postpartum mothers, and data were collected using a self-developed questionnaire. The approach integrated both quantitative and qualitative elements, ensuring alignment with the research aim of exploring the multifaceted nature of PPD.

Result: Findings indicated that PPD is influenced by factors such as hormonal fluctuations, lack of social support, previous mental health issues, and exposure to stress. Symptoms like persistent sadness, fatigue, irritability, and feelings of inadequacy were common. Early interventions and structured support systems were found to significantly enhance recovery and maternal-infant bonding.

Conclusion: The study underscores the importance of early screening, comprehensive care, and collaborative healthcare approaches in addressing postpartum depression. These findings contribute to the growing body of knowledge by emphasizing culturally sensitive interventions and the need for robust support networks, offering valuable insights for clinical practice and future research.

Keywords: intervention, maternal mental health, new mothers, postpartum depression, risk factors, social support.

Introduction

Postpartum depression (PPD) is a significant public health concern, affecting an estimated 10-15% of new mothers globally within the first year after childbirth. While the birth of a child is often accompanied by immense joy, it can also trigger a range of emotional and psychological challenges for mothers, which may escalate into clinical depression. This mental health disorder not only compromises the well-being of mothers but also has far-reaching consequences for family dynamics, infant development, and broader societal functioning.

Understanding PPD requires a comprehensive exploration of its complex origins, which stem from a combination of biological, psychological, and social factors. Hormonal fluctuations, genetic vulnerabilities, psychosocial stressors, and lack of social support all play a role in the onset and severity of PPD. Furthermore, the transition to motherhood involves profound physiological, emotional, and social changes that increase vulnerability to depressive symptoms. The multifaceted nature of PPD necessitates an in-depth examination to understand its full impact on maternal health and family well-being.

This study aims to provide a thorough evaluation of PPD, synthesizing empirical studies, theoretical frameworks, and clinical perspectives. By reviewing the latest literature, this paper will highlight the various dimensions of PPD, including its effects on maternal-infant bonding, breastfeeding, parenting, and overall family functioning. Additionally, the study will investigate how PPD is experienced across different cultural contexts, socioeconomic levels, and healthcare systems, emphasizing the importance of adequate support mechanisms.

Ultimately, this research aims to raise awareness and promote the development of effective healthcare practices, early interventions, and responsive policies to support maternal mental health. Through a holistic approach, this study seeks to reduce the burden of PPD and empower new mothers with the tools and resources they need to thrive in their maternal roles.

Review of Literature

Postpartum depression (PPD) is a generic and debilitating circumstance that impacts new mothers worldwide, with vast implications for maternal mental fitness and infant nicely-being. This literature evaluation synthesizes key findings from empirical studies, theoretical frameworks, and scientific observations to provide a comprehensive analysis of PPD among new mothers, exploring its etiology, risk elements, manifestations, impact, and interventions.

The aetiology of PPD is multifactorial, concerning complicated interactions between biological, mental, and social determinants. Hormonal fluctuations, especially in estrogen and progesterone stages, had been implicated within the onset of PPD (Bloch et al., 2000). Genetic predispositions and neurobiological vulnerabilities also play a extensive position, with studies suggesting a heritable component to PPD (Sullivan et al., 2004). Psychosocial stressors together with marital discord, economic stress, loss of social

support, and a records of despair growth the risk of growing PPD (Beck, 2001; Robertson et al., 2004).

PPD manifests via a spectrum of symptoms, including chronic disappointment, irritability, anxiety, sleep disturbances, feelings of guilt or worthlessness, and impaired awareness (American Psychiatric affiliation, 2013). Left untreated, PPD may have profound effects on maternal-toddler bonding, breastfeeding fulfilment, parenting efficacy, and circle of relatives functioning (Gavin et al., 2005). Babies of mothers with PPD are at increased threat of developmental delays, behavioural issues, and insecure attachment (Murray et al., 1996).

Early detection and intervention are important in addressing PPD and mitigating its negative outcomes. Pharmacotherapy, specifically selective serotonin reuptake inhibitors (SSRS), and psychotherapy, which includes cognitive-behavioural therapy (CBT) and interpersonal remedy (IPT), have validated efficacy in treating PPD (O'Hara et al., 2014). But access to mental health offerings remains a mission for many new moms, specifically the ones from marginalized agencies (Goodman, 2009). Complete, multidisciplinary techniques that combine screening, training, social support, and network resources are important in providing holistic care to moms with PPD (Earls, 2010).

