

An Overview of the Management and Treatment of Postpartum Depression (PPD)

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Abstract

Postpartum depression (PPD) can result in insomnia, crying spells, anxiety, fatigue, poor concentration, and depressed mood. Further symptoms of PPD may include anxiety and thoughts of harming the baby. It is estimated that 10–15% of women suffer from some form of PPD, mild, moderate, or severe. PPD disrupts the normal and healthy bonding between mother and newborn and has detrimental effects on relationships within the family and community. It is challenging to accurately diagnose and effectively treat PPD promptly; PPD is considered under-diagnosed. Alternative and complementary medicine approaches are being used to treat or ameliorate the symptoms of PPD, in light of concerns regarding the possible side effects of pharmacologic agents in the breast milk. Still, with the advances in diagnosis and treatment, much more needs to be done regarding early identification of risk factors, prevention, and the management and treatment of postpartum depression.

Keywords: Edinburgh Postnatal Depression Scale; Postpartum Depression; Psychosis; Vitamin B12

Abbreviations

OCD: Obsessive-Compulsive Disorder; PPD: Postpartum Depression

Introduction

Postpartum depression (PPD) represents a severely irritable or depressed mood in the biological mother within four weeks after birth. The condition can last as long as thirty weeks postpartum [1]. The leading indicators of the condition include insomnia, crying spells, anxiety, fatigue, poor concentration and depressed mood. Patients may experience mild, moderate, or severe symptoms. Many psychosocial stressors can result in PPD's development. The term postpartum depression is a collective and current term; however, the disorder has a long history in Western medical science with advancements in its understanding, management, and treatment [1]. Various connections throughout medical research and history have linked difficulties between childbirth and postpartum mood in the mother; however, advances in prevention and treatment have lagged. What makes this topic and condition unique among mental health disorders is its role in disrupting one of life's greatest pleasures—bonding with and raising children.

Discussion

Historical identification and attempts at treatment

Over the centuries, there have been various ideas, theories, and suppositions related to the depressed state and mood of affected post-partum women. PPD was first acknowledged when it was identified that there were women who experienced mental illness after giving birth. These women had just given birth and subsequently experienced mental illness, but it was a time before the condition had a name or label. The condition was noted as early as 460 BCE [2]. The same period saw the Hippocrates writing about the "puerperal fever" that produced "agitation, delirium, and attacks of mania" [2].

A 16th-century physician, Castello Branco, documented a case involving PPD. The case had no formal term and was considered as a healthy woman suffering from melancholy just after childbirth. The treatment was not declared, but experimental procedures were implemented for the condition in the following centuries.

Some early scholars associated the condition with madness, such as described in the publication of "The Yellow Wallpaper" by Charlotte Perkins Gilman in the 19th century [3]. The story follows a woman treated by her physician husband for a depression experienced shortly after the birth of their child. The book led to professional dialogue that eventually resulted in the removal of "hysterical neurosis" from the DSM in 1980 and the addition of PPD as a distinct disorder in 1994 [2].

Later, there was a continuation of the mental illness and female reproductive connections (emphasizing the reproductive organs) until the modern age [2]. The improvement in technology, coupled with enhanced knowledge among the healthcare workers, has made diagnosis more timely and accurate and treatment more available. The treatment of PPD has now incorporated the use of psychological interventions or antidepressants. Women with moderate or severe PPD experience more significant benefits from a combination of pharmcological and psychological interventions. Light aerobic exercises have been shown to help in mild to moderate cases of PPD. Advancements in medicine and technology have made it possible to treat the condition with hormone therapy and electroconvulsive therapy. Other treatment methods include psychotherapy, supportive counseling, implementing social support networks, and massage [4]. However, the primary treatment remains psychotherapy and medications [5,6].

Current considerations regarding PPD

Postpartum depression differs from the "baby blues" because PPD is more severe and does not resolve on its own. The symptoms of PPD can range from thoughts of wrongdoing and anxiety to thoughts of harming the baby, which is drastically different from the sadness, tiredness, and stress that can accompany the task of new parenting and the "baby blues". Symptoms of PPD vary for each person; however, according to Ghaedrahmati., *et al.* (2017), "they include a combination of mood swings, anger and irritability, fatigue, excessive crying, the inability to bond with the baby, and anxiety, worry and fear" [5]. The postpartum period lasts up to six months after childbirth. However, symptoms might appear anytime during pregnancy, and up to twelve months after the delivery, a wide range of time for a wide range of symptoms to manifest. It is estimated that 10–15% of women experience PPD, while 70–80% experience milder forms [2]. Some researchers believe PPD to be more prevalent than these percentages suggest.

Negative consequences of PPD

PPD is detrimental to the health of the mother if prolonged or left untreated. Due to the lack of a timely diagnosis and effective treatment in the past, the condition led to undermining the attachment of mother and infant, and impaired the development of many children [2]. Moreover, until today, it disrupted relationships within the family and community. Many mothers are reluctant or fail to recognize that

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they need help with postpartum depression. The social stereotype continues to hold that new mothers should experience a time of great happiness and joy after childbirth, which is a barrier to perceiving the problem and seeking help.

