Interpersonal Aspects of Postpartum Depression

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Abstract: The primary goal of this paper is to provide a theoretical understanding of postpartum depression that captures multiple aspects of a woman's life during pregnancy and postpartum. Recent literature cites the couple's relationship as playing an important role in the antenatal period. This paper offers a unique perspective. Family systems theory is employed to inform the conceptualization of postpartum depression and also to guide clinicians, women and family's understanding of this disorder from a relational perspective. Specifically, a family system perspective connects relational risk and protection to postpartum depression and offers practical implications for clinicians and families.

Keywords: Postpartum Depression, Family Systems Theory, Couples Relationship, Risk Factors, Protective Factors

While having a baby is often referred to as the happiest time in a woman's life (Barnes, 2006), many women find pregnancy and the postpartum period to be a stage of major physical and emotional changes. Postpartum depression (PPD) is a mood disorder effecting women after childbirth and involves symptoms that range from mild to severe. It is the most frequent mental health complication following childbirth (Munk-Olsen, Laursen, Pedersen, Mors, & Mortensen, 2006). While our knowledge about postpartum depression has greatly advanced in recent years, a more comprehensive understanding of the pregnancy and postpartum depression process is vital to understanding the context in which postpartum depression exists, especially the relational aspects of a woman's antenatal period. A focus of recent literature has been on the couple's relationship being of paramount importance during the postpartum time yet we do not have specific information on how the quality and function of a couple's relationship affects the family postpartum (Banker & LaCoursier, 2014; Barnes, 2006; Blum, 2007; Chandra, Bhargavaraman, Raghunandan, & Shaligram, 2006; Haslam, Pakenham, & Smith, 2006; Paulson & Bazemore, 2010). In this paper, the family and couple unit will be referred to as a heterosexual relationship because literature related to postpartum depression has primarily looked at heterosexual relationships. Understanding how the relational aspects of the antenatal period interact with postpartum depression risk and protective factors is necessary to better understand postpartum depression.

Early research on postpartum depression focused only on etiology (Bloch, Daly, & Rubinow, 2003; Blum, 2007; Forty et al., 2006; Hendrick, Altshuler, & Suri, 1998; Klier et al., 2007; Whiffen & Johnson, 1998; Zonana & Gorman, 2005). These studies looked at the biological aspects of the women affected, such as the role of female hormones and various biological changes which occur during pregnancy and childbirth (Barnes, 2006). Establishing biomedical risk factors for postpartum depression (Kendall-Tackett & Kantor, 1993; Nierop, Bratsikas, Zimmermann, & Ehlert, 2006; Pedersen et al., 2007) was pivotal for understanding physical and chemical changes that can affect a woman's mood (Barnes, 2006). While these studies were important, they were limited by failing to consider the emotional, social and economic contexts of a woman's life.

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Then postpartum depression researchers' focus turned to psychosocial issues. It was not until this decade that researchers turned their attention toward the range of psychological and social aspects of postpartum depression (Barnes, 2006; Chandra et al., 2006; Green, Broome, & Mirabella, 2006; Halligan, Murray, Martins, & Cooper, 2006; Haslam et al., 2006; Roberts, Bushnell, Collings, & Purdie, 2006; Shaw, Levitt, Wong, & Kaczorowski, 2006). Researchers began acknowledging the important role life stressors could play in women's mental health (Blum, 2007; Cutrona & Troutman, 1986; Forty et al., 2006; Haslam et al., 2006; Klier, 2006; O'Hara, 1986; Whiffen & Johnson, 1998). For example, poverty, low socioeconomic status (SES) and financial stresses during pregnancy have all been associated with postpartum depression symptoms (Curry, Durham, Bullock, Bloom, & Davis, 2006; Patel, Araya, de Lima, Ludermir, & Todd, 1999). Seguin and colleagues (1999) suggest that a large proportion of economically disadvantaged women suffer from depression during pregnancy. Researchers have also acknowledged the stress from social stratification and cultural disadvantages on families during pregnancy (Britton, 2008; Kim et al., 2006; Mckee, Cunningham, Jankowski, & Zayas, 2001). In addition, women who experience physical violence or another type of emotional or traumatic stress are at greater risk of mental health problems (Varma, Chandra, Thomas, & Carey, 2007). The rates of physical abuse during pregnancy range between four to eight percent (Altarac & Strobino, 2002; Bohn, Tebben, & Campbell, 2004). Women and their families who experience emotional distress during pregnancy have an increased risk of adverse health outcomes (Glazier, Elgar, Goel, & Holzapfel, 2004). During the past decade, long lists of psychosocial risk factors have been identified in the literature.