Method

Study Design

An exploratory study design was employed to gain insights into postpartum depression (PPD) among women aged 20–40 years in the Delhi-NCR region. This design was chosen for its flexibility in exploring new areas where standardized instruments were limited, allowing for in-depth examination of stressors and symptoms associated with PPD. It helped minimize biases by directly addressing a specific, targeted population.

Participants

The study was conducted across 5–6 gynaecology clinics in Delhi-NCR. Participants were selected using purposive sampling based on inclusion criteria such as being postpartum women aged between 20 and 40 years. Exclusion criteria involved women with pre-existing psychiatric diagnoses unrelated to postpartum conditions. A total sample of 60 participants was gathered, considered adequate based on precedents in exploratory mental health studies and the exploratory nature of the research. Participants were recruited through clinic referrals and approached individually. Informed consent was obtained, and initial demographic details— including name initials, age, educational qualification, and place of residence—were collected following ethical guidelines.

Tools Used

A self-developed 21-item questionnaire was used for data collection, administered through Google Forms. The tool focused on areas such as stress sources, causes, symptoms, hormonal fluctuations, and physical concerns related to PPD. Responses were recorded using a Likert

scale. The questionnaire demonstrated high reliability (Cronbach's alpha = 0.85) and strong concurrent validity (r = 0.78) when compared with established depression assessment tools. Content validity was established through expert reviews and pilot testing.

Procedure

Data collection involved three stages over two weeks: questionnaire development, online distribution, and data review. After brainstorming and expert validation, the questionnaire link was circulated via WhatsApp groups to participants for ease of access. Respondents answered both demographic and stress-related sections, selecting one option per item. Severity of stress was categorized into four levels (Low: 0–10, Mild: 11–20, Moderate: 21–30, Severe: 31–40) based on cumulative scores.

Ethical Considerations

Ethical approval was obtained from a recognized institutional review board. Participants were informed about the study's objectives, assured of confidentiality, and provided consent before participation. Data security was maintained throughout, with participant anonymity preserved. No compensation was provided.

Data Analysis

SPSS software was used to manage and analyse the data due to its robustness in handling quantitative survey responses. Descriptive statistics summarized demographic information and stress severity levels. Reliability analysis using Cronbach's alpha confirmed high internal consistency (0.85), while concurrent validity was assessed by correlating the new tool with existing depression scales (r = 0.78). Outliers and missing data were systematically reviewed and cleaned to maintain data integrity.

Result

The results of the collected data are discussed. The findings that are based on surveys are presented.

Table 1: Overall Analysis Scores and Their Mean Value with Number of Responses

	Age Group (20-24)	**Age Group (25-29)**	**Age Group (30-34)**	**Age Group (25-29)**
N	13	16	11	19
Mean	24.46	21.63	23.36	25.84

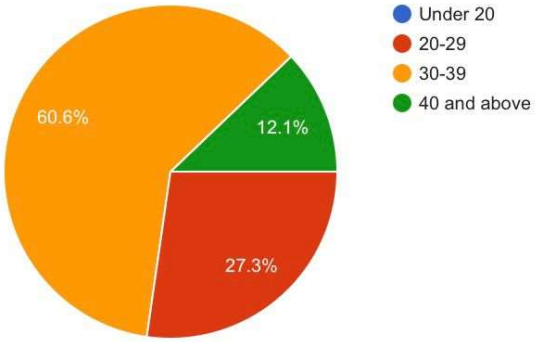
four age groups: Data 1 (20-24), Data 2 (25-29), Data 3 (30-34), and Data 4 (35-39). In Data 1, there were 13 participants in the age group of 20-24, with a calculated mean score of 24.46. This indicates that this group falls under the moderate level of severity according to the PPDS scale. In Data 2, there were 16 participants in the age group of 25-29, with a calculated mean score of 21.63, also indicating a moderate level of severity according to the PPDS scale.

