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Postpartum depression: A multi-disciplinary approach to screening, management and breastfeeding support

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ABSTRACT

Postpartum depression (PPD) is a common condition affecting 11%-20% of all postpartum women. Depression can have significant consequences for both mother and infant. There are many risk factors associated with PPD, all of which contribute to an inflammatory response in the mother. An inverse relationship exists between PPD and breastfeeding; women with PPD are less likely to have a positive breastfeeding experience which can lead to early weaning, while long-term exclusive breastfeeding is associated with decreased rates of PPD. A multi-disciplinary approach to managing PPD, including strong breastfeeding support, will lead to improved mental health outcomes for women and their children.

Introduction

Depression is a common complication of childbirth. Postpartum depression (PPD) is the term used to describe depression that occurs during the postpartum period and up to 1 year after childbirth (American College of Obstetrics and Gynecology [ACOG], 2015). In the United States, PPD is the leading cause of non-obstetric hospitalization among women aged 18–44 years of age (O'Hara, 2009). It is estimated that 1 in 7 women experience depression in the postpartum period (Gavin et al., 2005), though incidence can range significantly depending on the population studied and how it is defined. The Center for Disease Control and Prevention (CDC) published data from 27 states reporting an overall PPD prevalence of 11.5%, with a range of 8% to 20% (Ko, Rockhill, Tong, Morrow, & Farr, 2017). Postpartum depression is associated with adverse outcomes for both mother and the infant and can negatively impact the entire family. This article will focus on the effect postpartum depression can have on infant development and mental health, the relationship between inflammation, breastfeeding and postpartum depression, the importance of a successful breastfeeding experience for both maternal and infant and highlight the need for a multidisciplinary approach to care.

Consequences of postpartum depression

There is a large body of evidence documenting the impact of maternal depression on infants and children. Women who are depressed during pregnancy have a higher risk of pre-eclampsia, preterm delivery, and low birthweight infants (Dayan et al., 2006; Grote et al., 2010; Kim et al., 2013). In addition, anxiety during pregnancy has also been found to increase the risk of preterm delivery and low birthweight (Ding et al., 2014; Glynn, Schetter, Hobel, & Sandman, 2008). Following delivery, anxiety and depression continue to impact the well-being of both mother and infant. In a meta-analysis of research examining the effects of PPD in mothers during the first 3 months of the infant's life, studies indicated depressed mothers were less likely to be engaged with their infant, they exhibited less warmth, and played with their infants less than mothers who did not experience PPD (Lovejoy, Graczyk, O'Hare, & Neuman, 2000). Forman et al. (2007) found depressed mothers were less responsive and had a more negative view of their 6-month-old infants when compared to non-depressed mothers.

Mothers suffering from PPD may have difficulty bonding with their infants. A longitudinal study examined the effects of PPD over the first year of the infant's life. Mothers who had an Edinburgh Postpartum Depression Scale (EPSD) score of > 13 in the first month postpartum were evaluated with the Mother-Infant Bonding scale at 4, 9, 16 weeks and 1 year postpartum. Findings indicated that mothers who were depressed in the first month of their infant's life failed to bond well with their infant at all subsequent time points (O'Higgins, Roberts, Glover, & Taylor, 2013). This decreased bonding and engagement can have a negative impact on the growth and development of the infant. Multiple studies have indicated infants of depressed mothers perform less optimally on the Brazelton Neonatal Behavior Assessment Scale (Abrams,

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Field, Scafidi, & Prodromidis, 1995; Field et al., 2004; Lundy, Field, & Pickens, 1997).

