Postpartum Depression: A review

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Abstract

Postpartum depression is a common mental health issue that is often unrecognized and undertreated. It is a global public health issue while problematic patterns occur due to postpartum depression can persist across generations, negatively impacting quality of life. This review article addresses major traits of postpartum depression, including brief introduction of postpartum depression, risk factors contributing postpartum depression, current statistics, how it influences families and society. An integrative literature review was done using different electronic databases including PubMed, Google scholar, and Research Gate. The global prevalence of postpartum depression is estimated at 17.22%, though it varies significantly across regions. In Asia, postpartum depression rates range widely, from 0.82% in South Korea to 93% in Japan. Postpartum depression symptoms typically involve significant changes in sleep, eating, and activity patterns. Untreated maternal depression can harm child development and mother-infant bonding, with effects that also impact the partner and family. The greatest risk for postpartum depression is having a history of major depression and experiencing depression during past pregnancies. Research indicates that women's ability to manage postpartum stress is linked to a combination of biological, social, and environmental factors. These factors differ based on cultural and geographic contexts. To prevent negative effects of postpartum depression on children and family, healthcare professionals and nurse practitioners should be knowledgeable about the signs and symptoms, screening methods, and treatment options. This study aimed to summarize the literature on postpartum depression, highlighting the research findings.

Keywords: postpartum depression; risk factors; public health; management

Introduction

Postpartum depression is a common mental health issue affecting women after childbirth. (Koszycki et al., 2010). It is a disabling but treatable mental disorder. According to the American Psychiatric Association's "Diagnostic and Statistical Manual of Mental Disorders," fifth edition, postpartum depression classified as a major depressive episode "with peripartum onset if onset of mood symptoms occurs during pregnancy or within 4 weeks following delivery". However, depression that starts later or does not meet all criteria for a major depressive episode can still be harmful. Postpartum depression occurs within 4 weeks, 3 months, 6 months, or up to 12 months after childbirth (Mauri et al., 2016; Gupta et al., 2024; Zhang et al., 2024). There are three types of postnatal affective illness: the blues (baby blues, maternity blues), postpartum (or postnatal) depression and puerperal (postpartum or postnatal) psychosis each of which varies in its prevalence, clinical presentation, and management.

Generally, symptoms of postpartum depression include significant changes in sleep, eating, and activity patterns. Many women with postpartum depression have no prior psychiatric history and may be reluctant to disclose their symptoms or seek help (Patel et al., 2012). Diagnosis of postpartum depression usually consist of changes in mood and behavior: dysphoric mood along with several other symptoms such as sleep, appetite, or psychomotor disturbance, fatigue, excessive guilt, and suicidal thoughts that a woman be experiencing that may be chronic and long-lasting. Those symptoms are present within a least amount of time, minimally within one week (Mauri et al., 2016). Usually, interventions may be required for the postpartum depression for identification and management as most cases of postpartum depression do not resolve on their own (Heh, 2013; O'Hara & Mc Cabe, 2013; Pathak, 2020).

By 2020, depression was expected to become the second leading cause of disability (Pathak, 2020). As of 2024, the global prevalence of postpartum depression is estimated at 17.22%, though rates vary by region (Amer et al., 2024).

Treatment for postpartum depression varies based on symptom severity and the mother's ability to care for her newborn. Mild to moderate symptoms can typically be managed in primary care; family support and care while persistent symptoms require a psychiatric referral. Severe cases, especially those involving self-harm or psychosis, need urgent psychiatric intervention. If depression is prolonged, antidepressants may be prescribed, and electroconvulsive therapy (ECT) is considered for severe cases with suicidal risk. (Heh, 2013; Zhang et al., 2024).

Meanwhile, postpartum depression is a significant public health issue that is not merely affect women, but its consequences directly implicate to the partners, family and the development of the baby. Thus, addressing prenatal and postnatal mental health issues of mother promptly benefits not only the mother's mental well-being but also enhances the infant's physical health and cognitive development. Public health nurses have a major role in supporting families with newborn babies for the improvement of maternal health (Gupta et al., 2024; Vaezi et al., 2019; Zhang et al., 2024; Muazzam Nasrullah, 2016; Pathak, 2020).

Through this review article, we emphasize major factors relevant to postpartum depression, including risk factors contributing to postpartum depression, its prevalence and how it influences families and society emerging as a public health issue.

Method

In preparing this review article, we searched articles during 2024 –2010 years using PubMed, Google, and Research Gate under the keywords postpartum depression, risk factors, public health, management. We found fifteen articles with the most relevant data and met the criteria that were included in this review. Four articles were reviews (Heh, 2013; Muazzam Nasrullah, 2016; O'Hara & Mc Cabe, 2013; Patel et al., 2012), seven were quantitative (Agampodi & Agampodi, 2013; Pathak, 2020; Vaezi et al., 2019; Zhang et al., 2024; Yaqoob et al., 2024; Amer et al., 2024; Jimènez-Barragan et al., 2024), two were qualitative (Gupta et al., 2024; Kantrowitz-Gordon et al., 2018), one was a case study, one was a pilot trial (Koszycki et al., 2010).