Based on the provided data, it is evident that Data 4 (age group 35-39) has the highest mean level, indicating the highest impact of postpartum depression (PPD) within this age group. Additionally, Data 1 (age group 20-24) exhibits a mean level close to that of Data 4, suggesting a significant impact of PPD on individuals in this age

group as well. Despite falling within the moderate level of severity according to the PPDS scale, these two age groups appear to be more affected by PPD compared to others. Conversely, Data 2 (age group 25-29) has the lowest mean level among the groups, indicating a relatively lower impact of PPD within this age range.

Based on Sample:

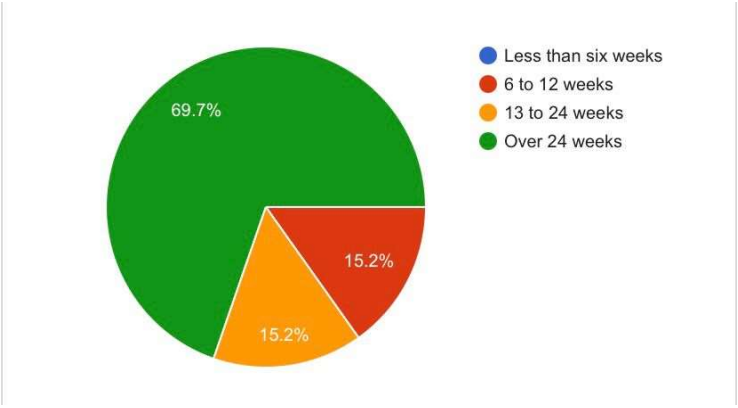
Frequency distribution of respondents among different age groups:



The chart illustrates the distribution of participants across three age groups: 20-29, 30-39, and 40 and above. It indicates that 27.3% of women belong to the 20-29 age group, 60.6% fall within the 30-39 age group, and 12.1% are in the 40 or above age group. This suggests that the 30-39 age group is disproportionately affected by postpartum depression compared to the other age groups.

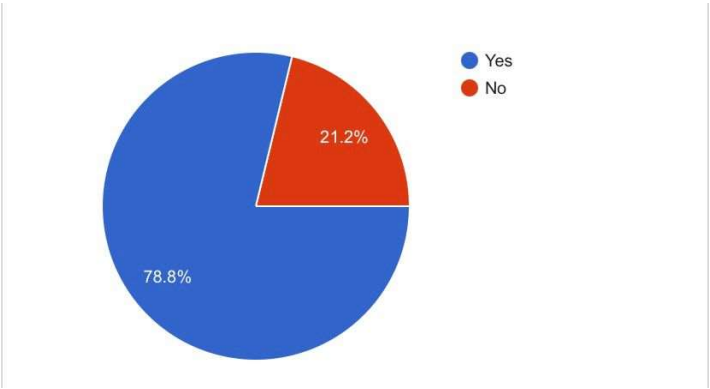
Frequency distribution of different weeks impacting PPD:

.



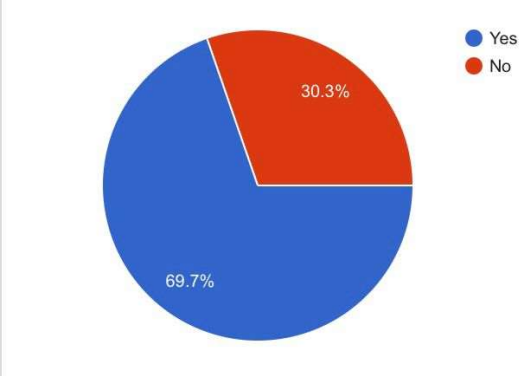
This chart illustrates the propensity of women towards postpartum depression (PPD) after giving birth. The highest percentage of women, constituting 69.7%, experienced PPD onset after 24 weeks postpartum. Moreover, approximately 15% of women began experiencing PPD between 6 to 24 weeks postpartum, with equal percentages for the 6-12 weeks and 13-24 weeks intervals.

Frequency distribution showing changes in appetite due to postpartum depression:



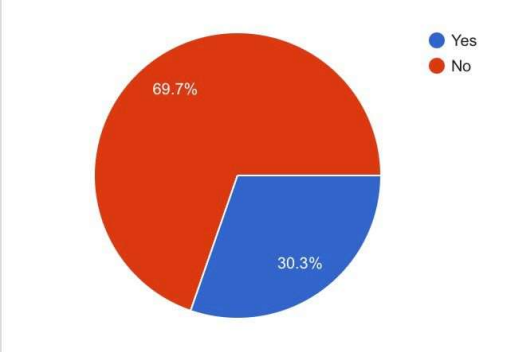
This chart shows that 78.6% women have experienced the changes in their appetite, whereas only 21.2% women didn't notice any changes in their appetite.

