Early Childhood Trauma: The vulnerability and presentation of very young children

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Goals:
• To illustrate the complexity of early childhood trauma.
  • Focus on very young children: infants, toddlers, and preschoolers.
• Discuss vulnerability to traumatic exposure, specific to early childhood. *Why are very young children at higher risk than older children or adults?*
• Trauma related symptoms in children, particularly young children. *What kinds of behaviors are seen following traumatic exposure?*
• Assessment of trauma related symptoms in young children. *What are some useful early childhood social-emotional questionnaires?*
Learning Objectives

1. List three reasons young children are at increased risk for traumatic exposure. Why are the very young particularly vulnerable?
2. Describe the common types of behaviors in children following traumatic exposure. How do children (sometimes) behave after upsetting experiences?
3. Describe two trauma related symptoms that are uniquely associated with very young children. What trauma related reactions are seen in young children that are less typical in older children or adults?
4. Be familiar with an early childhood social emotional questionnaire, the Infant and Toddler Social Emotional Assessment.
What are traumatic Events?

• What types of events are considered traumatic?
  • Events are considered traumatic by the reaction they provoke: Potentially traumatic events.
  • DSM-IV-TR:
    1) Individual experiences, witnesses, or is confronted with actual or threatened death, serious injury, or threat to the physical integrity of self or others,
    2) Such that the individual experiences a sense of intense fear, helplessness, or horror.

• In attempting to define what constitutes a traumatic event, age and developmental level are likely to influence both
  • what constitutes a “threat” and
  • what will evoke a subjective reaction of fear, helplessness, or horror.
Background

• Very young children’s experience of potentially traumatic events may be different than older children or adults
  • Different cognitive and emotional processing
  • Rapidly developing brains

• Criteria for PTSD may be developmentally misspecified (developed for adults)
  • None of the traumatized toddlers in two seminal studies by Scheeringa met full PTSD criteria using DSM-IV-TR
    • Inability to measure intense feelings of fear, helplessness or horror due to limited language;
    • Failure to meet criteria for 3 or more avoidance symptoms, in part due to difficulty appraising avoidance of thoughts or feelings associated with the trauma.
Changes from DSM-IV-TR to DSM-5

• Moved from anxiety disorders into a new class of "trauma and stressor-related disorders”.
• Still requires exposure to traumatic or stressful event
• The three symptom clusters of DSM-IV (avoidance, arousal, re-experiencing) divided into four clusters in DSM-5:
  • Intrusion
  • Avoidance
  • Negative alterations in cognitions and mood (new, drawn from old “Avoidance”)
  • Alterations in arousal and reactivity (revised to include reckless or destructive behavior)
Changes from DSM-IV-TR to DSM-5 (contd.)

• New clinical subtype "with dissociative symptoms”
• Separate diagnostic criteria are included for children ages 6 years or younger (preschool subtype)
Interpersonal vs. Non-Interpersonal Trauma

- Broad categorization of Traumatic Events: Interpersonal vs. Non-interpersonal events
- **Interpersonal Events**: events that are personally connected to you (e.g. violence by or towards a person you know or the loss of a loved one)
- **Non-interpersonal Events**: events that seem to happen randomly or that have no personal connection (e.g. accidents or natural disasters)
Interpersonal Trauma

• **Interpersonal Violence**
  • Seen someone hit, push or kick a family member
  • Seen someone use a weapon to threaten or hurt a family member
  • Been a victim of physical abuse
  • (Community violence/War)

• **Interpersonal Loss**
  • Death of a parent or child in the family
  • Long-term separation of a parent:
    • Parental Incarceration
    • Serious parental illness involving prolonged separation from the child
Non-Interpersonal Trauma

- Been bitten by a dog
- Been in a car accident
- Stayed in the hospital overnight
- Hurt seriously
- Had a medical operation
Birth Cohort Study Design

Connecticut Early Development Project *(Alice Carter & Margaret Briggs-Gowan)*

**Prospective Longitudinal Design**

(N=1312 or 1474 eligible families; 89% response rate):

**Wave 1:** 12- to 36-month olds *(n=1280; 87% response)*

**Wave 2:** 24- to 48-month olds *(n=1219; 91% retention)*

**Wave 3:** 36- to 48-month olds *(n=583; 91% retention)*

**Wave 4:** Kindergarten/First Grade

**Wave 5:** Second/Third Grade
Exposures across early childhood

![Bar graph showing exposures across early childhood.](image-url)
Why is it important to know the category or type of trauma?