In early studies on the effects of still-face and separation on infants, Field, Vega-Lahr, Scafidi, and Goldstein (1986) found 4-month-old infants' behavior to become negative and agitated when presented with their mother's still face and brief separation; maternal still-face elicited more stressful infant behaviors. Field et al. (2007) replicated this study comparing infants of depressed and non-depressed mothers. They found infants of depressed mothers were less interactive during the reunion phase of the activity. In addition, infants of depressed mothers showed less distress during the still-face activity compared with infants of non-depressed mothers who found the activity highly distressing. The authors hypothesized mothers who experience depression often present a still-face to their infants who then become accustomed to their mothers' emotional unavailability. Research on the impact of maternal emotional unavailability has consistently demonstrated a negative impact on the infant (Field, 1994; Field, Diego, & Hernandez-Reif, 2009; Field et al., 1986). If the mother is emotionally unavailable to the infant, the infant can experience behavioral and physiologic disorganization, manifesting in affective disturbances with potentially long emotional consequences (Field, 1994).

The effects of PPD appear to extend beyond the early infancy period. Forman et al. (2007) found mothers who were treated for PPD rated their children "lower in attachment security, higher in behavior problems, and more negative in temperament than nondepressed mothers" (p. 585). Several studies have found children whose mothers experienced PPD exhibited social and emotional problems during later childhood including less emotional well-being (Luoma et al., 2001, 2004; O'Connor, Heron, Glover, Golding, & ALSPAC Study Team, 2003). A longitudinal study examining the association between maternal PPD and child behavioral found a positive association between PPD and child behavioral problems, slow weight gain, and other health disorders (Avan, Richter, Ramchandani, Norris, & Stein, 2010).

Most significantly, PPD is positively associated with mental health problems that extend throughout childhood into adolescence. Verbeek et al. (2012) investigated the link between PPD and mental health problems in adolescents. The authors found "a statically significant association of adolescents' internalizing problems with maternal PPD which remained when adjusted for parental psychopathology" (p. 948). The researchers concluded that this association suggested maternal PPD had a direct psychological effect on the child during postpartum and early treatment of parental psychopathology may prevent future pathology in children. Glasheen et al. (2013) evaluated whether pre or postnatal exposure to maternal depression and/or anxiety could predict psychopathology in adolescents. Results indicated "exposure to medium and high pre-and postnatal anxiety was associated with the risk of conduct disorder among offspring" (p. 1045). The researchers suggested early identification of maternal anxiety and depression could become a unique target for intervention. Pearson et al. (2013) studied the relationship between maternal depression and the mental health status of offspring in a large-scale study with data from > 4500 parents and children. Results indicated maternal antenatal depression to be independently associated with adolescent depression at age 18 years. Postpartum depression was also associated with higher rates of adolescent depression, especially for mothers with low education. These researchers also suggested that "treating maternal depression … could prevent offspring depression during adulthood and that prioritizing less advantaged mothers postnatally may be most effective" (p. 1312).

The impact of maternal depression can also extend into adulthood. Weissman et al. (2006) compared children of depressed parents with children whose parents had no history of mental health disorders. In a 20 year follow up study, they found adult children of depressed mothers had 3 times the risk of major depression and substance abuse when compared with the children of non-depressed parents. This study underscores the importance of early identification and management of maternal antenatal and postpartum depression.

Table 1
Risk factors for postpartum depression.
Norhayati et al. (2015).

Psychological factors	• Antenatal depression and anxiety • Previous history of mental illness (including depression) • Stressful life events • Childcare stress
Obstetrical and pediatric factors	• Challenging infant temperament • Women whose infants had a medical illness • Lack of childcare knowledge • Lack of breastfeeding • Breastfeeding difficulties
Physical and biological factors	• Poor physical health • Negative body image
Socio-demographic factors	• Low socio-economic status • Lack of social support

Risk factors for post-partum depression (Table 1)

