

Postpartum Depression and It's Relation to Postpartum Bonding

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Abstract:

Depression in women during pregnancy and the postpartum period have been matters of great scientific interest. Pregnancy and puerperium are times of particular vulnerability, therefore many women exhibit symptoms of emotional distress during this period. While maternal prenatal and postnatal depression and its effects on both the mother's health and her child's development is a well-recognized health issue; however, the influence of maternal-fetal bonding during pregnancy on postpartum bonding has not been clearly identified. Early identification of bonding impairment during pregnancy and postpartum depression in mothers plays an important role for the prevention of potential bonding impairment in the early postpartum period.

Keywords: Postpartum bonding, PPD, Bonding disorders.

Introduction:

Postpartum depression (PPD) is defined as the most common psychiatric condition which is associated with maternal suffering and numerous negative consequences for offspring, whose high-risk time locates first six months after delivery. (1).

PPD is also defined symptomatically as exceeding a given threshold on a screening measure, such as the Edinburgh Postnatal Depression Scale (EPDS). (2)

Its prevalence was found to be 24 % among healthy postpartum mothers in a recent study (3). The prevalence of PPD varies from 1.9% to 82.1% in developed countries, with the lowest prevalence reported in Germany and the highest prevalence in the United States. In developing countries, the prevalence varies from 5.2% to 74.0%, with the lowest prevalence reported in Pakistan and the highest prevalence in Turkey. (4)

The Risk factors of PPD are violence, abuse, immigration status, gestational diabetes, cesarean section, depression-related factors, vitamin D deficiency, obese and overweight, skin-to-skin care, postpartum anemia, sleep-related factors, acculturation, social support and relationships, assisted reproductive technologies, dietary and nutrition, hormonal contraception, birth and infant-related factors and traditional confinement practices and other factors (5)

PPD occurs within 4 to 6 weeks after childbirth, and symptoms similar to the major depressive disorder (MDD) manifested by depressed mood, loss of interest or pleasure in activities ,sleep disturbance ,appetite disturbance ,loss of energy ,feelings of worthlessness or guilt ,diminished concentration ,irritability ,anxiety and thoughts of suicide(6).

Effect of PPD on mother and infant

On mother: PPD can result in a diminished quality of life, hindered bonding with the infant, and challenges in fulfilling essential maternal care responsibilities.

Moreover, it can adversely affect the mother's mental health and elevate the risk of enduring mental health disorders.(26)

on infant: for infants, being exposed to a mother experiencing PPD can harm their emotional, cognitive, and social development. They may encounter delays in achieving developmental milestones, exhibit behavioral issues, and face an increased likelihood of developing insecure attachments with their mothers. In the long term, this may heighten the chances of mental health disorders and compromise their overall well-being.(27).

Postpartum bonding:

Postpartum bonding is defined as the process of developing a healthy relationship and attachment between mother and newborn child, is a critical period of lifelong development. It often starts during pregnancy, gradually develops within the weeks after delivery, and endures through time, and is characterized by positive feelings, emotional warmth, affection, and maternal behaviors, such as cuddling and smiling at the infant (7).

Bonding disorders are characterized by a lack of maternal feelings that may be accompanied by feelings of irritability, hostility, aggressive impulses, or rejection towards the child, and have been repeatedly associated with impairment of the children`s mental and physical health (8).

Various factors affect postpartum bonding, such as, age of mothers, child planning, number of gravidities, number of parity, mother occupation, sex, mode of delivery, abortion history, current pregnancy complication, social support, stress, history of emotional abuse in childhood,, skin-to-skin contact, breastfeeding, intimate partner violence, and substance use (9).

The Relation between PPD and maternal bonding

A systematic review conducted by **McNamara et al. (10)** found that 15 of 19 research studies showed evidence that postpartum depression is associated with maternal–infant bonding. (10).

Low mood, lack of joy, low energy, low self-esteem, sleep disorders, mood swings, changes in appetite, fear of injury, serious concerns about the baby, sadness, crying, sense of doubt, difficulty in concentrating, lack of interest in daily activities, thoughts of death and suicide can seriously impact maternal–infant interactions, which then contribute to the child’s cognitive and emotional development during infancy and later life. Studies also found an association between maternal depressive symptoms and a lower level of sensitivity to a child, including a lack of confidence when taking care of a child. (11).

PPD significantly impacts the development of maternal-infant attachment, a fundamental element in an infant's emotional and social growth. Maternal-infant attachment is the strong emotional bond and connection between a mother and her baby. It provides a secure base from which the infant explores the world and regulates their emotions. (11).

