Advances in Social Behavior Research (2024) Volume 13 EWA Publishing
Published online: 20 November 2024 DOI: 10.54254/2753-7102/13/2024127

The Influencing Factors of Postpartum Depression and Effective Interventions

Chengcheng Huang

College of Finance and Statistics, Hunan University, Changsha, China

ccmayday99@163.com

Abstract. Postpartum Depression (PPD), a common and severe mental disorder, poses a great threat to the health and life of new mothers and their families. Given its long-lasting impact on global public health, PPD has emerged as an urgent issue to be addressed. This study discusses the potential influencing factors of PPD and proposes a comprehensive framework, arguing that PPD is caused due to the complexity of physical, psychological, and social factors. These factors include but are not limited to changes in hormone levels, psychological adaptation of individuals, and inadequate social support. Furthermore, this study reviews existing literature regarding interventions for PPD, proposing a set of intervention strategies derived from evidence-based medicine. These strategies cover pharmacotherapy, psychotherapy, social support, and other aspects. Although the proposed intervention measures contribute to PPD management to a certain extent, the influencing factors of PPD and the extent of their influence may vary significantly for different groups of people and different cultural backgrounds. Hence, the future study should further discuss the specific action mechanism of these factors in different cultural and social backgrounds, developing intervention measures targeting different groups with an assessment of cultural sensitivity and adaptation. This will enable more targeted and personalized strategies for the prevention and therapy of PPD.

Keywords: PPD, Influencing Factors, Interventions, Psychological Health

1. Introduction

Postpartum depression, also known as PPD, is a common mental disorder with high morbidity and diverse etiology, which imposes lasting influence on individuals and their families. PPD not only endangers the mental and physical health of postpartum women but also imposes a threat to neonatal growth and family relations. Although there have been a great amount of studies focusing on the issue of PPD, a systematic summary is lacking. This study aims to fill this gap by identifying the definition, clinical manifestations, and theoretical foundations of PPD first. It is followed by a comprehensive analysis of the major influencing factors of PPD. Based on the analysis, invention measures, and therapy plans are summarized, including psychosocial interventions, pharmacotherapy, and integrated care. Through analysis, this study aims to provide a solid scientific foundation for the prevention and treatment of PPD, providing practical value for clinicians.

In addition to discussing the practical value of these therapy plans, this study involves a discussion of their effectiveness and limitations. Furthermore, this study suggests the potential direction for future research based on its limitations, hoping to advance the science in the field of PPD and provide effective support and interventions for families being bothered by the mental disorder.

2. Symptoms and Diagnose of PPD

2.1. Symptoms of PPD

PPD, or postpartum depression, is a mood disorder that develops during the puerperium and is the most common mental health issue in the weeks or months following childbirth [1]. Key symptoms include persistent sadness, trouble sleeping, loss of appetite, irritability, anxiety, feelings of guilt, obsessive-compulsive symptoms, and various physical aches and pains. In more severe cases, it can lead to hallucinations, delusions, or even abnormal behaviors like self-harm or harm to others [2].

2.2. Diagnose of PPD

Given the diversity of clinical manifestations of PPD, its diagnosis imposes a challenge. In clinical practice, a two-stage screening approach is commonly used to identify PPD. The first stage involves using a screening scale to identify potential cases among the general population. The Edinburgh Postnatal Depression Scale (EPDS) is an internationally accepted tool for this purpose [3]. The scale allows women in the postpartum period to self-report their emotional state. A total score exceeding a certain threshold (typically 13) indicates a potential case of PPD. The second stage involves a Structured Clinical Interview (SCI), where a mental health professional conducts a more thorough assessment of those possible patients screened by the scale. This stage of diagnosis typically follows the criteria of Structured Clinical Interview for the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV), commonly referred to as SCID [4]. SCID is a semi-structured interview, aiming to improve the accuracy and reliability of diagnoses by answering standardized questions. However, it is noteworthy that PPD is not diagnosed merely using the scale and the interview. A comprehensive evaluation by the physician, considering the patient's medical history, physical examination, and psychological condition, is also required. In addition, due to the association of PPD with other medical conditions such as thyroid disorders, corresponding laboratory tests may be necessary to rule out or confirm these factors. An appropriate diagnosis underpins effective therapy. Hence, it is crucial to ensure that patients receive appropriate interventions during this process.