A number of high-level risk factors associated with increased incidence of PPD have been reported in the literature including depression and or anxiety during pregnancy, experiencing stressful life events during pregnancy or the early puerperium, low levels of social support, and having a previous history of depression (Robertson, Celasun, & Stewart, 2003). Moderate level PPD risk factors include poor self-esteem, low socioeconomic status and difficult infant temperament (Norhayati, Nik Hazlina, Asrenee, & Wan Emilin, 2015; Robertson, Grace, Wallington, & Stewart, 2003). More recently, researchers in the field of psychoneuroimmunology (PNI) have suggested a new approach to understanding depression related to inflammation. Previously it was believed inflammation was simple *one of* the risk factors associated with depression. Current studies have found that physical and psychological stressors increase inflammation, and it is now believed inflammation is the underlying cause of depression. This constitutes a shift in the approach to identification and treatment of depression (Kendall-Tackett, 2007; Miller & Raison, 2016; Schiepers, Wichers, & Maes, 2005). Based on these findings, Kendall-Tackett (2007), a health psychologist working in the field of women's health and breastfeeding has suggested, "inflammation is not simply *a* risk factor [for postpartum depression]; it is *the* risk factor that underlies all others" (p. 1).

Stress, breastfeeding, and postpartum depression

Mothers experience a multitude of stressors during the peripartum period including lack of sleep, pain, social and psychological stress, and birth trauma. These stressors can cause a significant inflammatory response in the body manifested by increased levels of proinflammatory cytokines, thus placing the peripartum women at increased risk of depression (Kendall-Tackett, 2007). Breastfeeding has been associated with decreased stress responses which may help explain the relationship between exclusive breastfeeding and decreased postpartum depression (Groer & Morgan, 2007). In a literature review of breastfeeding and PPD, Figueiredo, Dias, Brandaoc, Canaria, and Nunes-Costa (2013) describe the hormonal protection breastfeeding provides for PPD:

> Lactation has been associated with attenuated stress responses, especially that of cortisol. Attenuated cortisol stress responses were observed in lactating mothers compared to the non-lactating. These results suggest that lactation attenuates neuro-endocrine responses to stress, a factor that has been related with fewer postpartum depressive symptoms (p. 334).

Mezzacappa and Katkin (2002) examined the effect of breastfeeding on maternal stress and mood when compared with bottle feeding. They found breastfeeding to be associated with a decrease in negative mood and mothers reported a decrease in perceived stress. Additional studies

reported similar findings (Akman et al., 2008; Else-Quest, Hyde, & Clark, 2003).

Breastfeeding initiation and duration are inversely related to postpartum depression; women with PPD are less likely to initiate breastfeeding, more likely to use formula supplementation, and more likely to wean early (Bascom & Napolitano, 2016; Dennis & McQueen, 2009). Conversely, in a systematic review of the literature regarding breastfeeding and depression, researchers found that a shorter breastfeeding duration was associated with higher rates of depression (Dias & Figueiredo, 2015). In a study of 6410 mothers, researchers found exclusively breastfeeding mothers reported lower rates of depression than partial breastfeeding or formula-feeding mothers (Kendall-Tackett, Cong, & Hale, 2011). These findings illustrate the protective effect of breastfeeding on depression and mood disorders and underscore the importance of encouraging and supporting the breastfeeding relationship.

An important caveat identified in the literature was that negative breastfeeding experiences preceded the emergence of depressive symptoms – therefore, breastfeeding was protective against postpartum depression, only as long as breastfeeding was going well. A longitudinal study following 2586 postpartum women found, that women who experienced breastfeeding problems at 1 week postpartum were more likely to experience PPD at 2 months postpartum (Watkins, Meltzer-Brody, Zolnoun, & Stuebe, 2011). Breastfeeding challenges and a lack of confidence in breastfeeding is reported to be a common concern for mothers experiencing depressive symptoms (Edhborg, Matthiesen, Lundh, & Widström, 2005). Therefore, women experiencing early breastfeeding difficulties should be screened for depressive symptoms. Additionally, since breastfeeding problems appear to increase the risk of depression, any challenges a breastfeeding mother is experiencing should be addressed immediately.