Results

Prevalence

According to a study done by Amer et al., by 2024, approximately 1 in 10 women experience postpartum depression after childbirth, with some studies indicating rates as high as 1 in 7. Globally, the prevalence of postpartum depression is estimated at 17.22%. And it varies by region. Studies indicate a higher prevalence of 19% in low- and middle-income countries compared to 13% in high-income countries (Amer et al., 2024). In Western countries, the prevalence of antenatal and postnatal depression varies. For instance, in Canada, rates are

17% prenatally, and 5% postnatally; in Italy, 21% prenatally, and 13% postnatally; and in Spain, 15% postnatally (Jimènez-Barragan et al., 2024).

Yaqoob et al., done a study on "A systematic review of risk factors of postpartum depression. Evidence from Asian culture" in 2024, emphasizing that, in Asian countries, postpartum depression prevalence has shown significant variation, ranging from 0.82% to 93%. South Korea reported the lowest rates, while Japan had the highest. Between 2007 and 2023, postpartum depression rates indicating as, India (49% to 56%), China (15.9% to 17.3%), Japan (13.8% to 93%), Iran (26.6% to 72%), Indonesia (14.9% to 19.8%), Hong Kong (24%), Turkey (16% to 25%), Thailand (4% to 5.3%), South Korea (6.2% to 14%), Israel (2.2% to 7%), Taiwan (32% to 40%), Nepal (4.9%), Pakistan (56%), and Saudi Arabia (74%) (Yaqoob et al., 2024). Additionally, a study done by Zhang et al., on "Multidimensional influencing factors of postpartum depression based on the perspective of the entire reproductive cycle: evidence from western province of China", they found a high prevalence of postpartum depression in Yunnan Province at 46.1%, notably exceeding the global average of 17.22% (Zhang et al., 2024). In the year 2020, depression is predicted to be the second leading cause of disability worldwide. Statistics indicate that 450 million women are seriously affected by neurological and mental illness. Nearly 10% of pregnant women and 13% of women who just gave birth are suffering from mental health problems globally. It is higher in developing countries where 15.5% develop mental illness during pregnancy and 19.8% after childbirth continuing to affect the welfare of mothers, their babies, partners and family members (Pathak, 2020).

Likewise, in Sri Lanka an island-wide study found a prevalence of 27.1% of postpartum depressed mothers that need urgent attention of the medical authorities (Agampodi & Agampodi, 2013).

Potential Risk Factors

The period following the birth of a child is marked by significant physiological and psychological changes for new mothers. Pregnancy and childbirth are such stressful life events that many vulnerable women experience the onset of depressive episodes. Longstanding evidence shows that women's capacity to cope with changes related to stress postpartum has an association with biological, social, and environmental factors. These factors vary across cultures and location. (Gupta et al., 2024; Patel et al., 2012).

The combination of physical changes and environmental factors play significant roles in the development of postpartum depression. Physical challenges like back pain, postpartum weight retention, dyspareunia, and urinary incontinence during the postpartum period are often accompanied by emotional distress and can lead to psychiatric issues (Kantrowitz-Gordon et al., 2018; Vaezi et al., 2019). Various environmental risk factors include prenatal depression, prenatal anxiety, impaired mother-infant interactions, lack of social support, financial problems, dissatisfaction with marital relationships, unplanned pregnancy, previous pregnancy loss such as miscarriage or still birth and adverse life events are identified as influences for developing postpartum depression. Studies have shown that stressors during the peripartum period predict postpartum depression and correlate with its severity. Meanwhile, there is a significant link between stressful life events and the severity of depressive symptoms. Women who experienced multiple adverse life events, such as childhood or adulthood sexual abuse, are three times more likely to develop postpartum depression compared to those without such experiences (Muazzam Nasrullah, 2016; Jimènez-Barragan et al., 2024).

Though the exact cause of postpartum depression is unknown, different risk factors have been suggested. Hormonal fluctuations during and after pregnancy cause changes in sleep patterns. The decline in

progesterone levels early in the postpartum period promotes insomnia. Major neurotransmitter systems in the brain that regulate sleep are also linked to the development of psychiatric disorders, so imbalances in these neurotransmitters can contribute to an increased risk of postpartum depression (Zhang et al., 2024; Jimènez-Barragan et al., 2024). Likewise, lower oxytocin levels can predict postpartum depression and its severity, but this is only true for patients with a history of major depressive disorder. Meanwhile, progesterone treatment can increase the risk and severity of postpartum depression. Higher progesterone levels are linked to worse depression scores. However, some studies show that progesterone treatment can reduce the recurrence of postpartum depression in women with previous episodes, and lower progesterone levels are associated with increased depression scores (Muazzam Nasrullah, 2016).