3. Influencing Factors of PPD

3.1. Physiological Factors

During the process of pregnancy and childbirth, the hormonal environment inside the body undergoes severe fluctuations. During the prenatal period, oestrogen and progesterone levels are elevated, but they plummet after childbirth [5]. Fluctuations and prolonged deficiency of oestrogen and progesterone can lead to low mood, anxiety, and other symptoms in women during the puerperium.

3.2. Psychological Factors

Characteristics of individuals influence significantly the development of PPD. According to research, new mothers with introverted personalities tend to be more sensitive and overthinking. They are more likely to withdraw from social interactions, being unable to express or manage their negative emotions, which increases the risk of developing PPD [6]. Facing psychological conflicts from daily hassles, new mothers can easily develop long-term negative emotions if these issues are not handled properly. The accumulation of these emotions might cause a low mood and changes in cognitive function, ultimately leading to PPD.

Furthermore, anxious and depressed mood before or during the period of pregnancy are significant factors with anxiety or depression being recognized as warning signals for PPD development [7]. Therefore, it is crucial to provide early-stage psychological interventions and support for new mothers showing such psychological symptoms. This will help lower the risk of developing PPD and enhance their mental health.

3.3. Social Factors

The family's financial situation significantly influences the mental health of new mothers. Low-income families face greater economic and mental burdens while raising newborns, making lower household income levels a potential factor that contributes to the development of PPD [8]. The economic pressure further heightens the anxiety and pressure of new mothers, increasing the possibility of developing PPD.

In addition, PPD development is directly associated with family relations, especially the relation between husband and wife and the relation between mother-in-law and daughter-in-law. A positive family environment provides new mothers with essential emotional support and comfort. In contrast, a tense atmosphere is likely to intensify the mental pressure of new mothers. According to research, the level of harmony within a family is positively correlated with the incidence of postpartum depression [9]. Family relationship issues, conflicts between husband and wife, or the tense relationship between mother-in-law and daughter-in-law can all intensify the negative emotions of new mothers. If the situation continues to deteriorate, continues to worsen, the chances of developing PPD will increase.

4. Interventions and Therapy Plans for PPD

4.1. Pharmacotherapy

Across the globe, selective serotonin reuptake inhibitors (SSRIs) are the primary selection in PPD pharmacotherapy. According to research by Pawluski et al., SSRIs can influence the function of the prefrontal cortex and amygdala by increasing synaptic protein density and promoting the growth of immature neurons in the hippocampus, thereby improving the mood of PPD patients [10]. Meanwhile, some studies show that fluoxetine has a significant therapeutic effect on mild to moderate postpartum depression [11]. These findings provide a scientific basis for the application of SSRIs in PPD treatment.

4.2. Psychotherapy

4.2.1. Cognitive Behavioral Therapy (CBT)

Most PPD patients prefer non-pharmacological treatments for having concerns over the side effects of medication which may affect their infants through breast milk. Psychotherapy matches better for such patients. CBT is a short-term, effective, and cognitive-based psychotherapy. It improves patients' moods and behavior by reshaping their mindset and changing their cognitive models. Through CBT, patients can understand more about their negative moods and their underlying causes. They are encouraged to resolve problems with a positive attitude and apply these strategies in daily life. According to a meta-analysis of 2,779 PPD patients by Van Ravesteyn, CBT and Interpersonal psychotherapy (IPT) have strong therapeutic effects on PPD [12].

4.2.2. Interpersonal Psychotherapy (IPT)

IPT focuses more on communications and social support, especially in handling interpersonal disputes and role reversal. IPT sees depression as a curable disease instead of a personal deficiency. It points out that the incidence of PPD is closely associated with patients' interpersonal relations, emotions, and social environment. Therefore, to effectively treat PPD, patients' social skills should be enhanced. In turn, it can promote their ability to handle interpersonal issues, ultimately alleviating depressive symptoms.

According to research, a meta-analysis was used to assess the average changes in PPD patients before and after IPT treatment over a year (including depression, anxiety, relationship quality, social support, and social adaptation) and the difference in the incidence of depressive episodes between the treatment group and the control group. The results show that IPT is an effective treatment for perinatal depression, demonstrating intervention effects in terms of social support, maternal role competence, mental health, and emotional disorders. Meanwhile, it can facilitate the establishment and improvement of interpersonal relationships, bolster social support, and enhance the transition ability to motherhood, reduce negative emotions of PPD patients with great effect [13, 14].