For many years it was believed breastfeeding was an actual risk factor for PPD; this was partially based on the belief that breastfeeding contributed to a lack of sleep in the new mother (Alder & Bancroft, 1988; Alder & Cox, 1983). A common recommendation was to supplement the infant at night with formula to ensure quality maternal sleep (Ross, Murray, & Steiner, 2005) and this recommendation continues today. However, studies have demonstrated that breastfeeding, specifically *exclusive* breastfeeding, increases maternal sleep quality and duration (Doan, Gardiner, Gay, & Lee, 2007). In addition, research indicates that mothers who bottle fed at night self-reported more sleep disturbances (Doan et al., 2007; Goyal, Gay, & Lee, 2007; Kendall-Tackett et al., 2011). Sleep disturbance and fatigue are physical stressors which can increase inflammation thus putting the mother at increased risk for depression. Interventions that target disordered sleep [such as exclusive breastfeeding] may lower inflammation, decreasing the risk of depression (Motivala, Safari, Olmos, & Irwin, 2005). Again, the positive relationship between improved sleep and breastfeeding is only seen when the mother is having a successful breastfeeding experience.

Impact of breastfeeding on maternal and infant health

The health benefits of breastfeeding for the both the mother and the infant cannot be overstated. Breastfeeding protects the infant against a spectrum of adverse health outcomes and these outcomes can be seen globally in both low income and high-income populations (Grummer-Strawn & Rollins, 2015). The American Academy of Pediatrics (AAP) summarizes the health benefits of breastfeeding in their 2012 policy statement *Breastfeeding and the Use of Human Milk*. Improved health outcomes include decreased respiratory and gastro-intestinal tract illnesses, decreased allergies, lower rates of obesity, diabetes and childhood leukemias, and improved neurodevelopmental outcomes. There is a dose dependent relationship between these results and the length and exclusivity of breastfeeding. More significant health benefits are seen in infants who are exclusively breastfed for at least 3–6 months of age. In addition, higher rates of mortality are reported in infants who were never breastfed compared with infants who were exclusively breastfed for the first 6 months of life and beyond (Sankar et al., 2015).

Numerous studies have indicated a positive association between breastfeeding and children's mental development (Anderson, Jonhstone, & Remley, 1999; Drane & Logemann, 2000). Kramer et al. (2008) conducted a large-scale study involving 13, 899 participants, to assess whether prolonged and exclusive breastfeeding improved children's cognitive abilities. Findings indicated children who were exclusively breastfed from 3 to < 6 months of age had higher verbal IQ scores by 4.7 points at age 6 years than children who were breastfed for < 3 months of age (95% CI). Following on this study, Guxens et al. (2011) assessed the relationship between breastfeeding and children's neurodevelopment independent of parental psychosocial factors. They found “greater levels of accumulated breastfeeding during the first years of life were related to higher mental development at 14 months” (p. e880).

Specific benefits of breastfeeding, however, on the early psychosocial development of the infant and infant mental health are difficult to quantify. Research findings are based primarily on observational studies since there are ethical implications of assigning subjects to either a breastfeeding or formula feeding cohort. Woodward and Liberty (2017) address this issue in a recent literature review. They conclude that “there is ample justification for the value of breastfeeding from studies of the nutritional and cognitive advantages associated with breastfeeding, as well as the psychosocial benefits” (p. 7). However, they also state that breastfeeding is only one of multiple parent and family factors which can influence the psychosocial development and mental health of children and further research is needed to explore the relationship between breastfeeding and infant mental health.

Both short and long-term benefits have also been reported for mothers who breastfeed. Short term benefits include decreased postpartum blood loss, more rapid uterine involution, lactation amenorrhea, and decreased risk of PPD. Longitudinal studies are now finding positive relationships between the cumulative duration of breastfeeding and a number of maternal illnesses including cardiovascular disease, premenopausal breast cancer and ovarian cancer (AAP, 2012).