Frequency distribution of difficult sleeping patterns due to postpartum depression:



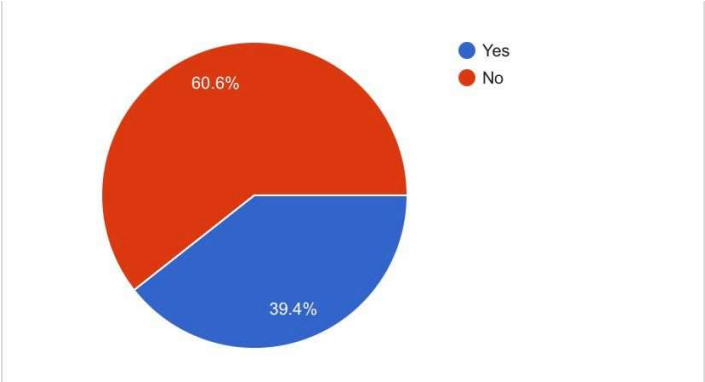
According to this chart, 69.7% of women had trouble in sleeping even when the baby was asleep, while only 30.3% reported having proper sleeping patterns.

Frequency distribution showing psychological symptoms among postpartum women:



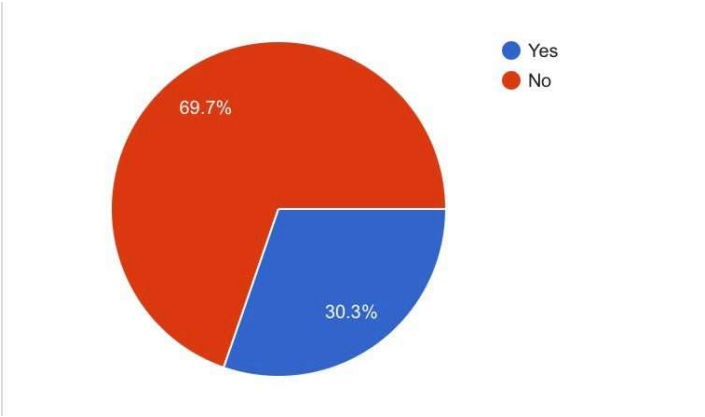
The chart illustrates that 30.3% of the population experienced physical symptoms such as panic or anxiety attacks, while 69.7% reported no physical symptoms.

Frequency distribution of respondents having disrupted thought pattern:



The chart illustrates that 39.4% of women experienced thoughts such as hopelessness, harming the baby, or difficulty bonding with the baby, while 60.6% did not report any of these symptoms.

Frequency distribution showing employment factors among the postpartum women:



The chart indicates that non-working women (69.7%) experience higher levels of postpartum depression (PPD) compared to working women (30.3%).

Interpretation of Findings

The present study examined factors associated with postpartum depression (PPD) among women, including age, symptom onset timing, appetite and sleep disturbances, panic symptoms, emotional bonding, and

employment status. The findings revealed that mothers aged 20–24 years (29.9%) and 35–39 years (28.6%) showed the highest rates of PPD, suggesting vulnerability at both younger and older maternal ages due to differing life stresses. In terms of symptom onset, 46.8% reported developing symptoms after 24 weeks postpartum, while 34% experienced them within the first four weeks, indicating that PPD can have a delayed emergence beyond the immediate postpartum period. Physiological symptoms were common, with appetite changes in 76.6% and sleep disturbances in 77.7% of participants, pointing to the importance of recognizing somatic signs. Panic symptoms were observed in 62.7% of the sample, highlighting significant comorbid anxiety, while 41.6% faced emotional bonding difficulties, underscoring risks to early mother-infant attachment. Additionally, a slight protective effect of employment was noted, as 51.9% of unemployed women reported PPD symptoms compared to 48.1% of employed women. Overall, the findings emphasize that postpartum depression is shaped by an interplay of personal, biological, psychological, and environmental factors.