In the midst of studying the psychosocial aspects, researchers found that social support inversely affects postpartum depression symptoms (Barnes, 2006; Blum, 2007; Dennis & Chung-Lee, 2006; Klier et al., 2007; Pearlstein et al., 2006). The focus on social support then led researchers to examine women's relationships during her postpartum period. Originally, studies on etiology, postpartum depression symptoms and its effects were focused only on the woman, rather than including other family members. The woman's experience is a critical component to understanding PPD; the female is not the only person affected by postpartum depression. Researchers became particularly interested in the relationship between a mother and her infant (Chandra et al., 2006; Green et al., 2006; Halligan et al., 2006; Klier, 2006; Moehler, Brunner, Wiebel, Reck, & Resch, 2006). They have found that postpartum depression affects the mother-infant bond, as well as a child's overall mental health (Barnes, 2006; Chandra et al., 2006; Green et al., 2006; Halligan et al., 2006; Haslam et al., 2006; Roberts et al., 2006; Shaw et al., 2006; Whiffen & Johnson, 1998). Some researchers began studying the marital relationship (Dulude, Ba, Wright, & Sabourn, 2002; Glazier et al., 2004; Koeske & Koeske, 1991; Lutz & Hock, 2002). Studies show that a woman feeling appreciated by her partner is actually a protective factor for postpartum depression, even with women who have a predisposition for depression (Barnes, 2006; Whiffen & Johnson, 1998). Pajulo and colleagues (2001) also acknowledged the importance of understanding women's relationships during this time and reported that women who had experienced difficulties with their mothers, friends or their partners were at higher risk for postpartum depression. Another study found that the couple's relationship can be both a risk factor and a protective factor for postpartum depression (Banker & LaCoursier, 2014).

Some research on the relational aspects of postpartum depression suggests that men experience postpartum symptoms: there may be both maternal postpartum depression, as well as paternal postpartum depression (Munk-Olsen et al., 2006; Whiffen & Johnson, 1998). The research in this area is not conclusive, but regardless of whether or not fathers can be clinically diagnosed with postpartum depression, partners of mothers with postpartum depression likely have more responsibilities and are under more stress. While scholars have noted these extended effects of postpartum depression on certain family members (Halligan et al., 2006; Haslam et al.2006; Moehler et al., 2006; Moran & O'Hara, 2006; Munk-Olsen et al., 2006; Whiffen & Johnson, 1998; Wisner, Chambers, & Sit, 2006), postpartum depression has not been conceptualized as a family issue.

At present, research focuses on the biological, psychological and social topics while separating each family member from the whole. Conceptualizing postpartum depression from a relational or family perspective broadens this current disjointed understanding by conceptualizing

the family members in relations to each other as well as connects the family unit to the other elements of postpartum depression. This expanded conceptualization offers explanation for what a woman is experiencing during pregnancy and postpartum. Using a family framework can also provide clarification and a basis for creating assessments and interventions.

Postpartum Depression as a Diagnosis

Women are admitted into psychiatric care during the child-bearing years more often than at any other time in their lives (Cox, Murray, & Chapman, 1993). Approximately 14.5 percent of women experience a new episode of minor or major depression during the first three months postpartum and 6.5 percent of these women's depression is categorized as major depression (Gaynes et al., 2005; Wisner et al., 2006). Postpartum depression is prevalent in many countries in addition to the United States. Approximately 10 to 28 percent of females experience postpartum depression internationally (Beck, 2001; Green et al., 2006). In fact, some studies show that rates of postpartum depression in developing countries are almost double the rates in developed countries (Husain et al., 2006). Many prevalence rates are based on self report, hence many cases of postpartum depression go undiagnosed and the numbers themselves are underestimated (Haslam et al., 2006). One study asserts that up to 85 percent of females experience postpartum depression after giving birth (Henshaw, 2003).

Family Systems Theory

The conceptualization of postpartum depression is critical to the understanding of and the examination of PPD. At present, postpartum depression research focuses primarily on the woman not the whole family unit. According to family system theory, focusing on the woman only or the other family members separately is acknowledging just one part of the system effecting or being affected by the disorder (Nichols & Schwartz, 2012). Allowing a family systems theory to inform the conceptualization of postpartum depression provides an expanded and more comprehensive understanding. Structural family theory provides a framework that explains family dysfunction and how to treat families for these dysfunctions (Nichols & Schwartz, 2012). Salvador Minuchin, one of the founders of family systems theory and the creator of structural family therapy, theorizes that problems in families are due to the family's inability to adjust to change and transition, and therefore is a natural fit when talking about the transitions of pregnancy or the birth of a new child (Minuchin, 1974; Nichols & Schwartz, 2012).

