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Men's Perinatal Mental Health in the Transition to Fatherhood

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While fathers have come to be more involved with their partners and infants throughout the perinatal period, recent research has shown that roughly 10% of new dads experience mental health difficulties including depression and anxiety. Unfortunately, few psychologists receive focused training regarding conceptualizing, assessing, or treating common men's issues in the period spanning from conception through a year post-partum. Because men tend not to seek mental health services during this period, the lack of scholarly attention to this vulnerable group reflects a commonly overlooked public mental health disparity. This article provides an overview of the key factors which research and theory suggest inform new fatherhood, along with an in-depth look at paternal postpartum depression. Implications for further practice and research are discussed. Specifically, the authors review psychosocial factors including masculine socialization, self-efficacy, social support, involvement with babies, and paternal postpartum mood and anxiety disorders. Finally, implications for research and practice are discussed.

Keywords: father, masculinity, men, perinatal mental health, postpartum

Until recently, perinatal mental health has been perceived as a topic relevant only to women (Kim & Swain, 2007; Musser et al., 2013; Roubinov et al., 2014). Although maternal perinatal stress and postpartum depression have received significant attention in medical and psychological research, little scholarly energy has been devoted to identifying prevalence rates, antecedents and consequences, and treatment of paternal mental health issues in the perinatal period spanning from conception through a year postpartum (Gawlik et al., 2014; Koh, Chui, Tang, & Lee, 2014). This lack of attention is concerning, given that emerging evidence suggests that fathers do experience major transitions to parenting including postpartum depression that is not regularly screened for, diagnosed, or treated (Musser et al., 2013). The consequences of such mental health concerns for fathers include a reduction in fathers' engagement with their babies, which has been associated with greater stress and other poor long-term psychosocial out-

son, Bzostek, & Osborne, 2008). Indeed, one could argue that efforts made toward understanding the nature, prevention and treatment of men's perinatal mental health disorders serve to address a largely ignored public mental health disparity issue (Roubinov et al., 2014). The purpose of this article, therefore, is to examine the sparse psychological literature on new fatherhood to provide professional psychologists with suggestions regarding how to engage in effective psychotherapy with these men. We begin by reviewing the evolution of perspectives on fatherhood, addressing contemporary approaches to generative fatherhood including fathers' involvement with their infants and partners as a critical outcome. We also provide an overview of key information regarding the prevalence, nature, and assessment of paternal perinatal mood and anxiety disorders (PMADS). Finally, we conclude with specific recommendations for research and practice in the area of men's perinatal mental health.

comes in their children (Bronte-Tinkew et al., 2007; Berger, Carl-

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Evolution of Fatherhood Perspectives

As a testament to the human father's typical lack of involvement with newborns and infants, anthropologist Margaret Mead famously said that "A father is a biological necessity, but a social accident" (Minden, 1982, p. 22). Although there are some notable exceptions in other cultures which have historically taken a more egalitarian approach, Western history generally evidences fathers taking a minor role in the care of their children (Parke, 1996). However, throughout history, fathers have simultaneously been seen as having the role of patriarchs empowered with a high level of control over their families (Knibiehler, 1995), and the echoes of this traditional role have endured. Much of the research and theory regarding men's socialization has driven this understanding that a father's most substantive contributions to his family come in the form of disciplining children and the provision of resources. On the other hand, fathers have recently been encouraged to be involved with their children and families, and such involvement has drawn on and extended the traditional "protect and provide" masculine role (Dollahite et al., 1997).

Lamb (1995) argues that there is currently a shift in the popular understanding of the roles and responsibilities of fathers. According to Lamb, the phases of fatherhood in the United States have transitioned through the "moral father" modeling Christian values and living during Puritan times (Demos, 1982), to an emphasis on the father as a breadwinner during the industrialization of the mid-19th century (Pieck, 1976). The advent of the Second World War brought a focus on fathers as serving as a gender role model, in particular for boys, and in the late 1960s, for the first time, social norms began to shift toward identifying fathers as needing to be active and nurturing caretakers. It is important to note that the fundamental characteristics of each of the earlier conceptualizations of "good fathering"—moral development, providing resources, and serving as a gender role—continue to serve as fundamental aspects of the father's role.

