PTSD In Early Childhood: DSM-5 and Beyond

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Charles H. Zeanah, M.D.
Section of Child and Adolescent Psychiatry
Departments of Psychiatry and Pediatrics
Faculty Disclosure Information

• I have no relevant financial relationship with the manufacturers of any commercial products and/or providers of commercial services discussed in this CME activity.

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Traumatic Experiences in Early Childhood

• Witnessing partner violence
• Witnessing community violence
• Witnessing parental homicide
• Sudden death of parent (figure)/loved one
• Missile attacks/war experiences
• Physical or sexual abuse
• Motor vehicle accidents
• Animal attacks
• Repeated, painful medical procedures
• Natural and unnatural disasters
PTSD
Fear remains when there is no tiger
PTSD DSM-IV criteria

• Exposure to trauma
  • Fear, helplessness or horror
• Re-experiencing (1)
• Avoidance/Numbing (3)
• Hyperarousal (2)
• Impairment
• One month duration
### The Problem

**Table 1. Studies of PTSD in Preschool Children Comparing DSM-IV and PTSD-AA Criteria**

<table>
<thead>
<tr>
<th>Citation</th>
<th>Age</th>
<th>N</th>
<th>Sample</th>
<th>Traumatic Events</th>
<th>DSM-IV Diagnosis</th>
<th>PTSD-AA Diagnosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scheeringa et al., 1995</td>
<td>1-3 yrs</td>
<td>12</td>
<td>Severely traumatized, clinic referred</td>
<td>Mixed</td>
<td>13%</td>
<td>69%&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>Scheeringa et al., 2001</td>
<td>1-3 yrs</td>
<td>15</td>
<td>Severely traumatized, clinic referred</td>
<td>Mixed</td>
<td>20%</td>
<td>60%&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>Levendosky et al., 2002</td>
<td>3-5 yrs</td>
<td>62</td>
<td>Recruited</td>
<td>Domestic violence</td>
<td>3%</td>
<td>26%&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>Ohmi et al., 2002</td>
<td>2-6 yrs</td>
<td>32</td>
<td>Recruited</td>
<td>Gas explosion in nursery school</td>
<td>0%</td>
<td>25%&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>Scheeringa et al., 2003</td>
<td>1-6 yrs</td>
<td>62</td>
<td>Recruited</td>
<td>Mixed</td>
<td>0%</td>
<td>26%&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Stoddard et al., 2006</td>
<td>1-3 yrs</td>
<td>52</td>
<td>Referred from burn unit</td>
<td>Burns</td>
<td>Not reported</td>
<td>29%&lt;sup&gt;b,c&lt;/sup&gt;</td>
</tr>
<tr>
<td>Egger et al., 2006</td>
<td>2-5 yrs</td>
<td>314</td>
<td>Community (Pediatric Clinic)</td>
<td>Mixed</td>
<td>0.2%</td>
<td>0.6%</td>
</tr>
<tr>
<td>Scheeringa et al., 2006</td>
<td>1-6 yrs</td>
<td>21</td>
<td>Recruited from Level I Trauma Center</td>
<td>Mixed</td>
<td>4.8%</td>
<td>14.3%</td>
</tr>
<tr>
<td>Scheeringa et al., personal communication</td>
<td>3-6 yrs</td>
<td>276</td>
<td>Traumatized and recruited</td>
<td>MVA, DV, Hurricane</td>
<td>12%</td>
<td>41%&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Gleason, personal communication</td>
<td>2-5 yrs</td>
<td>349</td>
<td>Community (Pediatric Clinic)</td>
<td>Mixed</td>
<td>0%</td>
<td>0.2%</td>
</tr>
<tr>
<td>Ghosh-Ippen, et al., personal communication</td>
<td>0-6 yrs</td>
<td>158</td>
<td>Recruited</td>
<td>Domestic violence</td>
<td>0-3: 2%</td>
<td>0-3: 47%&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4-6: 1%</td>
<td>4-6: 39%&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
</tbody>
</table>
Alternative algorithm

• Head to head, more children are identified
• 2 studies have looked at the predictive validity—signs are stable
• Criterion validity:
  • PTSD-AA
    • fewest symptom in unexposed,
    • intermediate in traumatized non-PTSD
    • most in traumatized with PTSD.
• DSM-IV
  • no relationship
Course of PTSD Symptomatology

