While postpartum depression (PPD) has historically been associated primarily with mothers, recently there has been increased awareness of the experience of fathers and strategies to address postpartum depression in men. For fathers willing to seek help, the lack of recognition of paternal PPD results in limited supports and treatments. Given the potential implications of paternal PPD, it is essential for new fathers and their healthcare providers to recognize the prevalence of paternal PPD, the symptoms, and the challenges surrounding this issue for men.

Prevalence of Paternal Postpartum Depression

For both men and women, PPD is defined as moderate to severe depression diagnosed in the postpartum period, which is shortly after or up to one year following delivery. Studies suggest anywhere from 4 to 25 percent of fathers experience paternal PPD, rates that are not dissimilar to mothers. Fathers are most likely to experience a first onset of paternal PPD in the first 3 to 6 months of the postpartum period.

Much of what is known about paternal PPD comes from studies of mothers and PPD. Research suggests that depression in one partner is significantly correlated with depression in the other. One study found 24 to 50 percent of men with paternal PPD also had partners with PPD. This suggests a high likelihood that infants may be in family situations where multiple caregivers are depressed, which can lead to more severe disruptions in infant development. Maternal PPD is the primary risk factor for predicting paternal PPD. While the relationship between maternal and paternal PPD is still being researched, studies report that male partners of depressed women generally feel less supported, and experience more fear, confusion, frustration, anger, and uncertainty.

Becoming a father is associated with little sleep, new and increasing demands, and new responsibilities that may trigger stress, fear, and anxiety, all of which can lead to depression. Men with previous histories of depression as well as those who are young fathers are at increased risk of developing paternal PPD. Men are likely to underreport their symptoms of depression due to the stigma associated with depression, along with concerns about not aligning with cultural concepts of masculinity.

Symptoms of Paternal Postpartum Depression

Postpartum depression includes depressive episodes that last for longer than two-weeks during the postpartum period. Symptoms associated with both paternal and maternal PPD include:

- Loss of interest in activities
- Significant weight loss or gain
- Fatigue or loss of energy
- Insomnia or hypersomnia
- Feelings of worthlessness or guilt
- Severe anxiety
- Inability to concentrate
- Thoughts of self-harm or suicide
While many PPD symptoms are similar for fathers and mothers, some symptoms are unique to men. These symptoms include:

- Irritability
- Indecision
- Impulsivity
- Violent behavior
- Avoidance behavior
- Substance abuse

**Impact of Paternal Postpartum Depression on Child Development**

In contrast to a large body of literature on maternal care and child development, the relationship between quality of paternal care, that is fathers caring for children, and child development has been less well documented. An increasing number of studies, however, suggest that many fathers with depression exhibit the capabilities to interact with their infants just as well as mothers with depression,17 and that the role of fathers and paternal care is important for children's social, cognitive and emotional development.18

Infants establish both basic biological and behavioral regulatory patterns as well as secure attachments through interactions with primary caregivers in the first year of life.3 However, most attachment research focuses on mothers and infants. For example, mothers with PPD are more likely to exhibit helplessness and negative emotions, and exhibit more irritability, hostility and apathy towards their infants.19 Unaffectionate parenting from both mothers and fathers may lead to the development of insecure attachment with infants.20 It is reasonable to suggest that limitations and deficits revealed for mothers with PPD and their infants regarding attachment are potentially concerns for fathers with PPD and their infants; this is an area that merits further investigation.

The impact on children of paternal PPD may be long term. One study of children of fathers with paternal PPD found an increased number of emotional and behavioral issues including conduct problems and hyperactivity.18 Major depression in fathers is associated with lower psychological functioning and increased suicidal ideation among sons, and increased rates of depression among daughters during young adulthood.21

**Future Directions**

Becoming a parent is a significant life transition that comes with a range of experiences and emotions that can be both gratifying and rewarding, as well as challenging and stressful. While much of the attention to this transition has focused on the experiences of mothers, the experiences of fathers must also be recognized. Health care providers do not routinely talk with men about the transition to fatherhood or screen them for depression. Increased awareness of and knowledge about paternal PPD may facilitate identification and promote treatment for fathers.3

Future research should focus on understanding the unique characteristics and experiences of men living with paternal PPD.22 Researchers should examine more heterogeneous groups of fathers and explore risk factors for developing paternal PPD.3 Studies of the changes that occur during fatherhood, as well as the co-occurrence of depression in couples, could bring an increased understanding of paternal PPD, leading to better screening and treatment options.23 Earlier intervention of paternal PPD can lead to improved outcomes for fathers, mothers and children, which can lead to improved well-being for families.

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