Pathways to Infant Trauma: The Role of Maternal Trauma and Disrupted Caregiving

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Overview of Presentation

- Review trauma symptoms in infancy
- Discuss pathways leading to infant trauma symptoms consistent with attachment theory
  - Maternal trauma (e.g., intimate partner violence)
  - Disrupted/disabled caregiving
- Describe overview of the present study
- Describe emerging results
- Implications for researchers & clinicians
Effects of Trauma on Infants

- **Common Misconception**: Infants and young children aren’t affected by exposure to trauma because they can’t cognitively comprehend it.

- In fact, trauma exposure interferes with a range of developmental tasks and skills:
  - Affects neurodevelopment during this early sensitive period
  - Impairs regulatory capacities (e.g., sleep, stress response system, behavioral)
  - Heightens arousal levels and sensitivity to stimuli
  - Interferes with a sense of safety and trust in the world
Assessing Trauma Symptoms in Infants

- Developmental manifestations of infant trauma symptoms may include (DC:0-3R):
  - Re-experiencing (e.g., posttraumatic play, intrusive memories, nightmares)
  - Numbing or restriction of activities
  - Increased arousal (e.g., sleep problems, temper tantrums, irritability)
  - New fears
  - Regression from previously acquired developmental skills

- There is no gold-standard questionnaire for assessing trauma symptoms in infants
Pathways to Infant Trauma

Effects via Caregiver Trauma

- Infant well-being must be viewed within the context of relationship with caregiver
- Primary attachment needs during infancy are compromised in face of maternal trauma
  - Less assistance from caregiver in regulation
  - More intrusive, harsh parenting AND/OR
  - More withdrawn, unresponsive parenting
  - Lack of predictable caregiver availability
- A significantly impaired caregiver threatens the infant’s psychological & physical integrity
- Relational PTSD (e.g., Scheeringa & Zeanah, 2001)
Pathways to Infant Trauma

- Effects via the Caregiver
  - The Disabled Caregiving System (George & Solomon, 2008)
    - Unresolved, un-integrated maternal trauma may lead to a sense of fear and helplessness in the maternal role
    - These feelings are experienced as overwhelming and may be defensively split off from consciousness
    - This state often leads to *abdicated caregiving* —the giving up of one’s role in providing care and protection to one’s infant
  - Has not yet been examined in context of IPV
The Present Study

- Aimed to empirically examine indirect effects of maternal experiences of trauma via disrupted/disabled caregiving (fear and helplessness) on infant trauma & distress
  - In the context of IPV
  - Across the transition to motherhood (pre- to post-natal), a highly relational time
  - In a diverse, relatively high-risk sample
- Sought to explore and evaluate a possible scale to assess infant trauma symptoms
Participants

- 120 pregnant women (last trimester) from community in southeastern Michigan
- Average age = 26 (Range = 18-42, SD = 5.7)
- Racial/Ethnic self-identification:
  - 47% African American
  - 36% Caucasian
  - 13% Biracial
  - 4% other ethnic groups
- Marital Status:
  - 64% single (never married)
  - 28% married
  - 4% separated
  - 4% divorced
- 30% first time mothers
Participants

- Highest level of education obtained:
  - 20% high school diploma/GED or less
  - 44% some college or trade school
  - 36% college degree

- Median monthly income = $1,500 (range = $0 - $10,416)

- Involvement in Social Services:
  - 88% WIC
  - 62% food stamps
  - 90% public health insurance
  - 20% public supplemental income
Procedures

- Participants were recruited via fliers, mostly from:
  - community-based health clinics (23%)
  - Women, Infants, and Children (WIC) program (18%)
  - regional-level university and community college (16%)
  - “community baby shower” (11%)
  - word of mouth (11%)

- Interviewed in last trimester of pregnancy at home (78%) or at research office (22%
  - 2 ½ to 3 hours
  - Compensated with a $25 gift card

- Interviewed with their infants at home 1 year after birth
  - 2 ½ to 3 hours
  - Compensated with $50 cash and baby gift
Conflict Tactics Scale – 2 (CTS-2; Straus et al., 2003)

- 78-item questionnaire designed to assess four types of intimate partner violence: psychological violence, physical violence, sexual violence, injuries from violence
- Women were asked about experiences during the current pregnancy perpetrated by (male) partner at the pregnancy interview
- **Response categories for each item include:** 0 (never), 1 (once), 2 (twice), 3 (3-5 times), 4 (6-10 times), 5 (11-20 times), 6 (more than 20 times), and 7 (not during these time periods, but it happened before)
- Higher scores indicate more frequent IPV
- Total Pregnancy IPV alpha = .84
PTSD Checklist-C
(PCL-C; Weathers et al., 1993)

- 17-item self-report designed to assess DSM-IV PTSD symptoms:
  - intrusions/re-experiencing
  - avoidance
  - hyperarousal

- Items are rated on a 1 (not at all) to 5 (extremely) scale, with higher scores indicating more symptoms in the past month

- Administered at the pregnancy interview

- Cut-off scores have been suggested for likely diagnosis; this study used it to assess severity of PTSD symptoms (dimensional)

- Total PCL-C alpha = .87
Caregiving Helplessness Questionnaire (CHQ; George & Solomon, in press)

- 26-item questionnaire designed to assess dimensions of disabled caregiving:
  - *Helplessness (7 items)
  - *Mother-Child Frightened (6 items)
  - Child Caregiving (Role-Reversal) (6 items)
- Items refer to relationship with a specific child (no time frame)
- Administered at the 1 year interview
- Items are rated on a 1 (*not at all characteristic*) to 5 (*very characteristic*) scale, with higher scores indicating more of each construct
Caregiving Helplessness Questionnaire (CHQ; George & Solomon, in press)

