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Psychopathology and parenting: An examination of perceived and observed parenting in mothers with depression and PTSD

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ABSTRACT

Background: The postpartum period represents a major transition in the lives of many women, a time when women are at increased risk for the emergence of psychopathology including depression and PTSD. The current study aimed to better understand the unique contributions of clinically significant postpartum depression, PTSD, and comorbid PTSD/depression on mother–infant bonding and observed maternal parenting behaviors (i.e., behavioral sensitivity, negative affect, positive affect) at 6 months postpartum.

Methods: Mothers (n=164; oversampled for history of childhood maltreatment given parent study's focus on perinatal mental health in women with trauma histories) and infants participated in 6-month home visit during which dyads engaged in interactional tasks varying in level of difficulties. Mothers also reported on their childhood abuse histories, current depression/PTSD symptoms, and bonding with the infant using standardized and validated instruments.

Results: Mothers with clinically significant depression had the most parenting impairment (self-report and observed). Mothers with clinically significant PTSD alone (due to interpersonal trauma that occurred predominately in childhood) showed similar interactive behaviors to those who were healthy controls or trauma-exposed but resilient (i.e., no postpartum psychopathology). Childhood maltreatment in the absence of postpartum psychopathology did not infer parenting risk.

Limitations: Findings are limited by (1) small cell sizes per clinical group, limiting power, (2) sample size and sample demographics prohibited examination of third variables that might also impact parenting (e.g., income, education), (3) self-report of symptoms rather than use of psychiatric interviews.

Conclusions: Findings show that in the context of child abuse history and/or current PTSD, clinically significant maternal depression was the most salient factor during infancy that was associated with parenting impairment at this level of analysis.

1. Introduction

The postpartum period represents a major transition in the lives of many women, a time of increased risk for the emergence of psychopathology (Ross and McLean, 2006; Studd and Nappi, 2012). Prevalence rates for postpartum depression or post traumatic stress disorder (PTSD) are relatively high, with estimates varying between 9% and 19% for depression (O'Hara and McCabe, 2013) and 3.6% and 15% for PTSD (Alcorn et al., 2010). Furthermore, comorbid depression and PTSD is common; findings from the National Comorbidity Survey show that 24.7% of depressed women also have PTSD, and 48.4% of women with PTSD also suffer depression.

These data are concerning because, relative to women with depression alone, women with comorbid PTSD exhibit more severe symptoms and are functionally more impaired (Cerulli et al., 2011; Kessler et al., 1995; Loveland Cook et al., 2004; Smith et al., 2006). During the postpartum period, mothers' psychopathology and functional impairment may detrimentally impact parenting and child outcomes. Abundant literature has shown that postpartum depression is associated with intrusive or disengaged parenting, (Lovejoy et al.,

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2000; O'Hara and McCabe, 2013) and that affected children exhibit worse biopsychosocial outcomes (Davalos et al., 2012; Deave et al., 2008). Less is known about the impact of postpartum PTSD on parenting attitudes and behaviors. Given high rates of comorbidity, it is also unclear whether the potential impact of PTSD on parenting is unique, or whether it can be explained by co-occurring depression.

Prior work indicates that women with childhood maltreatment histories may be particularly vulnerable to developing clinically significant postpartum depression (Buist, 1998; Lev-Wiesel et al., 2009) and/or PTSD (Edwards et al., 2003; Koenen and Widom, 2009). Postpartum experiences (including childbirth itself; Grekin and O'Hara, 2014) may trigger recollection of past trauma and heighten symptoms (Onoye et al., 2013). Women with childhood maltreatment histories are also at increased risk for parenting problems. Indeed, the concept of "intergenerational transmission of risk" frames much of the literature on trauma and parenting, and in some studies, estimates for risk among mothers who were maltreated as children to parent their infant in an abusive or neglectful manner are as high as 70% (DiLillo, 2001; Egeland et al., 1988).

Moreover, maternal cumulative trauma is linked to decreased parenting satisfaction, reports of child neglect, increased use of physical punishment, higher child abuse potential, and a history of protective service involvement (Banyard et al., 2003). Indeed, several studies show that children of mothers with PTSD, alone or comorbid with depression, have worse outcomes including greater exposure to traumatic life events and psychological abuse (Chemtob et al., 2013) and more aggressive and emotionally reactive behavior problems (Chemtob et al., 2010a). Further, maternal PTSD effects on child emotion regulation already are evident in infancy (Bosquet Enlow et al., 2011). In fact, one study suggests that children of mothers with comorbid PTSD and depression display more clinically significant internalizing and externalizing behavior problems than children of mothers with depression alone (Chemtob et al., 2010a). Given these negative child developmental outcomes, the question arises whether maternal PTSD has unique parenting correlates that would explain this heightened risk.