4.2.3. Psychodynamic Psychotherapy

Psychodynamic psychotherapy is an extension of Freudian psychoanalysis, a therapy focusing on guidance. It helps patients gain a deeper understanding of the source of subconscious depression and address them. This therapy emphasizes the emotional expression of patients and the shift of cognitive behavioral patterns by reconstructing their inner world, thereby improving their ability to deal with high-pressure situations [15]. The key to psychodynamic psychotherapy is to encourage patients to think and associate freely in the treatment process. This reveals their unconscious mind, enabling them to develop a deeper insight into how they were raised as well as the internal connections of self-psychology structure, individuality, and personality development. Furthermore, it also uncovers the relationship between these factors and their growth experiences, allowing them to better understand the causes and triggering factors of depressive episodes at specific times. Ultimately, it helps patients to rebuild their inner selves, heal psychological trauma, improve personality, and cope with negative emotions and depressive episodes. Compared to regular therapies for depression, psychodynamic psychotherapy zeroes in on rebuilding the psychodynamic system of new mothers and guiding them to adapt to their shifting roles and corresponding responsibilities. This allows them to better accommodate the current situation and heal from past trauma, reaching the desired therapeutic outcome [16].

4.2.4. Mindfulness-Based Cognitive Therapy (MBCT)

MBCT is a psychological intervention for cultivating present-moment awareness and non-judgmental cognition. It features three objectives with the first being mindfulness cultivation, namely non-judgmental awareness of present-moment experiences; the second being the development of a positive and healthy perspective to shape attitude and cognitive framework; the last being ability improvement of dealing with difficult emotions. The application of MBCT extends beyond simply reducing stress and anxiety in new mothers; it also holds significant potential for preventing depression relapse [17]. This therapy enables participants

to better manage their inner experiences and maintain strong psychological resilience and emotional balance when facing challenges in life.

4.3. Social Support

Medical care professionals should establish stable doctor-patient relationships, providing crucial social support for new mothers and their family members. By constantly enhancing psychological support during the prenatal, perinatal, and postpartum periods, clinical care providers can identify exceptions to emotions of new mothers in time and adopt intervention measures, helping them to deal with depressive disorders.

Support from families plays an essential role in interventions for PPD. Family-oriented psychological interventions have been proven effective in improving the depressive symptoms of PPD patients. Support from family also enhances social support for new mothers, promoting them to shift from the negative coping mechanism and feel a sense of understanding and respect from those around them, which effectively reduces PPD symptoms [18]. Comprehensive support provides new mothers with timely assistance and establishes a solid foundation for their mental health in the long term.

5. Conclusion

The triggering factors of PPD are closely associated with physical, psychological, and social factors. Common therapies for PPD include antidepressant pharmacotherapy, psychotherapy, and social support. Having concerns over taking medication during the lactation period, most PPD patients are more suitable for psychotherapy. Currently, common evidence-based psychotherapies include CBT, IBT, psychodynamic psychotherapy, and MBCT.

6. Suggestions

6.1. Suggestions for Future Studies

It is suggested to further study the principles of psychopathology and intervention strategies and summarize a set of effective psychological intervention plans for targeted patients that can be widely accepted. The plan should also be incorporated into medical guidelines and industry standards to ensure its practical application.

6.2. Suggestions for Practical Application

The treatment of PPD should combine symptomatic and causal approaches. Treatment plans should be selected based on the severity of symptoms. Psychotherapy is the preferred treatment for mild to moderate cases without significant social dysfunction. Pharmacotherapy (SSRIs) is the primary approach for moderate cases with social dysfunction and severe cases.

Considering the high incidence, severe risks, and complex causes of PPD, its prevention is crucial, and interdisciplinary cooperation is necessary. First and foremost, obstetricians should increase awareness of the psychological health of pregnant or postpartum women and follow their mood swings timely. When pregnant or postpartum women are in a low mood, a referral to a psychologist for assessment and treatment should be made timely. Then, reasonable, tailored treatment plans considering biological markers should be made based on the individual's symptoms and characteristics, which is crucial for reducing PPD symptoms and increasing the cure rate.

6.3. Policy Suggestions

The government should cooperate with medical institutions to enhance scientific knowledge popularization of preconception and childbirth among pregnant or postpartum women and their family members. This will help family members increase their awareness of anxious and depressive emotions, thereby providing PPD patients with more inclusion, better understanding, and acceptance. Meanwhile, communities should strengthen the promotion of depression-related knowledge, reduce the stigma of PPD which might result in misdiagnosis and missed diagnoses, and establish long-term management and follow-up records for pregnant and postpartum women with PPD.