Comparison with Existing Literature

The present study's findings align with prior research emphasizing the influence of maternal age on postpartum depression (PPD), supporting Hinkle et al. (2015), who reported a higher risk among younger mothers. Regarding symptom onset, the pattern of delayed depressive symptoms is consistent with Fergusson et al. (2006), who found PPD symptoms peaking around four weeks and varying over time. Appetite changes observed in the sample mirror results by Smith et al., who highlighted significant alterations in eating patterns among postpartum women with depression. Similarly, the high prevalence of sleep disturbances supports findings by Bei et al. (2015), demonstrating disrupted sleep patterns among depressed and anxious postpartum women. The co-occurrence of panic symptoms aligns with Mauri et al. (2018), who noted significant anxiety symptoms, including panic attacks, among mothers with PPD. Emotional bonding difficulties observed in the current study reflect outcomes discussed by O'Hara and Swain (1996), who emphasized challenges in mother-infant bonding as a hallmark of PPD. Furthermore, the slightly lower prevalence of PPD among employed women supports Lara et al. (2009), who found employment to be a protective factor against postpartum depression. Overall, the results corroborate broader literature suggesting PPD's complex interplay of hormonal, psychosocial, and cultural factors (Bloch et al., 2000; Sullivan et al., 2004), while also reinforcing its adverse impact on maternal-child bonding (Gavin et al., 2005) and underscoring the importance of culturally sensitive mental health interventions (Goodman, 2009).

Theoretical Implications

The findings support the biopsychosocial model, highlighting how biological, psychological, and social factors jointly contribute to postpartum depression (PPD). Cognitive-behavioural theories are reinforced by the presence of maladaptive thoughts related to motherhood and self-

worth, while attachment theory is validated through the observed emotional bonding difficulties between mothers and infants. The role of employment status also aligns with ecological systems theory, emphasizing how broader environmental contexts influence maternal mental health. Overall, the results affirm and extend these frameworks, suggesting the need for integrated, multi-level approaches to better understand and intervene in PPD.

Practical Implications

The study highlights the need for broader awareness, early detection, and sustained monitoring of postpartum depression beyond the early weeks after childbirth. It can inform healthcare providers to implement regular mental health screenings throughout the first year postpartum, not just immediately after delivery. The findings also emphasize the importance of designing targeted interventions that address emotional bonding difficulties, sleep disturbances, and comorbid anxiety symptoms. Public health programs can use these insights to create supportive resources for both unemployed and employed mothers, fostering environments that promote mental well-being. Overall, the study supports developing integrated care models that combine psychological, social, and medical support to better serve new mothers and promote healthier family dynamics.

Limitations

While this study is highly valuable to the understanding of postpartum depression among new mothers, there are several limitations that need to be taken into consideration. The use of a self-developed questionnaire, though painstakingly constructed, lacks extensive validation and might have benefited from a more detailed development and testing process to ensure its reliability and relevance to all aspects of PPD. Although the accessibility constraints of this study limit comparison with any other findings in studies, no established PPD measurement tools are indicated. The study relied mainly on quantitative data, which, although effective in capturing patterns and correlation, do not fully convey the personal and contextual nuances of PPD. Qualitative data, interviews or open-ended questions on the questionnaire, would have given a rich insight into the lived experiences of mothers diagnosed with PPD, allowing greater exploration of differences in individual and cultural presentations of symptoms and coping strategies. Lastly, the sample was drawn from a small geographic area and limited clinic settings, which limits generalizability. It is recommended that future research embrace diverse and geographically dispersed samples and incorporate mixed methods approaches to provide a broader view of PPD and to inform more comprehensive and culturally responsive interventions.

Future Research Directions

Future research should seek to address the limitations of this study by utilizing larger, more heterogeneous samples across different cultural, socioeconomic, and geographical contexts to enhance generalizability. Employing longitudinal

designs would allow better understanding of the long-term course and delayed onset of postpartum depression (PPD). Alternative methodologies, such as mixed-method approaches combining surveys with in-depth qualitative interviews, could yield richer insights into maternal emotional experiences, bonding difficulties, and the role of social support. Future studies could also explore biological and hormonal markers alongside psychological factors to deepen the understanding of PPD's aetiology. Additionally, research investigating intervention strategies—such as workplace policies supporting maternal mental health or community-based support programs—could offer actionable solutions.

