INTRODUCTION

Posttraumatic stress disorder (PTSD) is characterized by hyperarousal, re-experiencing, and avoidance/numbing. These symptoms can negatively impact mothers’ caregiving of their young children. For instance, research has demonstrated that mothers who have been traumatized may adapt by withdrawing from their children emotionally and physically or by displaying hostility toward their children (Lyons-Roth & Block, 1996). As a result of this compromised caregiving and the mother-child relationship, young children who may or may not have directly experienced a trauma may evidence high rates of trauma symptomatology; this process is termed relational trauma (Scheeringa & Zeanah, 2001).

The impact of disrupted caregiving has been associated with increased trauma symptoms in infants (Huth-Bocks et al., 2010) and disorganized attachment in children aged 4-6 (Solomon & George, 2011). The impact of disrupted caregiving on toddler social-emotional development and trauma symptoms, however, has not yet been closely examined.

Research Aim: The present study sought to investigate whether disrupted maternal caregiving, specifically helpless and frightened caregiving, helps explain the association between maternal PTSD symptoms and social and emotional development and trauma symptom expression during toddlerhood in a sample of high-risk mothers and their children.

METHOD

Participants:
- 120 women from the community were followed from pregnancy through their infants’ early years. At study entry, these women were:
  - Age range: 18-42 (M = 26, SD = 5.7)
  - 47% African-American, 36% Caucasian, 13% Bricial, 4% Other
  - 64% single/never married, 28% married, 4% divorced, 4% separated
  - 20% had a high school diploma or less, 44% some college, 36% college degree
  - Median monthly household income = $1500
  - 88% received services from WIC, and 90% had public health insurance

Procedure:
- Women were recruited through community service agencies and flyers. Interviewers surveyed the women during their third trimester (T1), at 3-months postpartum (T2), 1-year postpartum (T3), 2-years postpartum (T4), and 3-years postpartum (T5). The present study utilized data from T1 and T4.

Measures:

Demographics: A brief demographics questionnaire assessed for background characteristics such as age, ethnicity, education, income, marital status, and use of child care and public social services at T1.

Maternal Symptoms of Posttraumatic Stress: The PTSD Checklist (PCL; Weathers, Litz, Herman, Huska & Keane, 1993) is a 17-item questionnaire designed to assess specific symptoms of PTSD.

Respondents indicate how much they have been bothered by various problems in the past month using a Likert-type scale from 1 (not at all) to 5 (extremely). The PCL was administered at T4.

Maternal Helpless and Frightened Caregiving: The Caregiving Helplessness Questionnaire (CHQ; George & Solomon, 2007) is a 25-item self-report questionnaire used to measure how parents feel when they are caring for a specific child. Items are rated from 1 to 5, with 1 = not at all characteristic, 3 = somewhat characteristic, and 5 = very characteristic. Items on the CHQ are divided into three subscales: Mother Helpless, Mother-Child Frightened, and Child Caregiving. The CHQ was administered at T4.

Toddler Social-Emotional Development: The Brief Toddler Social-Emotional Assessment (BITSEA; Briggs-Gowan & Carter, 2006) is a 42-item parent-report used to assess social and emotional problems and competencies in children aged 12 to 36 months. The BITSEA was administered at T4.

Toddler Trauma Symptoms: The Toddler Trauma Symptoms Questionnaire (TTSQ) is a modified toddler version of the infant PTSD scale (Bogat, DeJonghe, Levendosky, Davidson, & von Eeye, 2006). It is a 20-item parent-report questionnaire designed to assess toddler reactions to stressful events. The TTSQ assesses trauma symptoms like numbing, increased arousal, fears or aggression, and re-experiencing. The TTSQ was administered at T4.

RESULTS

Table 1. Descriptive Data for Study Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Possible Range</th>
<th>Alpha</th>
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<tbody>
<tr>
<td>Maternal PTSD</td>
<td>28.55</td>
<td>12.58</td>
<td>17</td>
<td>77</td>
<td>17-85</td>
<td>.95</td>
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<td>Helpless Caregiving</td>
<td>9.73</td>
<td>3.24</td>
<td>7</td>
<td>25</td>
<td>7-35</td>
<td>.77</td>
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<td>Frightened Caregiving</td>
<td>8.47</td>
<td>2.20</td>
<td>6</td>
<td>17</td>
<td>6-30</td>
<td>.44</td>
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<tr>
<td>Toddler Social-Emotional Difficulties</td>
<td>11.56</td>
<td>9.25</td>
<td>36</td>
<td>0.62</td>
<td>0.83</td>
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<tr>
<td>Toddler Trauma Symptoms</td>
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<td>1.77</td>
<td>0</td>
<td>9</td>
<td>0.14</td>
<td>.70</td>
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</table>

Table 2. Correlation Matrix for Study Variables

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<th>Helpless Caregiving</th>
<th>Frightened Caregiving</th>
<th>Toddler Social-Emotional Difficulties</th>
<th>Toddler Trauma Symptoms</th>
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</thead>
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<td>Helpless Caregiving</td>
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<tr>
<td>Frightened Caregiving</td>
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<td>54**</td>
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<tr>
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<td>56**</td>
<td>66**</td>
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<tr>
<td>Toddler Trauma Symptoms</td>
<td>51**</td>
<td>27**</td>
<td>19*</td>
<td>36**</td>
<td>1</td>
</tr>
</tbody>
</table>

Figure 1. Mediation Models

The Mediating Effects of Helpless and Frightened Caregiving

Analyses were based on 99 participants who completed the final wave of data collection. Regression analyses revealed that the association between maternal PTSD symptoms and toddler social-emotional difficulties, in particular, was partially mediated by both helpless and frightened caregiving. Post-hoc Sobel tests confirmed the significance of indirect effects. See Figure 1.

Interestingly, however, the relationship between maternal PTSD symptoms and toddler trauma symptoms was not mediated by either helpless or frightened caregiving.

DISCUSSION

These results suggest that disrupted caregiving, especially helpless caregiving, may help account for the impact of maternal PTSD symptoms on toddler social-emotional development, but does not specifically account for the impact on toddler trauma symptoms. These differences may indicate that direct exposure to trauma by toddlers or other maternal caregiving characteristics are more important in explaining the association between maternal and toddler trauma symptoms. Alternatively, it is possible that mothers had a more difficult time accurately reporting on their own toddlers’ trauma symptoms as compared to broad social-emotional functioning.

Previous research has identified that maternal experiences of trauma are associated with disrupted caregiving, and disrupted caregiving is associated with problematic infant social-emotional development, like disorganized attachment (Lyons-Roth et al., 1999; Schechter et al., 2010; Solomon & George, 2011). This study extends past research into the realm of the effects of maternal trauma on toddlers and looks at social-emotional outcomes more broadly.

This study also highlights the impact of maternal mental health on child social and emotional development and maternal caregiving. It also implies that assessing maternal mental health and providing early intervention programs to traumatized parents could improve the social/emotional functioning of their children and reduce toddler trauma symptoms.

ACKNOWLEDGMENTS

We are extremely grateful to the families participating in this study who allowed us to visit their homes and learn about their circumstances.


The Impact of Maternal Posttraumatic Stress and Disrupted Caregiving on Toddler Social-Emotional Development and Trauma Symptoms

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