Recent research and governmental policy has focused on the role that the quality of the father-child relationship plays in the life of the child (Parke, 1996; Snarey, 1993). Findings in this area have shown that young children who have meaningful paternal involvement even during their first year of life experience a variety of benefits including decreased substance use, increased school readiness, and better emotional regulation (Parke, 1996). In an extension of work in this area, Dollahite, Hawkins, and Brotherson (1997) coined the term generative fathering, to describe the type of parenting used by fathers who respond readily and consistently to their child's development needs over time. This conception draws on Erik Erikson's principle that a key element of adult development is rooted in broadening the sense of self to include the next generation—what he termed, "generativity" (Erikson, 1973; Hawkins & Dollahite, 1997). The generative fathering approach highlights a clear way that men can focus their instinct to protect and to provide in a strengths-based way: By being involved and responsive to their children's needs even from an early age.

Although perspectives on fatherhood have evolved toward greater involvement, it is important to understand that the current generation of young fathers (i.e., Generations "X and Y" born in the '70s through '90s) is influenced by a kind of fatherhood socialization *generation gap*. On the one hand, they have seen the evolution of the father's role toward sharing more responsibility for caretaking and financial responsibilities. On the other hand, they have also been influenced by their own "Baby Boomer" generation fathers' tendency to serve as gender role models rather than as direct caretakers (Hochschild & Maschung, 1989; Duncombe & Marsden, 1999). These fathers also likely experience pressure to adhere to persistent, traditional male gender norms, such as the "sturdy oak" and "big wheel" (David & Brannon, 1976), which influence most men in current society.

Additionally, contemporary fathers are much more likely to have partners who are involved in paid employment as compared with fathers in the latter half of the 20th century (United States Department of Labor, Bureau of Labor Statistics, 2015). As Silverstein et al. (2002) noted, fathers socialized to focus on the material provision of resources to their infants and partners who are not the sole provider of those resources for their families are "feeling all of the disadvantages of the role and none of the satisfaction" (p. 362). Taken together, these findings suggest that the new generation of fathers who are expected to be highly

involved in the caregiving of their infants are caught in a type of "fatherhood generation gap" which may result in challenges, and potentially mental health difficulties as they work to manage their new role as fathers.

The Transition to Fatherhood

In addition to the unique generation gap in which contemporary fathers find themselves, the physical and emotional adjustment to fatherhood can also be complex and demanding (Kim & Swain, 2007; Lara, Navarro, & Navarrete, 2010; Sheng, Le, & Perry, 2010).

The lack of sleep and needs of an infant are exhausting, and the added stress of time away from work can increase anxiety. The relationship with one's partners changes in dramatic ways, requiring that the mother and father manage logistical aspects of caring for themselves and their new baby alongside the psychosocial changes which commonly accompany new parenthood.

New fathers sometimes struggle with gender role conflict, or men's experience of "rigid, sexist, or restrictive gender roles, learned during socialization, result in personal restriction, devaluation, or violation of others or self" (O'Neil, 1990, p. 25). Fathers experiencing this type of conflict are likely to have difficulty engaging in behaviors such as cooing, soothing, hugging, and playing with their infants—and sons in particular—because of deep-seated beliefs that these behaviors are feminine or "weak." Because men are commonly socialized to express "acceptable" masculine emotions such as anger, new fathers experiencing stress during the transition to fatherhood may be more likely to channel their frustration by withdrawing from the child and/or partner, which can ultimately result in a decreased father-child attachment bond (Levant, 1995). Furthermore, fathers who experience difficulty juggling work-life balance demands in the perinatal period may opt to enact the provider role and experience a sense of competence by increasing their time spent at work. This imbalance results in decreased involvement with their babies, along with a concomitant increase in their partner's management of child care responsibilities and a decrease in the father's sense of self-efficacy in caring for the child.