In summary, this study highlights the multifaceted nature of postpartum depression, identifying critical variables such as age, timing of symptom onset, physiological symptoms, emotional bonding difficulties, and employment status. It supports the relevance of biopsychosocial, cognitive-behavioural, attachment, and ecological systems theories in understanding PPD. While the findings provide valuable contributions to both theory and practice, the need for broader, more comprehensive research remains crucial to fully capture and address the complexity of postpartum mental health challenges.

Conclusion

This study investigated the key factors associated with postpartum depression (PPD) among new mothers, revealing that age, delayed symptom onset, appetite and sleep disturbances, panic symptoms, emotional bonding issues, and employment status all play significant roles. The findings contribute to the existing literature by reinforcing that PPD is not confined to the early postpartum period and is shaped by a complex interplay of biological, psychological, and social factors. Support was found for multiple theoretical models, including the biopsychosocial, cognitive-behavioural, attachment, and ecological systems theories, suggesting the need for an integrated framework when addressing maternal mental health. Practically, the study highlights the importance of extended screening timelines, early intervention targeting bonding difficulties, and the promotion of supportive employment structures for mothers. Despite these contributions, limitations such as a relatively small and less diverse sample, as well as the cross-sectional design, restrict generalizability and call for caution in interpretation. Future research should aim for larger, more diverse, and longitudinal samples to better capture the evolving nature of PPD and explore the biological and environmental pathways involved. Overall, this research advances psychological understanding by emphasizing the multifaceted nature of postpartum depression and its broad implications for clinical practice, public health policy, and future scholarly inquiry. By deepening the knowledge of PPD’s risk factors and practical outcomes, this study contributes to developing more nuanced, targeted, and effective interventions that can significantly improve the mental health and well-being of mothers and their families.

Funding

No financial support was received for the research, authorship, and/or publication of this article

Author contributions

Conceptualisation, Author A.; methodology, software, formal analysis, investigation, resources, data curation, writing—original draft preparation, writing—review and editing, visualization, Author B.; validation, supervision, project administration. All authors have read and agreed to the published version of the manuscript.

Competing interests

The authors declare no competing interests

References

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Arlington, VA: American Psychiatric Publishing.

Beck, C. T. (2001). Predictors of postpartum depression: An update. *Nursing Research, 50*(5), 275-285.

Bloch, M., Schmidt, P. J., Danaceau, M., Murphy, J., Nieman, L., & Rubinow, D. R. (2000). Effects of gonadal steroids in women with a history of postpartum depression. *The American Journal of Psychiatry, 157*(6), 924-930.

Earls, M. F. (2010). Incorporating recognition and management of perinatal and postpartum depression into paediatric practice. *Paediatrics, 126*(5), 1032-1039.

Gavin, N. I., Gaynes, B. N., Lohr, K. N., Meltzer-Brody, S., Gartlehner, G., & Swinson, T. (2005). Perinatal depression: A systematic review of prevalence and incidence. *Obstetrics & Gynaecology, 106*(5), 1071-1083.

Goodman, S. H. (2009). Women's mental health: Depression and anxiety. *Obstetrics & Gynaecology Clinics, 36*(4), 677-686.

Murray, L., Sinclair, D., Cooper, P., Ducournau, P., Turner, P., & Stein, A. (1996). The socioemotional development of 5-year-old children of postnatally depressed mothers. *Journal of Child Psychology and Psychiatry, 37*(8), 927-935.

O'Hara, M. W., & McCabe, J. E. (2014). Postpartum depression: Status and future directions. *Annual Review of Clinical Psychology, 10*, 379-407.

Robertson, E., Grace, S., Wallington, T., & Stewart, D. E. (2004). Antenatal risk factors for postpartum depression: A synthesis of recent literature. *General Hospital Psychiatry, 26*(4), 289-295.

Sullivan, P. F., Neale, M. C., Kendler, K. S., & Stroup, T. S. (2004). Bipolar disorder as a complex trait: Evidence for genetic links to illness severity. *Archives of General Psychiatry, 61*(10), 1136-1144.

World Health Organization. (2020). Maternal mental health. Retrieved from https://www.who.int/mental_health/maternal-child/maternal_mental_health/en/.