Anything that happens in one part of the family affects the other parts. Although Minuchin (1974) states that pathology could be in the individual, in the individual's social context, or in the interaction between people, he asserts that the family structure is what creates, amplifies, or corrects pathology. The symptoms of one family member, therefore, are not seen as individual problems, but as a reflection of problems within the family structure (Nichols & Schwartz, 2012). This notion is missing in the current understanding of postpartum depression.

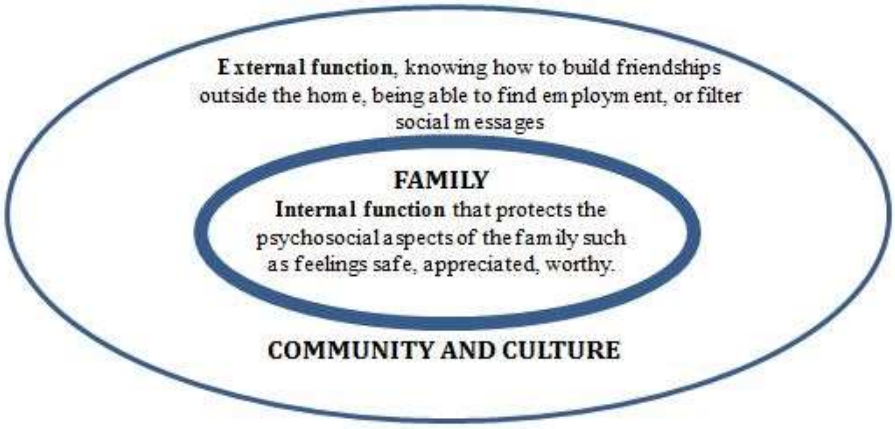
The focus of structural family theory is how families organize and reorganize the family structure, parallel to what is happening with families during pregnancy and adjusting to a newborn. Transitions are usually a source of stress for people (Cowan, Cowan, Shultz, & Heming, 1994; Minuchin, 1974; Minuchin & Fishman,1981). Childbearing is a critical developmental phase that requires individual, marital, and familial reorganization (Belsky & Pensky, 1988; Kreppner, 1988; Mercer, Ferketich, & DeJoseph, 1993; Ruble et al., 1990). In structural family theory, a family's capacity to handle this reorganization is based on an individual family structure and its ability to support one another (Minuchin, 1974; Nichols & Schwartz, 2012). Minuchin defines family structure as the organization of patterns in which its members interact such as making decisions in the family or offer emotional support to each other. According to structural family theory, family members serve two different functions. One is the internal function that protects the psychosocial aspects (i.e. feelings safe, appreciated, worthy) of each member. Family members need to know how to support each other emotionally. The second is the external function, or knowing how to build friendships

outside the home, being able to find employment, or filter social messages that help members acclimate to culture and the social context (Nichols & Schwartz, 2012). New circumstances, like pregnancy or childbirth change and adjustments to the family structure while still honoring these two functions (Barnes, 2006; Cowan et al., 1994; Tammentie, Tarkka, Astedt-Kurki, Paavilainen, & Laippala, 2004). See Table 1 for the main theoretical concepts of structural family theory.

Table 1

Main Concept	Definitions
Family Structure	The organization of how family members interact
Boundaries	The overt and covert rules which regulate behavior
Hierarchy	The organization of individual or subsystem power in the family structure
Subsystems	Individuals or dyads in the family system which together create the family structure
Roles	The position of a family member in relation to other family members which is governed by predictable behavior
Stuck	The state in which a family structure is inflexible and resistant to change