Maternal caregiving, as it relates to sensitivity, also appears to be related to breastfeeding. Maternal sensitivity is defined as the emotional responsiveness of the mother to her child (Leerkes, Blankson, & O'Brien, 2009). Several studies, focusing on the short-term implications, have shown a relationship between breastfeeding and mothers' displays of sensitivity when caring for their babies (Bigelow et al., 2014; Edwards, Thullen, Henson, Lee, & Hans, 2015). This effect has been demonstrated to have long term effects as well. In a longitudinal study of the potential effects of breastfeeding on maternal sensitivity, researchers found that “longer breastfeeding duration predicted increases in observed maternal sensitivity up to age 11 [years]” (Weaver, Schofield, & Papp, 2018, p. 220).

Clearly, breastfeeding plays an important role in both the mental and physical wellbeing of both mother and infant. However, breastfeeding can be a challenge for many new mothers, especially those who lack support and resources. It is therefore especially important for all healthcare providers working with mothers during the first year of an infant's life be aware resources in the community to support breastfeeding women.

The role of early screening

It is estimated that 50% of PPD goes undetected (Peindl, Wisner, & Hanusa, 2004). Many women either do not recognize that they are experiencing PPD, or they are unwilling to suffer the social stigma of depression and do not acknowledge their feelings. The mother may be embarrassed by her symptoms, or worried if she reveals them, she may be separated from her baby (Thurgood, Avery, & Williamson, 2009). Early recognition of potential problems and methods to detect the

Table 2
Edinburgh Postnatal Depression Scale (EPDS).
Cox, Holden & Sagovsky (1987).

As you are pregnant or have recently had a baby, we would like to know how you are feeling. Please check the answer that comes closest to how you have **felt IN THE PAST 7 DAYS**, not just how you feel today.

In the past 7 days:

1. I have been able to laugh and see the funny side of things
   - ☐ As much as I always could
   - ☐ Not quite so much now
   - ☐ Definitely not so much now
   - ☐ Not at all
2. I have looked forward with enjoyment to things
   - ☐ As much as I ever did
   - ☐ Rather less than I used to
   - ☐ Definitely less than I used to
   - ☐ Hardly at all
3. I have blamed myself unnecessarily when things went wrong
   - ☐ As much as I always could
   - ☐ Not quite so much now
   - ☐ Definitely not so much now
   - ☐ Not at all
4. I have been anxious or worried for no good reason*
   - ☐ No, not at all
   - ☐ Hardly ever
   - ☐ Yes, sometimes
   - ☐ Yes, very often
5. I have felt scared or panicky for no very good reason*
   - ☐ Yes, quite a lot
   - ☐ Yes, sometimes
   - ☐ No, not much
   - ☐ No, not at all
6. Things have been getting on top of me*
   - ☐ Yes, most of the time I haven't been able to cope at all
   - ☐ Yes, sometimes I haven't been coping as well as usual
   - ☐ No, most of the time I have coped quite well
   - ☐ No, I have been coping as well as ever
7. have been so unhappy that I have had difficulty sleeping*
   - ☐ Yes, most of the time
   - ☐ Yes, sometimes
   - ☐ Not very often
   - ☐ No, not at al
8. I have felt sad or miserable*
   - ☐ Yes, most of the time
   - ☐ Yes, quite often
   - ☐ Not very often
   - ☐ No, not at all
9. I have been so unhappy that I have been crying*
   - ☐ Yes, most of the time
   - ☐ Yes, quite often
   - ☐ Only occasionally
   - ☐ No, never
10. The thought of harming myself has occurred to me*
    - ☐ Yes, quite often
    - ☐ Sometimes
    - ☐ Hardly ever
    - ☐ Never

possible presence of PPD is an essential step in helping mothers obtain timely mental health evaluation, treatment and support (Horowitz, Murphy, Gregory, & Wojcik, 2011).