Scheeringa et al., 2005
DSM 5 PTSD (preschool subtype)

- Exposure to a traumatic event
- Re-experiencing (1)
- Avoidance or
- Negative alteration in mood or cognition (1)
- Hyperarousal (2)
- One month duration
- Impairment in functioning
**Reactions at the time of event**

<table>
<thead>
<tr>
<th>Acute Reaction</th>
<th>PTSD</th>
<th>Subclinical PTSD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surprise</td>
<td>66%</td>
<td>61%</td>
</tr>
<tr>
<td>Fear</td>
<td>85%</td>
<td>80%</td>
</tr>
<tr>
<td>Helplessness</td>
<td>62%</td>
<td>46%</td>
</tr>
<tr>
<td>Worry</td>
<td>64%</td>
<td>36%</td>
</tr>
<tr>
<td>Sadness</td>
<td>87%</td>
<td>79%</td>
</tr>
<tr>
<td>Anger</td>
<td>45%</td>
<td>36%</td>
</tr>
<tr>
<td>Numbness</td>
<td>22%</td>
<td>10%</td>
</tr>
<tr>
<td>Other Emotional</td>
<td>9%</td>
<td>7%</td>
</tr>
<tr>
<td>Cry</td>
<td>69%</td>
<td>62%</td>
</tr>
<tr>
<td>Scream</td>
<td>48%</td>
<td>40%</td>
</tr>
<tr>
<td>Physically agitated</td>
<td>51%</td>
<td>29%</td>
</tr>
<tr>
<td>Aggressive (people)</td>
<td>27%</td>
<td>18%</td>
</tr>
<tr>
<td>Aggressive (things)</td>
<td>20%</td>
<td>9%</td>
</tr>
<tr>
<td>Confused</td>
<td>70%</td>
<td>53%</td>
</tr>
<tr>
<td>Quiet</td>
<td>47%</td>
<td>39%</td>
</tr>
<tr>
<td>Feeling sick</td>
<td>19%</td>
<td>6%</td>
</tr>
<tr>
<td>Other Behavioral</td>
<td>8%</td>
<td>8%</td>
</tr>
<tr>
<td>Post Katrina</td>
<td>Stayed n=24</td>
<td>Evacuated n=46</td>
</tr>
<tr>
<td>----------------------</td>
<td>-------------</td>
<td>----------------</td>
</tr>
<tr>
<td>PTSD diagnosis</td>
<td>62.5%</td>
<td>43.5%</td>
</tr>
<tr>
<td>MDD diagnosis</td>
<td>12.5%</td>
<td>26.1%</td>
</tr>
<tr>
<td>ADHD diagnosis</td>
<td>34.8%</td>
<td>20.0%</td>
</tr>
<tr>
<td>ODD diagnosis</td>
<td>30.4%</td>
<td>35.6%</td>
</tr>
<tr>
<td>SAD diagnosis</td>
<td>17.4%</td>
<td>13.3%</td>
</tr>
<tr>
<td>PTSD signs</td>
<td>6.7</td>
<td>5.1*</td>
</tr>
<tr>
<td>MDD signs</td>
<td>2.7</td>
<td>2.5</td>
</tr>
<tr>
<td>ADHD signs</td>
<td>6.0</td>
<td>4.5</td>
</tr>
<tr>
<td>ODD signs</td>
<td>3.4</td>
<td>3.0</td>
</tr>
<tr>
<td>SAD signs</td>
<td>2.2</td>
<td>1.5*</td>
</tr>
</tbody>
</table>

* p < 0.05
Signs of Re-Experiencing

- Play re-enactments
- Posttraumatic play
- Recurrent recollections/preoccupation
- Nightmares
- Distress at reminders
- Dissociative reactions
Avoidance of Reminders/
Alterations in Mood or Cognition

- Avoidance of reminders
- Substantially increased frequency of negative emotional states -- for example, fear, guilt, sadness, shame or confusion.
- Diminished interested in activities; play constriction
- Social withdrawal
- Emotional dampening or restricted positive affect
Signs of Hyperarousal

• Exaggerated startle reaction
• Increased distractibility and decreased concentration
• Hypervigilance
• Persistent irritability and tantrums
Co-Morbidity
PTSD Comorbidity
Mixed Trauma Sample