New fathers may also question their ability to be a competent parent, and they may lack parenting self-efficacy beliefs (Coleman & Karraker, 1998). Social Cognitive Theory posits that selfefficacy for a certain behavior-for example, caring for an infant—is one of the strongest determinants of whether or not a person will attempt a given behavior (Bandura, 1986). Research has shown that the more stress and marital dissatisfaction a new father experiences, the lower his paternal self-efficacy and therefore his direct involvement with his infant (Murdock, 2013; Sevigny & Loutzenhiser, 2010). Furthermore, spousal/partner support in the form of "other-efficacy" or a belief that one's male partner's ability to parent an infant also likely informs a new father's self-efficacy. Spousal support has been shown to predict enhanced psychological well-being, parental effectiveness, and coping (Avcan & Eskin, 2005). Although many mothers encourage fathers to be involved, one study found that the majority of women did not want their partners to be more involved with their children, even while 40% of fathers wanted to spend more time with their children than they currently were spending (Quinn & Staines, 1979). This tendency in mothers is referred to as a gatekeeping role, and research has shown that mothers' own view of their role as caregiver and that of the father draw heavily to bear on the father's level of involvement with his children (Mcbride et al., 2005). In this way, many factors may influence a father's self-efficacy, or lack thereof, during the transition to fatherhood.

The perinatal period reflects a period of heightened stress during which men may benefit from increased social support; however, men are typically socialized to rely heavily on their intimate partner for the majority of their emotional support (Fischer & Good, 1997). Fathers who maintain solid social support networks experience a buffer from the conflicts and demands associated with parenting while also providing role models which facilitate a sense of competence as parents (Aycan & Eskin, 2005). However, as both parents increase their focus on the needs of their new child, men are often less proactive about seeking out social support from sources other than their partner because of increased demands managing a new baby (Patulny, 2011). This decrease in outside emotional social support sets the stage for added stress and isolation which may ultimately place undue strain on the relationship with his spouse, further isolation from mother and child, and limited ability to experience competent caretaking experiences with his child and increased self-efficacy beliefs (Paquette, 2004).

The information in this section illustrates how a man's fatherhood role is but one of many elements of his masculine socialization, and that the shaping of that role is ongoing throughout his life. It is essential for practitioners to recognize that men experiencing a disconnect between a more traditional male gender role and the contemporary expectations of generative fathering behavior during the perinatal period may experience distress. This distress may result in a father's withdrawal from his partner and infant, and in some cases, may lead to the development of mental health concerns such as anxiety and depression. The complex interaction of fatherhood/gender role conflict, partner social support, paternal involvement, self-efficacy, and mental health concerns represent a fertile area for practitioners to assist men navigating the transition to fatherhood. Importantly, it also calls attention to ways in which professionals working with men might prevent and treat mental health concerns. In the section below, we summarize existing research about diagnosis, prevalence, risk factors, and outcomes of perinatal mood and affective disorders (PMADs) among fathers. We focus on paternal postpartum depression, as this is the most commonly researched area within this small body of literature (Musser et al., 2013). We also summarize the few existing studies about perinatal depression and anxiety, and any other mental health concerns among fathers during the perinatal period.

Paternal Postpartum Depression

Diagnosis and Assessment

Paternal postpartum depression has been defined in various ways within research and clinical practice, as there is no existing diagnostic criteria for this mental health concern (Kim & Swain, 2007). Most studies have utilized the *Diagnostic and Statistical Manual of Mental Disorders*, fourth edition, text revision (*DSM-IV-TR*) definition of maternal PPD (Musser et al., 2013), which was a major depressive episode with onset occurring within four weeks of delivery, which included five or more of the following

symptoms during a 2-week period: depressed or sad mood, marked loss of interest in virtually all activities, significant weight loss or gain, insomnia or hypersomnia, psychomotor agitation or retardation, fatigue or loss of energy, feelings of worthlessness or guilt, diminished ability to think or concentration, and recurrent thoughts of death (American Psychiatric Association, 2000).