To improve detection and offer early treatment, the Association of Women's Health, Obstetrical and Neonatal Nursing (AWHONN), in their most recent policy statement on *Mood and Anxiety Disorders in Pregnant and Postpartum Women*, recommends that all pregnant and postpartum women be screened for postpartum depression (AWHONN, 2015). This recommendation is also supported by ACOG (2015) and the AAP (Earls and The Committee on Psychosocial Aspects of Child and Family Health, 2010). The U.S. Preventative taskforce (USPSTF) has endorsed the Edinburgh Postnatal Depression Scale (EDPS) as the tool to be used for routine screening of PPD (Siu and the USPSTF, 2016) (Table 2).

The EDPS was originally developed in Britain and is one of the most widely used screening instruments for detection of PPD. It is a 10-item questionnaire that reliably identifies women at risk for developing depression. The tool is simple to administer, and most mothers can complete the scale in < 5 min (Cox, Holden, & Sagovsky, 1987). The EPDS should be administered within two to three days of delivery; women with a score ≥ 9 and/or those who have additional risk factors warrant closer follow up (El-Hachem et al., 2014). The EPSD is not diagnostic, it is meant to be used as a screening tool to open dialogue with the mother regarding PPD. Standard depression screening should always be used in conjunction with more comprehensive evaluations when indicated by both EPSD results as well as observation of other depressive risk factors and symptoms (Peindl et al., 2004). The screening tool is used most frequently by healthcare providers working with mothers in the immediate postpartum period, however mental health professionals providing care to women during this time period are also well suited to screen for PPD using the EPSD.

When routine screening is not utilized, healthcare providers who care for pregnant women or women in their first year after delivery should be on alert for symptoms of depression or anxiety. As previously discussed identified risk factors, which include a history of previous depression, poor social supports, low socio-economic status, and challenging infant temperament, all contribute to maternal stress which in turn can lead to an inflammatory response (Kendall-Tackett, 2007). Recognizing the correlation between breastfeeding challenges and PPD, a mother experiencing lactation difficulties should also be assessed for postpartum depression (Dias & Figueiredo, 2015; Figueiredo, Canário, & Field, 2014; Watkins et al., 2011; Ystrom, 2012).

Treatment and referrals

Managing PPD is multifaceted and requires a multidisciplinary approach. According to Kendall-Tackett (2010) “All effective treatments for depression are anti-inflammatory interventions” (p. 8). If the depression is mild, support through extra visits to the pediatric or obstetric healthcare provider may be all that is needed. During these visits, the provider can offer reassurance and discuss transition to motherhood. Suggestions on how to maximize rest, improve nutrition, and incorporate mild exercise with mindfulness practices into a daily routine can be very helpful in decreasing stress and mitigating depressive symptoms. The provider can also educate the mother regarding recognizing more significant depression symptoms which may indicate the need for additional assistance and/or treatment. Helping mothers identify family and community supports may also alleviate stressful life circumstances; this type of support can be extremely valuable in the management of PPD.

If screening indicates depression is more significant, referral for psychotherapy and/or medications may be needed. Empirically validated psychological treatments are available for postpartum depression including interpersonal psychotherapy and cognitive–behavioral therapy. These modalities have been shown to be effective for perinatal women experiencing mild to severe depression (Stuart, 2012, 2014.) Peripartum depression with suicidal or homicidal intent or peripartum depression with psychotic features is considered a psychiatric emergency. In these situations, immediate evaluation by a mental health professional is warranted (Guille, Newman, Fryml, Lifton, & Epperson, 2013).

Medications can be a useful intervention for some women experiencing PPD. Providers should be aware that mothers may be reluctant to consider medications due to concerns regarding passage of medication into breastmilk. A risk–benefit assessment regarding use of pharmacological intervention, involving the mother and all relevant healthcare providers may be necessary. Using a reliable resource is invaluable in providing education to the mother when making medication decisions. Current information about medication use during lactation is readily available from the Internet on TOXNET LACTMED (http://toxnet.nlm.nih.gov/newtoxnet/lactmed.htm) and e-lactancia (http://e-lactancia.org/). Detailed information regarding medications and breastfeeding, including the degree of transfer of medications into human milk, the effect on mother and infant (if known), the relative risks to the infant (if any), and the adult pharmacokinetics of the medication can be found in *Medications and Mothers Milk* (Hale, 2019).