Definition of Structural Family Theory Concepts



Structural Family Theory, Pregnancy, and Postpartum Depression

From a structural family theory lens, all families are competent and have the ability to change but families can get trapped in maladaptive patterns and have a hard time adjusting to a newborn in the home (Barnes, 2006). Families with a stable, but flexible structure successfully deal with transitions and life struggles (Belsky, Spanier, & Rovine, 1983; Lutz & Hock, 2002; Mercer et al., 1993). Minuchin's (1974) definition of how families affect and are affected by the pregnancy time-

frame and ultimately postpartum depression can be applied to understand how to protect against PPD. In Minuchin's theory, one way to build a flexible but stable family structure is through a clearly outlined hierarchy built through subsystems that are created by family members joining together (Minuchin & Fishman, 1981). One of the most important subsystems during pregnancy is the couple unit (Barnes, 2006; Dennis & Chung-Lee, 2006). The boundaries of the couple can be clearly defined in the hierarchy to support the family structure. During pregnancy or postpartum the couple's boundaries need to be ones where each partner is comfortable asking the other for help ensuring that the relationship is strong enough so that they can rely on each other when they need support rather than seeking outside support (Barnes, 2006; Belsky et al., 1983; Dennis & Chung-Lee, 2006). When the couple subsystem is not able to support itself and thus the family structure, family dysfunction occurs and pathology can develop.

Even though couples often report having to support each other in new ways during the transition to parenthood, they may experience in a decline in marital quality (Belsky et al., 1983; Mercer et al., 1993). Some of the couple's distress is temporary and is resolved in a short amount of time (Campbell, Kub, & Rose, 1996; Dulude et al., 2002; Tessier, Piché, Tarabulsy, & Muckle, 1992). In structural family theory, these families have a way that can accommodate change. For other families, members' individual well-being decreases and family distress increases during the transition to parenthood (Campbell et al., 1996; Cutrona, 1986; Dulude et al., 2002; Ferketich & Mercer, 1989; Gottman & Osofsky, 1985). Within structural family theory, a lasting increase in distress and decrease in personal well-being illustrates a stuck and potentially pathological family structure that is not able to support its members appropriately. During this life transition of having a baby, pathology commonly manifests itself as postpartum depression (Barnes, 2006; Beck, 2001; Green et al., 2006). While whole families must adjust when a new baby is brought into the family system, according to structural family theory, a well-functioning couple subsystem increases the likelihood of positive adjustment for the family. Family structures which are not able to accommodate change may make mothers more vulnerable to postpartum depression. Partners may feel an increased need for support due to their wives' attention now being focused on the baby (Lutz & Hock, 2002), whereas wives may feel a need for more support due to their new physical and emotional responsibilities (Barnes, 2006; Dennis & Chung-Lee, 2006). Couples with clear rules, patterns and norms within their relationship that they both agree on protect and support each other or relationship and thus the family. Current research indicates that poor relationships are a significant predictor of postpartum depression, with or without the presence of other stressors (Barnes, 2006; Burke, 2003; Coyne & Benazon, 2001; Jacob & Johnson, 1997). Marital conflict, feelings of isolation, or physical separation may be predictors of postpartum depression and may affect how other psychosocial stressors are linked to postpartum depression (Thorp, Krause, Cukrowicz, & Lynch, 2004; Brugha et al., 2000; Cutrona, 1986; Paykel, Emms, Fletcher, & Rassaby, 1980; Robertson, Grace, Wallington, & Stewart, 2004). Many couples report a major increase in conflict during pregnancy and during the postpartum period (Dulude et al., 2002; Glazier et al., 2004; Koeske & Koeske, 1991; Lutz & Hock, 2002). Although conflict is normal, it can manifest pathologically depending on the family structure (Minuchin, 1974).

Conversely, Minuchin (1974) would suggest the family structure and a lack of stress in the couple's relationship could also serve as the protective factor for women during pregnancy and postpartum. Functional boundaries around the family members are critical for protection (Barnes, 2006; Dennis & Chung-Lee, 2006). In fact, the couple's relationship could protect women and thus, their family from outside stressors and experiencing postpartum depression.

Relational Risk Factors

Families that are exposed to extra challenges or stresses during this transition to parenthood have more dysfunctional patterns. Many researchers have acknowledged that stress provokes illness, especially postpartum depression (Brown, 1986; Dulude et al., 2002; Glazier et al., 2004; Minuchin, 1974). A pregnancy being unwanted or unplanned, low levels of social support for the mother, highly stressful life events during pregnancy, marital problems, and poor family relationships are some of

the stresses which can burden the family structure. These have been previously identified as risk factors for postpartum depression (Blum, 2007; Forty et al., 2006; Haslam et al., 2006; Klier, 2006; Whiffen & Johnson, 1998).