With the 2013 publication of the DSM-V, the time period of this major depressive episode has changed to include any time during pregnancy to four weeks following delivery (e.g., "with peripartum onset modifier"). Although this expansion to include the timeframe during pregnancy has been seen as positive, particularly because it has been shown that both women and men experience significant stress during the prenatal period (Ramchandani et al., 2008), many authors have criticized the fact that the postpartum timeframe was not expanded. Indeed, groups have lobbied to extend postpartum depression definitions to six months or even one year, given that there is evidence to support the challenging nature of the year after the birth of the child on both parents (Paulson, Dauber, & Leiferman, 2006). Nevertheless, the DSM-V criteria for PPD is likely to be seen more frequently in practice and published studies for both women and men. It is also important to note that theorists have suggested that depression may look different among men because it is "masked" (hidden) through expressions of irritability, anger, or withdrawal (Cochran & Rabinowitz, 2000). It may be that the DSM criteria for depression does not completely account for the masculine-specific expressions of depression.

For most research about maternal and paternal PPD, the Edinburgh Postnatal Depression Scale (EPDS; Heim et al., 2000) is the most widely used scale. This measure consists of 10 self-report items about depressive and anxiety symptoms. Cut-off scores are used to note depression, and support for its psychometric properties with both women and men exist (Kim & Swain, 2007; Matthey et al., 2001). Other self-report measures for PPD have included the Beck Depression Inventory-II (BDI-II; Beck, Steer, & Brown, 1996), and the CES-D (Radloff, 1977), though the EPDS remains the most common.

Prevalence Rates

A challenge posed by differing methods of diagnosis and assessment is that a wide variety of prevalence rates have been noted by researchers in this area (Gawlik et al., 2014). Furthermore, the timing of measurements, as well as small, homogenous samples makes it hard to gather reliable estimates (Paulson & Bazemore, 2010; Roubinov et al., 2014). As a result, estimates of paternal postpartum depression have varied from 1% to 26% within the United States (Goodman, 2004; Ramchandani et al., 2005). In the only meta-analysis that has been published about paternal perinatal depression, Paulson and Bazemore (2010) reviewed 43 studies from 16 countries to estimate paternal depression rates between the first trimester and one year postpartum. These authors found an overall rate of paternal depression during this time period to be 10.4%. In comparison with the 4.8% 12-month prevalence base rate of depression for men in the United States (Kessler et al., 2003), the findings of the meta-analysis provide additional support for the importance of attending to men's perinatal mental health needs.

The Paulson and Bazemore (2010) meta-analysis revealed additional findings of interest. First, the incidence of postpartum

depression for men was greatest between the initial three and six months of fatherhood, though the authors note that the small number of studies included in this analysis suggest the findings should be interpreted with caution. Still, previous studies have found that fathers tend to experience depressive symptoms more frequently prenatally as compared with postpartum (Boyce et al., 2007; Buist et al., 2003; Condon, Boyce, & Corkindale, 2004), implying the prenatal period was most stressful for men. Further research is needed to better understand the nature of prenatal depression and its course throughout the postpartum period among fathers

Rates for other perinatal mood and anxiety disorders are difficult to obtain, though there have been a few studies to explore these. For example, a range of 0% to 4.7% has been found for paternal postpartum PTSD (Ayers, Wright, & Wells, 2007; Bradley, Slade, & Leviston, 2008). For paternal postpartum anxiety, rates have varied from 4.4% to 9.7% (Bradley et al., 2008; Matthey et al., 2003). In a recent prevalence study of Obsessive Compulsive Disorder in fathers, authors found a prevalence of 3.4% in the third trimester and 1.8% in the postpartum period (Coelho et al., 2014). Finally, a study about depression and bipolar disorder (Pinheiro et al., 2011) suggests that depressive episodes were significantly associated with manic/hypermanic episodes for fathers during pregnancy and up to 12 months postdelivery. For example, among the 5% of fathers who were diagnosed as depressed during the prenatal period, 2.1% of them also experienced manic episodes, and 3.3% experienced hypomanic episodes. Clearly much more research is needed to better understand the prevalence and comorbidity of these mental health disorders, and how they change over time during the perinatal period.

Risk Factors of Perinatal Mental Health Concerns

Though research has been done to understand the factors that might predispose a father to experience perinatal mental health concerns and related consequences, the majority of the research has been correlational in nature. It is important to recognize, therefore, that this research suggests relationships between variables, but only a few studies have actually indicated causation of certain outcomes. Below we highlight some of the most studied variables and their relationships to father's perinatal mental health.