Postpartum Depression as a Public Health Issue

Postpartum depression affects women globally, making it a significant public health issue. Mothers are vulnerable to depression due to a combination of psychological and social factors. (Zhang et al., 2024). Mainly, postpartum depression is a considerable health problem affecting women and their families, contributes substantially to maternal mortality and morbidity. The occurrence of postpartum depression is associated with both overall social support during pregnancy and support from the baby's father. Furthermore, maternal depression affects lower birth weight of infants, higher rates of underweight at 6 months of age, poor long-term cognitive development, children's physical and psychological health; higher rates of antisocial behavior and more frequent emotional problems among children (Yaqoob et al., 2024; O'Hara & Mc Cabe, 2013)

A mother with postpartum depression has substantially reduced capacity to care for herself and her infant. Infants are entirely dependent on their caregivers for provision of nutrition, physical care, comfort, social interaction and protection.

Meanwhile, the mother's ongoing depression is associated with poor mother-infant bonding, negative infant feeding and it can affect emotional, behavioral, cognitive (such as language and IQ), and interpersonal problems in later life of babies. Through bonding and attachment in the early years, lifelong capacity to build and maintain satisfactory relationships is established (Mauri et al., 2016). Likewise, problematic patterns in relationships can be conveyed and continue across generations. This affects society desperately, decreasing the quality of life. Therefore, postpartum depression has a significant impact on not only the mother but also the child, partner and family. Thus, for both maternal and infant wellbeing, early recognition and treatment of postpartum depression are essential that have to be focused as public health matter (Yaqoob et al., 2024; Mauri et al., 2016).

Discussion

Postpartum depression, a major depressive episode occurring during the postpartum period, negatively impacts the health of the woman, infant, and family if untreated. It typically begins within six weeks after childbirth, with the high-risk period extending up to six months (Mauri et al., 2016; Gupta et al., 2024; Zhang et al., 2024). Symptoms may include significant changes in sleep, eating, and activity patterns, differing from those of non-postpartum depression.

The global prevalence of postpartum depression is estimated at 17.22% and when comparing with the rates, there is a higher rate in low- and middle-income countries (19%) than high-income countries (13%). In Asia, postpartum depression rates vary widely. As indicated it is low (0.82%) in South Korea while it is high (93%) in Japan (Amer et al., 2024). According to the studies in many countries, between 2007 and 2023, we can see that postpartum depression rates were increased; India (49% to 56%), China (15.9% to 17.3%), Japan (13.8% to 93%), Iran (26.6% to 72%), Turkey (16% to 25%), Thailand (4% to 5.3%), South Korea (6.2% to 14%), Israel (2.2% to 7%), Taiwan (32% to 40%), Nepal (4.9%), Pakistan (56%), and Saudi

Arabia (74%) (Yaqoob et al., 2024).

According to the prevalence and increasing rates we can find postpartum depression as a major public health issue. Meanwhile, it significantly contributes to maternal mortality and morbidity. Therefore, early recognition and treatment are crucial for the well-being of both mother and infant and should be a public health priority (Gupta et al., 2024; O'Hara & Mc Cabe, 2013). Postpartum depression can arise from a combination of factors, including hormonal imbalances, physical changes after delivery, history of psychiatric disorders, biochemical issues, family history, recent stress, childcare demands, past pregnancy loss, antenatal depression or anxiety, and lack of supportive relationships. Poor marital relationships and difficulty in adjusting to post-childbirth changes are also significant contributors (Muazzam Nasrullah, 2016).

Detection of symptoms early focusing risk factors, effective prevention, and treatment of postpartum depression should span pre-pregnancy, pregnancy, and postpartum periods. Management should take into account the patient's medical history, symptom severity, functional impact, preferences, and resources. Recommended treatments include peer support and structured psychotherapy, such as interpersonal or cognitive behavioral therapy, provided individually, in groups, or online (Heh, 2013; Zhang et al., 2024).

The literature review revealed several gaps due to the limited number of studies included. Improving the quality of antenatal and postnatal services is the most cost-effective intervention to prevent postpartum depression, despite existing gaps in health policies. Support from public health nurses and midwives, including psychological screenings and counseling, is crucial. Further research on postpartum depression should examine interactions with the healthcare system, help-seeking behaviors, and treatment preferences.

Conclusion

Depression is expected to become the most prevalent global health problem while its higher rate indicates in low- and middle-income countries. Depression during pregnancy and the postnatal period is a serious public health issue, making early identification and treatment of postpartum depression crucial to prevent harmful consequences. Continuous support from the health sector is essential, benefiting not only the mother but also the child, family, community, and healthcare professionals. Public health nurses should be encouraged by these findings to promote changes in postpartum policies and practices. Despite promoting results, further research is needed to draw definitive conclusions on this understudied area.

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