- **Helplessness Examples:**
  - When I am with my child, I often feel out of control
  - I feel that I am a failure as a mother
  - I feel that my life is chaotic and out of control
  - I often feel there is nothing I can do to discipline my child
  - alpha = .78

- **Mother-Child Frightened Examples:**
  - I am frightened of my child
  - Sometimes my child acts as if s/he is afraid of me
  - I feel that I punish my child more harshly than I should
  - My child hits, kicks, or bites me
  - alpha = .35
Brief Infant-Toddler Social Emotional Assessment (BITSEA; Briggs-Gowan & Carter, 2006)

- 42-item questionnaire assessing broad social-emotional functioning in 1-3 year olds
- Established subscales include: internalizing, externalizing, dysregulation, and social competence
- Items are rated 0 (not true/rarely), 1 (sometimes), or 2 (very true/often) for the past month, with higher scores indicating more problems
- Subset of items (17) were chosen to approximate PTSD subscale based on DC:0-3R criteria
BITSEA Items Used in ‘PTSD’ Subscale

<table>
<thead>
<tr>
<th>6/8 Internalizing</th>
<th>4/6 Externalizing</th>
<th>5/8 Dysregulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nervous, tense, or fearful</td>
<td>Restless, can’t sit still</td>
<td>Wakes up at night and needs help</td>
</tr>
<tr>
<td>Afraid of certain… things</td>
<td>Hits, shoves, kicks, or bites children</td>
<td>Cries or tantrums until exhausted</td>
</tr>
<tr>
<td>Has less fun than other children</td>
<td>Hits, kicks, or bites you</td>
<td>Trouble falling or staying asleep</td>
</tr>
<tr>
<td>Cries or hangs on when you leave</td>
<td>Purposefully tries to hurt you</td>
<td>Trouble adjusting to changes</td>
</tr>
<tr>
<td>Worries a lot; is very serious</td>
<td></td>
<td>Often gets very upset</td>
</tr>
<tr>
<td>Seems unhappy, sad, withdrawn</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Plus two “other” items: ‘spaces out; unaware of surroundings’ and ‘when upset, gets very still, freezes, or doesn’t move’
## Results: Associations between Maternal and Infant Variables

<table>
<thead>
<tr>
<th></th>
<th>Pregnancy IPV Total</th>
<th>Pregnancy PTSD sxs</th>
<th>Maternal Helpless</th>
<th>Maternal Frightened</th>
<th>Infant Symptoms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pregnancy IPV Total</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pregnancy PTSD sxs</td>
<td>.35*</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maternal Helpless</td>
<td>.08</td>
<td>.15</td>
<td>1.00</td>
<td></td>
<td></td>
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<tr>
<td>Maternal Frightened</td>
<td>.02</td>
<td>.28*</td>
<td>.25*</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Infant Symptoms</td>
<td>.09</td>
<td>.27*</td>
<td>.33*</td>
<td>.67*</td>
<td>1.00</td>
</tr>
</tbody>
</table>

* $p < .01$. 
Results: Frightened Caregiving as a Pathway to Infant Trauma

- $p < .01$.
- $p < .001$.

Sobel Test Statistic = 2.83, $p = .005$

$\beta = .28^*$

$\beta = .64^{**}$

$\beta = .27^*$

($\beta = .08$)

- Maternal Trauma Symptoms
- Mother-Child Frightened Caregiving
- Infant Trauma/Distress Symptoms

$p < .01$. **$p < .001$.

Sobel Test Statistic = 2.83, $p = .005$
Summary of Findings

- Maternal experiences of IPV during pregnancy had an indirect relation to infant outcomes via maternal trauma sequelae.
- As predicted based on George & Solomon’s work, transmission of maternal trauma to infant trauma/distress was explained by frightened caregiving (but not helplessness).
  - Trauma may have unique and specific detrimental effects on caregiving (vs. other stressors or other forms of psychopathology).
  - Parenting in the context of trauma is characterized by fear.
Limitations

- Relatively small sample (but a unique one)
- Internal consistency of CHQ mother-child frightened subscale was poor—needs measurement work
- The BITSEA was not intended to be a measure of trauma symptoms; items were not in reference to specific trauma event(s)
  - However, it may be a promising tool
- Generalizability may be limited to women in the perinatal period
Future Research Directions

- Continue to empirically examine pathways to infant trauma via caregiver(s)
- Continue to focus on specific, identifying characteristics of caregiving that may be unique to trauma-exposed mothers
- Examine longer-term outcomes with follow-up data
- Empirically examine current and future PTSD (or other?) diagnostic criteria for infants
  - Including what type of caregiving impairments may be considered ‘traumatic’
- Refine and test assessment methods for infants
Clinical Implications

- It is important to assess and take very seriously infants’ exposure to traumatized mothers (from IPV and other forms of trauma)
- It is important to consider the developmental timing of exposure
- The infant does not have to directly witness the violence to be affected; *maternal functioning is crucial*
  - Clinicians should attend to infant AND caregiver and consider transactional nature of effects
  - Clinicians should pay particular attention to maternal *fear* and *helplessness* in relation to women’s thoughts, feelings, and behaviors regarding caregiving
  - It may be possible, and ideal, to identify these caregiving risks during pregnancy for prevention purposes
Acknowledgements

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