References

[1] American Psychiatric Association (1994) Diagnostic and Statistical Manual of Mental Disorders-IV(DSM-IV).

[2] O'hara, M. W., & McCabe, J. E. (2013). Postpartum depression: current status and future directions. *Annual review of clinical psychology*, 9(1), 379-407.

[3] Cox, J.L., Holden, J.M. and Sagovsky, R. (1987) Detection of Postnatal Depression. Development of the 10-Item Edinburgh Postnatal Depression Scale. *British Journal of Psychiatry*, 150, 782-786.http://dx.doi.org/10.1192/bjp.150.6.782.

[4] Gorman, L. L., O'Hara, M. W., Figueiredo, B., et al. (2004). Adaptation of the structured clinical interview for DSM - IV disorders for assessing depression in women during pregnancy and postpartum across countries and cultures. *British Journal of Psychiatry*, Supplement.
[5] Brummelte, S., & Galea, L. A. (2016). Postpartum depression: etiology, treatment and consequences for maternal care. *Hormones and Behavior*, 77, 153 - 166.
[6] Chen, Y., Song, F., Gang, J., Kang, S., & Ma, X. (2016). Analysis of risk factors associated with postpartum depression. *China Medical Innovation*, 13(30), 23 - 26.
[7] Mccarter - Spaulding, D., & Shea, S. (2016). Effectiveness of discharge education on postpartum depression. *MCN: The American Journal of Maternal/Child Nursing*, 41(3), 168 - 172.
[8] Deng, A., Jiang, T., Luo, Y., & Xiong, R. (2014). Prevalence and risk factors of postpartum depression in Tianhe District of Guangzhou. *Journal of Southern Medical University*, 34(1), 113 - 116.
[9] Yang, L., Xu, Q., & Qi, L. (2016). Risk factors and preventive measures of postpartum depression. *Chinese Clinical Nursing*, 8(6), 501 - 504.
[10] Pawluski, J. L., Lonstein, J. S., & Fleming, A. S. (2017). The Neurobiology of Postpartum Anxiety and Depression. *Trends in Neurosciences*, 40(2), 106 - 120.
[11] Kashanil, L., Eslatmanesh, S., Saedi, N., et al. (2017). Comparison of Saffron versus Fluoxetine in Treatment of Mild to Moderate postpartum depression: A Double - Blind, Randomized Clinical Trial. *Pharmacopsychiatry*, 50(2), 64 - 68.
[12] Van Ravesteyn, L. M., Lambregtse - van den Berg, M. P., Hoogendijik, W. J., & Kamperman, A. M. (2017). Interventions to treat mental disorders during pregnancy: A systematic review and multiple treatment meta - analysis. *PLoS One*, 12(3), 1 - 17.
[13] Sockol, L. E. (2018). A systematic review and meta - analysis of interpersonal psychotherapy for perinatal women. *Journal of Affective Disorders*, 232, 316 - 328.
[14] Chi, X., Zhang, P., Wu, H., & Wang, J. (2016). Screening for Postpartum Depression and Associated Factors Among Women in China: A Cross-Sectional Study. *Frontiers in psychology*, 7, 1668. https://doi.org/10.3389/fpsyg.2016.01668
[15] Zhao, Z. (2018). Case Studies on Treatment of Major Depression Disorder by Thought Imprint Psychotherapy (TIP) in Lower Resistence State [D]. Beijing: China Academy of Chinese Medical Sciences.
[16] Zhang, J. (2014). Clinical Analysis of Utilization Psychoanalysis Combined with Sertraline in the Treatment of Postnatal Depression. *Chinese and Foreign Medical Research*, 12(6), 22 - 23.
[17] Tomfohr - Madsen, L. M., Campbell, T. S., Giesbrecht, G. F., et al. (2016). Mindfulness - based cognitive therapy for psychological distress in pregnancy: study protocol for a randomized controlled trial. *Trials*, 17(1), 498.
[18] Wang, X., Wang, Y., Zhou, Q., & Yang, Y. (2018). Effects of Family Support - based Nursing Intervention on Social Function, Coping Style and Quality of Life of Urban Postpartum Depression Patients. *China Journal of Health Psychology*, 26(7), 979 - 983.