Scheeringa et al., 2003
Comorbidity of PTSD in Early Childhood

• 78.6% of these disorders *not present before* the traumatic event
• Not vulnerability factors but rather result from the traumatic experience
Post Katrina Psychopathology

- Of the children with new onset (non-PTSD) disorders:
  - 53% had diagnosis of PTSD
  - 47% had sub-clinical PTSD symptomatology (mean 6.4 signs of PTSD)
  - 0 children developed new non-PTSD disorder in the absence of new PTSD symptoms
This child might have PTSD

- Trauma exposure plus any of these...
  - Poor concentration
  - Agitation
  - Emotional dysregulation
  - Social withdrawal
  - Aggression
  - Defiant behavior
  - Separation anxiety
  - Phobias (specific or social)
  - Irritability
  - Sleep disturbance
Assessment
Structured Interviews

• Omnibus measures
  • Preschool Age Psychiatric Assessment
    • Egger and Angold
  • Diagnostic Infant/Preschool Assessment
    • Scheeringa

• Posttraumatic Stress Disorder
  • Posttraumatic Stress Responses in Infancy and Early Childhood Interview (P.I.E.)
    • Ghosh Ippen et al.
  • Semi-Structured Interview and Observational Record for Infants and Young Children
    • Scheeringa and Zeanah
Key Features of Assessment

• Type of traumatic event or circumstance
• Age and developmental level before and after trauma
• Actual and psychological proximity of events
• Acute or chronic trauma
• Symptom picture, post-traumatic and otherwise
• Relationship of victim to perpetrator
Key Features of Assessment

- Relationships with caregivers prior to and after the trauma, including threat to caregiver
- Safety and stability of current living situation, including routines and structure
- Degree of protection in child’s environment
- Strengths of family, protective factors
Treatment
Barriers to Treatment in Young Children

- Too young to be affected
  - reasonably large evidence base
- Symptoms fit the experience
  - “of course the child is symptomatic—consider what they experienced”
- Will grow out of it
  - watchful waiting not a plan in case of trauma
- Attending to trauma make symptoms worse
  - “Don’t focus on symptoms—this will exacerbate them”
- Lack of awareness of effects
  - Now you know
- Lack of resources
Treatment of PTSD in Young Children (RCTs)

  - Cognitive Behavioral Therapy
    - Sexually abused preschool girls
- Lieberman et al. (2005)
  - Child Parent Psychotherapy
    - Partner violence
- Scheeringa et al. (2011)
  - Cognitive Behavioral Therapy
    - Mixed traumatic experiences
CBT Sessions for Preschool Children

- Session 1—Intro and psychoeducation
- Session 2-4—Oppositional behavior
- Session 5—Tell story and create hierarchy
- Session 6-8—Easy and medium level exposure
- Session 9-11—Most frightening exposure
- Session 12—Review and graduate
Case W. Weekly Changes

![Graph showing weekly changes for Child and Mom over 11 sessions. The graph indicates a decrease in values for both categories as the sessions progress.]
Pre- and post-treatment symptomatology

Scheeringa et al. (2011)
Pre- and post-treatment symptomatology

Scheeringa et al. (2011)
Child Parent Psychotherapy for Traumatized Young Children

- Randomized controlled trial of CPP vs. case management and treatment in community
- Young children (3-5 years) and mothers who had experienced serious partner violence
- Dose
  - CPP group attended 34.29 sessions ($SD = 13.24$).
  - Comparison group, 73% ($n = 22$) of mothers and 55% ($n = 17$) of children received individual treatment, with 50% of the mothers and 65% of the children receiving over 20 individual sessions.
Percentage of Children Diagnosed with PTSD

Lieberman, Van Horn & Ippen, 2005
Case Study of Treatment
Final Points

• Trauma exposure is quite common in young children and PTSD is likely frequently missed.

• PTSD is hard to identify without specialized expertise and systematic assessment.

• Any children with new onset psychiatric symptoms following trauma exposure should be referred for evaluation of PTSD.

• Young children with PTSD do not often improve spontaneously or “grow out of it.”

• RCTs supporting both CPP and CBT—not any treatment will do.
Thanks!

czeanah@tulane.edu