According to Minuchin (1974), stress and conflict usually increase in the family during transitions. If the family members are able to serve their two functions (internal and external protection) then they can help protect the family unit from these extra psychosocial stressors that put them at risk. If the family is not able to support each other during this transition time then these extra stressors are going to create more distress and more potential pathology for the family. Women who experience relationship stress during pregnancy are vulnerable to both psychological and physical problems (Barnes, 2006; Chandra et al., 2006; Haslam et al., 2006). Many couples have unrealistic expectations of pregnancy and parenthood, which have a negative effect on their relationship and thus become risk factors for postpartum depression (Barnes, 2006; Whiffen & Johnson, 1998). Unrealistic expectations frequently include the belief that the baby's birth will not change the family's daily life, that each partner will have an equal responsibility of caring for the baby, and that babies fix problems in marriages (Barnes, 2006; Beck 2001; Whiffen & Johnson, 1998). The need to create a new family structure to accommodate their baby is not immediately obvious to these couples, (Barnes, 2006; Tammentie et al., 2004) and, when their roles are not renegotiated after a child's birth, they report some of the highest rates of marital dissatisfaction (Belsky et al., 1983). Couples in well functioning stable marriages have different ways of handling conflict than couples in unstable marriages (Gottman, 1999). Since research indicates that tension in the marital dyad is a risk factor for the onset of postpartum depression (Barnes, 2006; Beck, 2001; Blum, 2007; Haslam et al., 2006; Whiffen & Johnson, 1998), it is especially important to understand the quality of a woman's marital relationships. Minuchin (1974) would say that women who are not in a supportive couple relationship will not have the same protection from the couple subsystem and family hierarchy. Leaning more about postpartum depression risk factors and what can protect women from postpartum depression symptoms may improve health outcomes on many levels.

Relational Protective Factors

A review of the literature states that social support is the main protective factor against postpartum depression (Dennis & Chung-Lee, 2006; Green et al., 2006; Haslam et al., 2006; Shaw et al., 2006). Social support research specific to postpartum depression is not specific enough to childbearing families (Seguin et al., 1999; Webster et al., 2000). It is not clear if researchers are referring to emotional support, instrumental support or specific behaviors or actions that were perceived as supportive. Structural family theory offers a framework for understanding which factors protect pregnant women from postpartum depression symptoms and why. Munichin's (1974) theory offers a unique conceptualization regarding the existence or absence of these couples' stressors because its theoretical framework shows how the family's responsibility can protect the family members from outside stress (Munichin, 1974). The patterns a couple uses to deal with life transitions, such as having a baby, illustrates how their family system functions and can either help or hinder the onset of postpartum depression. Couple's stress could indicate a subsystem that is not able to support this transition. When a couple reports the absence of these couple stressors, it could signify a couple who is functioning well and handling this life transition. If other psychosocial stressors are also present during this transition time, the couple has to work very hard to support one another and maintain the family hierarchy. Also, the quality of the couple's relationship can have a profound effect on how psychosocial stressors affect the individual and the family system.

Postpartum depression literature cites family dynamics as playing an important role in the risk or protective factors for postpartum depression (Hakulinen, Paunonen, White, & Wilson, 1997; Mercer et al., 1993; Tomlinson, White, & Wilson, 1990). From a structural family theory perspective, a couple who is able to handle the transition of pregnancy without stressing their relationship and still support each other is critical to helping the mother through this postpartum period and crucial for the protection of the couple and the children (Minuchin, 1974). In structural family theory, one part of the family system affects all parts of the system. Family structures that support the family

members, and thus decrease maternal pathology, in turn, help their children and is better able to support itself. One study demonstrated that remission of maternal depression lowered the rates of children's psychiatric diagnosis (Weissman et al., 2006). In fact, often times when a mother has major depression, her child also has a mental health diagnosis, and when mothers are treated successfully, their children also get better (Weissman et al., 2006). Family structures that are stable enough to support the subsystems and flexible enough to adapt during transitions will help the overall health of the whole family (Minuchin, 1974). When women are protected, entire families are protected. Specifying the types of family support that are helpful will aid in the development of educating, screening and especially treatment recommendations in the future. Learning more about the absence of couples stress can also catapult research regarding protective factors for at risk women.

The support women receive during pregnancy and postpartum can act as a buffer against stress in their lives (Banker & LaCoursier, 2014; Seguin et al., 1999). Both couple support and extended network support have been shown to be helpful to pregnant and postpartum women. From a structural family theory perspective, not just any support is helpful. Support from within the couple relationship would be the most effective buffer against individual and family pathology. Partner support has been shown to decrease a woman's chance of postpartum depression symptoms (Belsky et al., 1983; Lutz & Hock, 2002; Mercer et al., 1993).