However, mothers experiencing PPD often face difficulty establishing a secure and robust emotional bond with their infants. These challenges can manifest as reduced emotional warmth, characterized by a lack of affectionate touch, limited eye contact and diminished expressions of joy or delight towards their baby. The diminished emotional warmth may stem from the mother's emotional struggles, such as sadness, fatigue, or anxiety associated with PPD. (12)

Inconsistent responsiveness is another characteristic observed in mothers with PPD. They may have difficulty consistently attending to their baby's needs and responding promptly and appropriately to their cues. This inconsistent responsiveness can lead to confusion and distress in the infant, as they may struggle to understand and predict their caregiver's behaviors and responses (13).

Mothers with PPD may also experience difficulties attuning to their baby's emotional signals. Attunement involves the mother's ability to understand and interpret her baby's emotions and respond sensitively. However, due to the emotional turmoil associated with PPD, mothers may find it challenging to accurately interpret their infant's cues and respond with appropriate sensitivity and responsiveness. **(14)**.

These difficulties in maternal-infant attachment can have long-term implications for the infant's socioemotional development. Insecure attachment patterns may emerge, which are characterized by ambivalence, avoidance, or resistance in the infant's interactions with their mother. These insecure attachment patterns can result in emotional and behavioral problems, such as difficulties regulating emotions, reduced self-confidence, and impaired social relationships as the child ages. **(15)**

It is essential to recognize the effects of PPD on maternal-infant attachment and provide appropriate support and interventions to promote healthy attachment relationships. Early detection, intervention, and targeted therapies can help mothers with PPD develop more secure and nurturing relationships with their infants, fostering positive socio-emotional development and well-being for both the mother and child. **(16)**.

Bonding impairment measurement:

Failure or disturbance in the process of developing a relationship and attachment between mother and newborn child. **(17)**. **Can be measured** by The Postpartum Bonding Questionnaire (PBQ), It consists of 25 statements, some positive and some negative. Each statement has six response options, ranging from 'always' to 'never'. A higher score indicates increasing bonding difficulties. The total score ranges from 0 to 125. The PBQ score is divided into four factors (factor 1: impaired bonding; factor 2: rejection and pathological; anger; factor 3: anxiety about the infant; factor 4: incipient abuse), each with an individual cutoff. The cutoff 12 for factor 1 has a sensitivity of 0.82 for mother–infant disorders **(18)**.

Role of family physician in PPD management and referral system:

The international literature shows that PPD screening programs in PHC can improve women's mental health outcomes in the postpartum period even in low-income regions with low-cost technologies, as pointed out by Chilean and Australian studies. The Edinburgh Postnatal Depression Scale (EPDS) validated in several countries are recognized as the main PPD tracking tool by non-specialized professionals in PHC **(19)**.

the American College of Obstetricians and Gynecologists (ACOG) recommends that clinicians screen patients at least once during the perinatal period for depression and anxiety symptoms. **(20)**.

The American Academy of Pediatrics (AAP) recommends incorporating the Edinburgh Postnatal Scale into the 1-, 2-, 4-, and 6-month visits **(21)**.

PHC health professionals are well positioned to provide psychosocial support to all women in the perinatal period and to perform preventive approaches among women who may be more likely to develop PPD or related disorders, particularly in the immediate postpartum period. These professionals should play an active role in screening and selecting PPD treatment, considering contextual factors, such as culture, socioeconomic condition, among others. **(19)**.

The most-common psychosocial and psychological interventions utilized in the management of postpartum depression were psychosocial support, professionallybased postpartum home visits, interpersonal psychotherapy, and cognitive therapy. However, among these interventions, psychosocial support proved to be the most effective intervention as it was reported to have influenced the reduction of depressive symptoms. **(22)**.

Screening of PPD alone is insufficient to improve outcomes, ACOG recommends appropriate follow-up and treatment, and clinicians should be prepared to initiate antidepressant medication and/or refer patients to appropriate behavioral health resources. (20).

Referral systems

Establishing a referral system to complement standardizing PPD screening is necessary and endorsed in both adult and pediatric settings (21)

The USPSTF recommends that if screening is to be performed, there must be adequate systems in place for necessary referral and care.(23).

Having a protocol to follow when screening results are positive can objectify a very sensitive issue—empowering pediatric providers to make decisions when they otherwise may feel inexperienced or be apprehensive because of personal uncertainty with their responses to positive screening results. (24).

Pediatric providers must keep in mind that by standardizing screening and referral, they are serving the needs of their patients and their patients' families by protecting them both from the potential sequelae of PPD. The task may, at first, appear to be daunting, but it can be incredibly rewarding and important (25).

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