As expected, research has shown that having a psychiatric disorder can make fathers more vulnerable to other disorders (Kim & Swain, 2007). A high comorbidity of postpartum depression and other psychiatric disorders has been noted, with anxiety and obsessive-compulsive disorder (OCD) being some of the most common (Zelkowitz & Milet, 2001). New fathers' mental health and attentiveness to their children may also be related to changes in hormonal levels that mirror those of mothers' throughout the perinatal period; specifically, increased levels of prolactin and cortisol, with decreased levels of testosterone and estrogen (estradiol) around the birth of their infants (Storey, Walsh, Quinton, & Wynne-Edwards, 2000). Each of these hormones has implications for different aspects of how men behave with their newborns and partners, suggesting that imbalances in these levels may account for psychological and/or behavioral issues. Although there is as yet no research definitively linking these phenomena, there is some initial evidence that perinatal depression may have a biological

basis, potentially linked to changes in hormone levels (Ramchandani, Stein, Evans, O'Connor, 2005).

Another potential risk factor for perinatal depression is a lack of social support. Several studies have found that poor social support predicts higher levels of depressive symptoms in fathers in late pregnancy (Koh et al., 2014) and postpartum (Boyce et al., 2007). In a large-scale study of depression among fathers of infants, Bronte-Tinkew et al. (2007) found that the highest prevalence of depression was found with father who were divorced or separated, as well those who were unemployed and who reported drug use and alcohol use.

Many studies have found that when mothers were depressed, fathers are also more likely to develop depression (Burke, 2003). Though maternal depression has been indicated as a predictor of paternal depression (Goodman, 2004; Paulson & Bazemore, 2010), studies have been unable to demonstrate the mechanisms by which these variables are related. In one of the few studies to explore why maternal and paternal postpartum depression might be linked, Don and Mickelson (2012) followed new parents at 1 and 9 months postpartum. They found that rather than a direct relationship between spousal depression, the association was explained by the quality of the spousal relationship. In other words, when mothers experienced postpartum depression, it was related to less positive spousal support, which in turn was related to lower relationship satisfaction and greater paternal postpartum depression.

Poor relationship satisfaction has been found to be a risk factor in other recent studies about paternal depression (Gawlik et al., 2014; Wee et al., 2011). Importantly, in the Gawlik et al. study, birth concerns and relationship quality were found to be more important in predicting postnatal depressiveness among fathers than prenatal depressive symptoms. Depressive disorders among fathers are associated with increased risk of interparental conflict (Ramchandani et al., 2011), and decreased relationship quality and decreased coparenting (Bronte-Tinkew et al., 2007). Again, some of these latter findings suggest associations between these variables and do not indicate causation.

Outcomes of Perinatal Depression

The effects of perinatal depression can be seen in fathers themselves, their children, and the parenting relationship. In a large study about fathers of infants with depression (Bronte-Tinkew et al., 2007), having major depression reduced the frequency of father's engagement with their children above and beyond controlling for mother's depression and other demographic characteristics. Similarly, fathers who were depressed were less likely to engage in enrichment activities (e.g., singing, reading and telling stories) with their children (Paulson, Dauber, & Leiferman, 2006). In a study that further explored mediators through which father's postnatal depression was associated with emotional-behavioral difficulties in their children, irritable parenting behaviors (e.g., yelling and losing one's temper) emerged as a significant variable (Giallo, Cooklin, Wade, D'Esposito, & Nicholson, 2011).

Researchers have found that children whose fathers have postpartum depression tend to demonstrate increased behavioral problems, including hyperactivity and conduct problems (Ramchandani et al., 2005). The children of fathers who reported depressive symptoms when they were infants had poorer outcomes (e.g., increased hyperactivity, peer problems and conduct concerns) at age 4 to 5 years (Bronte-Tinkew et al., 2007).