The present study seeks to better understand the effects of postpartum depression and PTSD symptoms on parenting in the first six months postpartum. Three domains of parenting: were evaluated: maternal perceptions of mother–infant bonding impairment (to capture the subjective quality of mother–child relationship), and two measures of observed parenting: behavioral sensitivity (a parenting style marked by empathic and sensitive responding), and maternal positive and negative emotional displays. In prior research, all three parenting domains are associated with maternal depressive symptoms and child outcomes (Denham et al., 2000; Feldman, 2007; Lovejoy et al., 2000; Mäntymaa et al., 2015). However, less is known about the role of PTSD symptoms on these domains of parenting.

As such, we conducted a literature review of studies examining the unique contributions of postpartum depression and postpartum PTSD on these three domains of parenting during infancy, with mixed results. Some research shows differential outcomes associated with "simple PTSD" (i.e., PTSD due to one acute event, e.g., car accident or child birth) versus more complex PTSD (i.e., PTSD resulting from repeated and often chronic trauma exposure (Taylor et al., 2006). Therefore, further attention to the type of trauma experienced by postpartum women and its associations with psychopathology and parenting outcomes is needed.

Lang et al. (2010) examined the effects of postpartum PTSD on mothers' self-reported parenting behaviors at one year postpartum in a non-clinical sample of mothers with varied trauma exposures. When controlling for co-morbid depression, postpartum PTSD symptoms were not a statistically significant predictors of parenting. Similarly, McDonald et al. (2011) examined the link between PTSD symptoms due to traumatic childbirth and self-reported parenting stress and mothers' perception of their child at two years postpartum, controlling for co-morbid depression. Their results show that childbirth-related PTSD solely predicted parenting distress. In contrast, in a sample of depressed postpartum women in which 74% had a history of childhood maltreatment, Ammerman et al. (2012) failed to find significant associations between PTSD symptom severity and self-rated dysfunctional parenting, even after controlling for maternal depression..

In our own work studying the postpartum mother-infant relationship among mothers with childhood maltreatment histories, *both* postpartum depression *and* PTSD, but not maltreatment history alone, conveys risk for self-reported bonding problems (Muzik et al., 2012). This finding is based on data from the Maternal Anxiety in the Childbearing Years (MACY) study; a project evaluating the effects of mothers' histories of childhood maltreatment on their postpartum psychosocial adaptation, parenting, mental health, and their young infants' outcomes (NIMH K23 MH080147; PI: Muzik). Other published MACY data shows that, although childhood maltreatment history elevates risk for postpartum PTSD and depression, only postpartum depression (and not PTSD) is associated with less optimal observed parenting (Martinez-Torteya et al., 2014).

Similar results to the MACY findings are reported by Schechter et al. (2010) in a sample of low-income mothers with slightly older children (12–48 months). They report that, among women with trauma experiences, complex trauma is the norm and PTSD symptom levels vary across the sample (23% clinically significant PTSD, 41% sub threshold PTSD, 36% no PTSD). Schechter et al. also report a marginal correlation between observed atypical maternal behaviors during mother-child interaction and maternal PTSD (but not depression), but significant relations between maternal PTSD and the amount of time the child spent unsuccessfully trying to engage the mother in joint attention after a stressor (which the authors interpreted as maternal emotional unavailability). These investigators also report a significant correlation between maternal depression and PTSD and maternal self-reported parent-child dysfunctional interactions (measured via Parenting Stress Inventory). Of note, PTSD and depression symptoms are highly correlated in this sample (r=.80), and to our knowledge their analyses do not control for this comorbidity.

In more recent work by Schechter's group evaluating a sample of mothers with a high prevalence of interpersonal trauma and their toddlers (12–48 months old) (Schechter et al., 2015a, 2015b), comorbid depression and PTSD symptoms also are observed (r=.57). They also report that maternal PTSD severity is positively linked to negative maternal attributions about their toddlers (uncontrolled for depression) as well as lower levels of observed sensitive parenting (even after controlling for depression).

Taken together, the few studies evaluating the impact of postpartum PTSD on *parenting indicators* with young children (in contrast to evaluating impact on child outcomes per se) have yielded inconsistent results, particularly regarding whether there is a significant postpartum PTSD effect on parenting after accounting for postpartum depression (Ammerman et al., 2012; Lang et al., 2010; Martinez-Torteya et al., 2014). Much of the extant literature also suffers from methodological problems that potentially limit interpretation, including (a) frequent reliance on self-reported parenting indices rather than observed behaviors (with the exception of work by Schechter's group); (b) a focus on symptoms rather than clinically significant symptom cut-offs are validated against clinical diagnoses, possibly obscuring effects due to clinical impairment; and (c) a failure to tease apart effects of depression alone, PTSD alone, and comorbid PTSD and depression.

The current study aims to address these limitations by examining how *postpartum depression, postpartum PTSD, and comorbid PTSD/depression* may impact observed maternal parenting behaviors during mother–infant interaction at 6 months postpartum. We hypothesize that clinically significant PTSD alone will confer less risk to parenting than clinically significant depression alone or comorbid PTSD and depression. This is based on the fact that there is currently more empirical support for the detrimental impact of depression on parent-