The couple subsystem must achieve a boundary that supports each other and protects them from the demands of other subsystems (Belsky et al., 1983; Lutz & Hock, 2002; Mercer et al., 1993; Minuchin, 1974). While conflict is normal, it can range from daily struggles to severe pathology (Minuchin, 1974). How conflict manifests can depend on the family structure. If the boundaries around the couples are too rigid, then the couple may experience emotional isolation. Women who report feelings of isolation and a lack of support are more likely to develop postpartum depression (Robertson et al., 2004). If the couple's boundaries are too loose, then the subgroups can infringe on the couple's relationship and negatively affect the family functioning. Munichin's (1974) theory suggests that couples who report experiencing relationship stressors are vulnerable to these rigid or loose boundaries. Couples may feel so isolated they decide to separate or divorce. Couples who have such loose boundaries may discuss marital problems and/or get most of their support from people outside the couple subsystem, then the relationship loses its protective function. If couples are not able to provide this support to one another, their subsystem and the hierarchy will be weakened (Minuchin, 1974). These families are more susceptible to postpartum depression. Couples who keep there relationship together during pregnancy, who do not argue more than usual during pregnancy and couples where the partners favor the pregnancy are all examples of subsystems which are handling the transition period well and are not experiencing extra stress in the relationship.

Conclusion

This paper explains how a couple's relationship affects symptoms of depression in postpartum mothers. A couple's relationship, depending on the stress level experienced in the relationship, can be both a risk and protective factor for pregnant mothers. This theoretical understanding offers families, practitioners, and researchers information as they develop screening tools, treatment protocols, and increase the overall understanding of postpartum depression. Structural family theory highlights the importance of a well functioning couple's subsystem and stresses the need to assess women's relationships during pregnancy. It also builds a case for including a relational component when assessing and treating women for postpartum depression in the future.

Future Research

Using family systems theory as a framework for postpartum depression research has yielded new and influential findings. Structural family theory, specifically, can guide future research in examining the effect of both internal and external functions of the family unit. Continuing to use

this framework can help practitioners and researchers alike to develop a more comprehensive understanding of postpartum depression.

Clinical Implications

Screening

Identifying postpartum depression is a critical goal for health care providers, and many practitioners, researchers and patients are advocating for routine screening and education. (Buist et. al., 2006; Goldsmith, 2007; Lau, Wong, & Chan, 2010; Martin & Redshaw, 2009). There is evidence that detection and treatment by medical providers is limited and needs improvements (Goodman & Tyer-Viola, 2010). Some people are pushing for formal identification methods for postpartum depression and even universal screening. Criteria can be developed by a national screening committee to establish a national policy (Paulden, Palmer, Hewitt & Gilbody, 2010). Some professionals have argued against the lengthy screening tools and recommend two or three screening questions that providers could ask during their medical appointments (Cox, Holden, & Sagovsky, 1987). Based on structural family theory, the couple's relationship would be an important risk factor to assess when screening for postpartum depression. While more research needs to be conducted to determine the validity of these indicators as a screening measure, the present study suggests these indicators may narrow down the current screening assessments. Recent literature and structural family theory suggests the importance of relationship dynamics and relationship issues when screening women for postpartum depression (Banker & LaCoursier, 2014; Hakulinen, et. al., 1997; Mercer et. al., 1993; Tomlinson, et. al., 1990.)

Education

The result of poor screening protocols is that many women go undiagnosed and untreated (Dennis & Chung-Lee, 2006). One of the important aspects of screening is that it also provides an opportunity for practitioners to educate women and their families about postpartum depression. In general, women tend to be undereducated about postpartum depression and therefore do not seek treatment (Whiffen & Johnson, 1998). Educating others about postpartum depression is the only way to break this trend and, in particular, educate them about risk and protective factors. Therefore, this education is part of the prenatal care guidelines (Hanson, VandeVusse, Roberts, & Forristal, 2009). The content and methods of this education varies and may lead to different outcomes for pregnant women. Educating couples together, rather than just the mother, may be one way to eliminate the idea that women are responsible for their own postpartum mental health. Also, talking with couples about the joys and challenges of their upcoming transitions as parents could dispel some of these unrealistic expectations that have been shown to contribute to not seeking help (citation). In addition, it could be helpful to educate couples about the ways in which aspects of their relationships become risk or protective factors with regard to postpartum depression symptoms. Rather than serving to worry or scare couples who are stressed, the goal of educators would be to help them look for warning signs and explain which types of resources may be most helpful. Education that includes structural family theory may be a way for couples to learn more about what affects postpartum depression, hopefully reducing the shame and blame that some women with postpartum depression may end up experiencing.

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