Implications for Practice and Research

Recommendations for Practice

Increased awareness of paternal perinatal mental health issues. At the broadest level, practitioners need to recognize that men in the perinatal period are at an elevated risk for mental health issues (Ramchandani et al., 2005), yet the majority of scholarly and clinical work in this area focuses on mothers' and the infants' well-being (Brockington, 2004). A key challenge for clinicians is to be aware of the unconscious gendered stereotypes (e.g., "dads' main role is to support mom") that they may perpetuate as a result of their socialization regarding gender and parental roles. Concrete training in the psychology of men and masculinity is not commonly incorporated into graduate training or continuing education programming in psychology, so many practitioners are ill-prepared to recognize or to support men regarding common issues such as perinatal depression as they make the transition to fatherhood. For example, masked male depression commonly manifests as anger/ irritation, substance use, and withdrawal, so psychologists need to familiarize themselves with the presentation and dynamics that support this maladaptive tendency to "stuff" difficult experiences (Rabinowitz & Cochran, 2008). Men are socialized not to ask for help, and although it is particularly difficult to do so during a period in which they believe they need to support and provide for their partner, it can be very helpful to emphasize the need to take care of themselves to provide the best version of themselves. Developing a greater awareness of masculine socialization, the psychology of early fatherhood, and men's perinatal mental health issues will enable psychologists to work more effectively with this at-risk population.

Screening for expectant and new fathers. As noted earlier, nearly 10% of men experience perinatal depression (Paulson & Bazemore, 2010), but they are not commonly screened for mental health issues during antenatal or well-baby visits postpartum (Spector, 2006). An initial recommendation would be to include regular screenings for new and expectant fathers—in particular when either the father or mother has a history of any mental health concern (Hynan, Mounts, & Vanderbilt, 2013, "Depression Screening for New Fathers"). Using a validated screening tool such as the Edinburg Postnatal Depression Scale (Cox, Holden, & Sagovsky, 1987) to assess the fathers during this period would increase early identification of fathers having difficulty (Hynan et al., 2013). In practice, this would mean screening patients who are new or expectant fathers, as well as working to schedule conjoint office visits to assess the male partners of new mothers (e.g., the "primary patient"). The American Academy of Pediatrics (Earls, 2010) recommends that pediatricians assess mothers for postpartum depression at 1-, 2-, 4-, and 6-month follow-up visits. The National Perinatal Association (Hynan et al., 2013) recommends that fathers be screened at least twice for postpartum depression during the first postpartum year. Because fathers' perinatal depression tends to develop around 3 to 6 months postpartum (Paulson & Bazemore, 2010), psychologists should also keep an eye toward assessing new fathers' mental health issues during this period.

Encouraging fathers to engage with their partners. It is also important to educate new parents about the reality that parents commonly experience decreased relationship satisfaction immediately after the birth of a child (Twenge, Campbell, & Foster, 2003). New fathers can benefit from concrete guidance regarding the need to actively engage their partners on an emotional level about any issues they are experiencing. By avoiding the tendency to ignore or "power through" difficulties they may be having, men can work proactively schedule regular weekly "check-ins" in which they connect with their partners to discuss how they are doing. Teaching new parents to use basic assertive communication skills such as leading with open questions, making restatements, and avoiding the "fix-it" approach is an excellent way to foster higher levels of relationship satisfaction and shared understanding.

Enhancing paternal perinatal self-efficacy. Fathers tend to have lower parenting self-efficacy than mothers (Hudson, Elek, & Fleck, 2001), and lower self-efficacy has been shown to relate to parenting stress, depressive symptoms, and partner relational functioning (Sevigny & Loutzenhiser, 2010). For fathers experiencing a low sense of self-efficacy in terms of caring for their infant, it is essential that they enhance their parenting self-efficacy by engaging is as much of the direct caretaking of their infant (e.g., soothing, swaddling, bathing, burping, etc.) as soon as possible. Having a frank discussion with new mothers and fathers regarding their perceptions about specific areas of concern in terms of his ability to care for their baby is an excellent way to discern areas of higher and lower parenting self-efficacy. One way that fathers can connect with their partners and build confidence even before baby is born is to obtain a birth plan template (for an example from the American Pregnancy Association, see: http://americanpregnancy .org/labor-and-birth/birth-plan/) and interview mom to clarify a "decision tree" for the day of the birth. Dads can also take the lead on gathering information about pediatricians, interviewing their partner about preferences, and doing an initial round of calls to see about interviewing pediatricians.