Support of the breastfeeding mother who is having difficulties, experiencing pain, or is simply not confident in her ability to breastfeeding will benefit from a referral to an experienced lactation professional such as an International Board-Certified Lactation Consultant (IBCLC®). Along with maternal frustration, the infant who is struggling to breastfeed may not be receiving sufficient amounts of milk or may be difficult to console. This behavior can be interpreted as a ‘challenging infant temperament’, which can further increase maternal stress. Resolution of these breastfeeding issues is key in establishing a successful breastfeeding relationship. Since breastfeeding difficulties often precede the symptoms of PPD, appropriate referrals should take place whether or not depressive symptoms are noted. Alongside professional services, mother to mother support groups and peer counselor programs may be a helpful addition in providing a supportive network for the

breastfeeding mother.

A multidisciplinary approach

A multifaceted plan of care that meets the specific needs of each maternal-infant dyad is best achieved when health care providers of different disciplines communicate and collaborate. Working together, focusing on the protection of the maternal-infant relationship as well as the health and wellbeing of both mother and infant offers the best hope in preventing the deleterious effects of PPD. Bunik, Dunn, Watkins, and Talmi (2014), describe the development of an interdisciplinary clinic model they term the "Trifecta Approach", combining the expertise of a pediatrician, a lactation consultant and a clinical psychologist specializing in infant mental health. Each professional is responsible for a specific role. The pediatrician assumes responsibility for obtaining a maternal health history along with medical management of the infant. This includes evaluating the mother for breastfeeding risk factors and assessing the infant for any physical issues which could impact breastfeeding. The lactation consultant shares in assessment of the dyad and focuses care on breastfeeding management issues such as positioning, latch and milk transfer. After administration of the EPSD, the psychologist meets with the family and discusses adjustment to the parental role with "the ultimate goal of increasing maternal wellbeing and health, which directly affects ability to care for the infant" (Bunik et al., 2014, p. 145). This model demonstrates the bidirectionality of breastfeeding and postpartum depression and highlights the importance of a multidisciplinary approach to caring for women experiencing PPD. Although not described in the Bunik et al. (2014) study, advance practice registered nurses (APRN) as well as other mental health care providers can also be an integral part of this healthcare team. Pediatric and family nurse practitioners can obtain medical histories and manage the physical health of the infant, while healthcare providers with a specialty in maternal and infant mental health can provide the needed support to at risk mothers and participate in the management of maternal & infant wellbeing.

Buchholz, Dunn, Watkins, and Bunik (2016) provide a follow up report on the success of the Trifecta Approach. Since its inception, over 500 families have been served with an average number of visits to the clinic per family of 1.65 (highest number of visits = 6). An interesting finding is the relatively low scores on the EPSD of 5.5 (SD = 4.32). This finding underscores the fact that the EPSD serves only as a screening tool that opens the door for communication with mothers about challenges they may be experiencing in the early postpartum period. Clinicians caring for new mothers and infants need to be vigilant in assessing for all risk factors associated with PPD, especially breastfeeding difficulties, regardless of screening results.

Conclusion

Postpartum depression occurs frequently, is often underreported, and has significant long-term negative consequences. Early detection of PPD can lead to improved management which promotes the health and well-being of women and their children (O'Hara & Wisner, 2014). To facilitate identification and prompt treatment, routine screening using an approved screening tool along with assessment for risk factors is recommended as best practice. A multidisciplinary plan of care aimed at reducing maternal stress is optimal for managing women with PPD. Breastfeeding difficulties and early weaning is considered a risk factor for PPD (Ystrom, 2012), therefore, exclusive long-term breastfeeding with appropriate support will help promote positive mental health outcomes for mothers and infants.

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