Collateral risk factors of the condition must be considered. Some of the principal risk factors connected with PPD include a personal history of the condition, family history, and a history of depression in an earlier pregnancy [7]. Also, genetic testing should be considered [8]. Untreated maternal depression is associated with severe morbidity for the mother, the infant, and the family unit. The mother has a difficult time bonding with her infant, and the infant does not develop to his or her full potential resultantly [9]. Diminished cognitive functioning and adverse emotional development have been noted. The "disconnect" between mother and child can further reinforce the mother's depressed state and the child's psychological development might be impaired [9]. Depression in the mother can increase the risk of substance abuse, self-inflicted injury, and maternal mortality [10].

Current treatment protocols

There is no specific and sole cause of PPD, which differs from the previously held belief and theory that hormone withdrawal after childbirth led to PPD. Although hormone changes can contribute to some cases, a diverse combination of factors and risk factors are more likely the cause of PPD [11]. Risk factors can include a history of depression or mental illness, low socioeconomic status, severe stress, unplanned pregnancy, being under the age of twenty, or lack of a family or support system [12]. PPD types can vary from a more severe psychosis or obsessive-compulsive disorder (OCD) to milder or less severe forms." However, all forms can adversely effect individual and family health and well being.

One of the most significant challenges of PPD is its accurate and timely diagnosis. The use of population-specific screening tools, such as the Edinburgh Postnatal Depression Scale and the Mood Disorder Questionnaire, can enhance awareness in healthcare providers and aid in an early and accurate diagnosis [13]. However, it is still widely held that PPD is under-diagnosed. Healthcare providers should assess the patient and rule out other medical or psychiatric conditions. Lab tests should include blood counts, electrolytes, vitamin B12, urine drug screens, and other tests as indicated [14]. The evaluation process can be complicated, making it difficult to achieve adequate or optimal outcomes [15].

The use of medicines, especially antidepressants, affects the brain. These medications assist in altering the chemicals responsible for regulating mood. However, some people experience side effects after using antidepressants, including dizziness, decreased sex drive, and fatigue. Healthcare professionals may offer counseling. Cognitive-behavioral therapy assists the patient in making sense of destructive thoughts and providing strategies towards their favorable resolutions [16].

Also, there are alternative and complementary medicine approaches to PPD. According to McCloskey and Reno (2019), these include yoga, massage, and relaxation training. Yoga exercises help improve mild or moderate depression, whereas massage utilizes the "healing power of touch" to affect the condition beneficially. Massage assists in improving the symptoms. Relaxation training helps in learning to soothe the patient coping with PPD. Primary relaxation methods include self-hypnosis, guided imagery, and deep breathing. However, early identification of PPD allows for better efficacy in the natural prevention or treatment of the condition [17].

The lessening of PPD symptoms can be helped through exercises, a healthy diet, regular sleep and rest regime and expressing personal feelings perinatally. Other helpful coping tools include adequate preparation for childbirth, avoiding any significant changes in life right after or during childbirth, and enlisting emotional support in birth [10].

Pros and cons of current treatment options

Once an accurate diagnosis of PPD has been made, antidepressant medication, behavioral and hormone therapy, and other methods may need to be tried to arrive at the best approach for the individual patient and their most pronounced symptoms and needs. For exam-

ple, peer and partner support may work better for a patient with a partner equally as overwhelmed versus interpersonal therapy working better for a patient who cannot seem to control their sadness or anger.

There is also a concern for the infant in breastfeeding mothers. Neonates and young infants are especially vulnerable to potential drug effects due to their immature hepatic and renal systems, immature blood-brain barriers, and developing neurological systems [18–20]. The potential side effects of these drugs delivered to the child via breast milk cause many mothers and physicians to seek non-medical (non-pharmaceutical) but possibly less effective treatment methods.

The most commonly used screening tool is the Edinburgh Postnatal Depression Scale, a self-report 10-item questionnaire recommended at the first postpartum visit at 4–6 weeks. Although easy to administer in a primary care or obstetric office setting, the questionnaire can be complicated by new motherhood changes or common false positives [21]. Various prevention studies examining the use of antidepressants and estrogen therapy during pregnancy have shown promise in treating PPD, but lack comparison groups or significant study populations.

Conclusion

Research data remains limited regarding the early identification, prevention, and treatment of postpartum depression. Diagnosis and treatment can be a lengthy and complicated issue. Thus, the symptoms of PPD in a new mother can be exacerbated as the outcome of diagnosis and treatment is prolonged. Although the dialogue about mood and mental changes in some postpartum women has been ongoing for centuries, still much more needs to be done in terms of early identification of risk factors, prevention, and the management and treatment of postpartum depression [22], in order to bring back to afflicted mothers and their affected children one of life's greatest joys and gifts, the caring and loving bonding between mother and child.

Conflict of Interest Statement

The authors declare that this paper was written in the absence of any commercial or financial relationship that could be construed as a potential conflict of interest.

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