Suggestions for Further Research

There is a complex and poorly understood interplay between men's normative role changes (e,g., parenting self-efficacy, gender role strain, relationship satisfaction, social support, work-life balance, help-seeking attitudes), and the development of psychopathology in the perinatal period spanning conception through the first year postpartum. More sophisticated research models aimed at elucidating how men's socialization impacts the transition to fatherhood in both positive and negative ways is a first step toward clarifying men's common normative and pathological experiences during pregnancy and new fatherhood. For example, more research is needed regarding how the conflict between traditional gender role norms (O'Neil, 1981) and expectations of generative fathers (Hawkins & Dollahite, 1997) may contribute to the development of perinatal mood and anxiety disorders. Another avenue for exploration within this area might address mechanisms through which maternal postpartum depression serves as the principal risk factor for paternal postpartum depression (Condon, Boyce, & Corkindale, 2004; Roberts et al., 2006) as well as how this relationship may generalize to other mental health issues (e.g., is anxiety contagious?). Beyond traditional deficit-reduction approaches, some recent research and theory has begun to explore masculinity taking a strengths-based approach. Kiselica and Englar-Carlson's (2010) "Positive Psychology/Positive Masculinity" model emphasizes ways in which traditional masculine norms can reflect areas in which men flourish, yet to date there is no research available which applies this approach to men's experience in the perinatal period. Existing findings regarding interrelationships among paternal involvement, gender role changes, relationship satisfaction, social support, self-efficacy, perinatal mental health issues, and positive aspects of fatherhood (Don & Mickelson, 2012; Huang & Warner, 2005) suggest that employing a well-validated theoretical lens such as social-cognitive theory (Bandura, 1997) may assist researchers and clinicians to develop a more cogent understanding of how these elements work in concert.

With respect to diagnostic criteria and prevalence data, although the preponderance of research in men's perinatal mental health has focused on postpartum depression, there is a need for focused studies focusing on men's experience of psychopathology during pregnancy as well as the latter half of the first year. Research supports that men experience greater anxiety during the pregnancy, and that postpartum depression spikes 3 to 6 months after birth and persists throughout the first postpartum year (Condon, Boyce, & Corkindale, 2004; Huang & Warner, 2005). Furthermore, anxiety, OCD, and psychosis all exist in men as well as women, yet the majority of scholarly and popular media coverage address depression nearly exclusively. Researchers can usefully expand the scope of their work to address the broader range of perinatal mood and anxiety disorders in men.

Finally, more research is needed on lower SES, non-Caucasian (or minorities within their countries of origin) fathers (Roubinov et al., 2014). Many prevalence studies have been conducted across the globe, including Sweden, Brazil, and the United States. That being said, cultural variables have yet to be explored in these studies as variables of interest. Of importance, few studies exist that explore ethnic minority fathers within the United States, and the complex interplay between culture and gender. One notable exception was a recent study by Roubinov et al. (2014) about low-income, Mexican American fathers, in which the authors explored acculturation and enculturation, depressive symptoms, and other demographic variables. Findings demonstrated a 9% prevalence rate of paternal depression, as well as notable risk factors such as unemployment and lower relationship quality. Interestingly, fathers who were less acculturated endorsed higher depressive symptoms, suggesting that perhaps some of the resources associated with greater assimilation (e.g., fewer language and cultural barriers or experiences of discrimination) may play a role in buffering the effects of the transition to fatherhood. Clearly more research is needed to test these hypotheses and broaden our understanding of paternal perinatal mental health across cultural groups.

Conclusion

With more than 10% of men experiencing some type of perinatal mood or anxiety disorder (Kim & Swain, 2007), the lack of attention to fathers' perinatal mental health is a critical health disparity issue that psychologists are poised to address. As noted, men today commonly experience a "generation gap" between their own fathers' traditional parenting styles and current expectations for more egalitarian coparenting. In light of this shifting landscape

of what it means to be a father, and the reality that many men will experience mental health concerns during the perinatal period, psychologists must consider how contemporary masculinity and gender roles reflect both risk and protective factors for well-being during the transition to fatherhood. It is hoped that with a greater understanding of this unique period for men, professionals will be able to further research and practice interventions with this population.

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