- In studies of children and adults, interpersonal traumatic events have a greater impact on functioning than non-interpersonal events, particularly interpersonal violence.
What we know about prevalence:

• “Accidents” and injuries are among the most common causes of morbidity and mortality in young children.
• Four to five percent of one- to four-year olds are seriously injured annually (Ward-Begnoche et al., 2006).
• The majority of one- to five-year old children in an urban primary care clinic had been exposed to violence (Taylor et al., 1994).
Background

• By early adolescence, most children have experienced potentially traumatic, adverse events:
  • injury, loss, natural disaster, violence.
Children under age six:

• More likely than older children to be exposed to violence;
• More likely to be exposed to severely violent events;
• More likely that this violence was unpredictable;
• More likely to be exposed *more often* than older children and adults.
Developmental Level

- Lack of skills necessary to understand and process traumatic exposure
- Lack of coping skills to deal with exposure
- Rapidly developing core cognitive, social, and emotional abilities
Caregiver Dependence

- Young children are completely dependent upon others for their care
  - Cannot independently keep themselves safe
  - Cannot adequately meet their own needs if their primary caretaker is unavailable
Children Living in Poverty

• Young children living in poverty are more likely to be exposed to violence, than young children who are not: Violence exposure was approximately 4.4 times more likely among children living in poverty (CEDP, Briggs-Gowan & Carter)
In sum,

- Very young children (birth through preschool age) are at increased risk for traumatic exposure than older children or adults:
  - Completely dependent on others
  - More likely to experience worse types of violence, *more often*
  - Children living in poverty are at increased risk for exposure
  - Core cognitive, social, and emotional abilities are rapidly developing
In sum: Prevalence

• Approximately 1/3 of children had been exposed to a potentially traumatic event by 3 years of age (13% violence; 27% non-interpersonal).

• Children were most commonly (>10%) exposed to
  • Family violence
  • Car accidents
  • Hospitalizations

• Children living in poverty were over four times as likely to be exposed to events
Impact of Traumatic Exposure

• Not everyone has a negative reaction
• What is the range of children’s reactions in the general community (impact)?
Impact of Traumatic Exposure

These traumatic experiences increase risk for a wide range of affective and behavioral psychopathology, including:

- Disruption in attention processing
- Impairments in cognitive functioning
- Social Emotional Difficulties
- Earlier onset of substance use
- Poorer health (short and long-term)

**Take Home:** Traumatic Exposure can impact children across a very wide range of functioning
How do children behave after upsetting experiences?

- Avoidance
- Arousal
- Re-experiencing/Intrusion
- Regression
- Attachment Difficulties
Trauma related Symptoms

• Feelings of helplessness and generalized anxiety
• Difficulty expressing what is bothering them
• Loss of previously acquired skills
• Increased attachment needs
• Need to “play out” traumatic event
• Sleep and eating problems
• Acting younger than their age
Background
Symptom Level Data:

1. Following trauma exposure, very young children exhibited:
   • Increased internalizing and externalizing symptoms (Scheeringa et al., 2003).
   • Symptom levels that meet criteria for psychiatric diagnoses (Scheeringa et al., 2003):
     • PTSD (using modified criteria) in 26% of trauma exposed children.
     • Oppositional Defiant Disorder
     • Separation Anxiety Disorder

1. Younger children (1-3) more symptomatic than older children (4-6) & particularly vulnerable to re-experiencing symptoms
Background

3. Increased symptoms seen in children across a range of different traumatic events:

• Elevated PTSD symptoms have been observed in children exposed to
  • Domestic violence (Bogat et al., 2006)
  • Severe burns (Stoddard et al., 2006)

• Elevated internalizing and externalizing symptoms have been observed in children exposed to
  • Terrorism (Chemtob et al., 2008; Want et al., 2006)
  • Domestic violence (Levendosky et al., 2006)
  • Burns (Meyer et al., 2000)
  • Exposure to family conflict and violence toward a family member (McDonald et al., 2007)
“Too young to understand?”

• Younger children appear to be at **greater risk** (Famularo et al., 1994; Vila et al., 2001)
  
  • For example, earlier onset of maltreatment may lead to **generalized problems** with cognitive, affective, and somatic self-regulation that go beyond PTSD (Ford, 2005)
Beyond PTSD...

- Toddlers and preschoolers exposed to violence and/or other potentially traumatic events also display elevated emotional, behavioral, and regulatory symptoms relative to unexposed children.

- Young trauma-exposed children are also more likely to meet criteria for other psychiatric disorders.
Early Childhood Social Emotional Measure

Social Emotional Functioning:

- Infant Toddler Social and Emotional Assessment (ITSEA; Carter & Briggs-Gowan)
  - 1 to 3 years of age
  - Addresses problems and competencies
  - Covers known symptoms and existing psychiatric diagnostic systems (DSM-IV and DC:0-3)
  - Developmentally salient items (Externalizing, Internalizing, Regulatory Problems, Competencies)
  - Clinical and research applications
  - Cost and time effective (20-25 minutes to complete)
  - Multiple informants (parent, childcare)
  - Reliable and valid
ITSEA Problem Domains and Subscales within Domains

- **Internalizing**
  - General Anxiety
  - Depression/Withdrawal
  - Separation Distress
  - Inhibition to Novelty

- **Externalizing**
  - Aggression/Defiance
  - Peer Aggression
  - Activity/Impulsivity

- **Dysregulation**
  - Negative Emotionality
  - Eating
  - Sleep
  - Sensory Sensitivities
Competence Domain

- Attention Skills
- Compliance
- Empathy
- Prosocial Peer
- Mastery Motivation
- Imitation/Play

Three Additional Indexes

- Maladaptive
- Atypical
- Social Relatedness
Modified Scales

- ITSEA-Trauma Related Symptom Scales (Carter & Briggs-Gowan, 2008)
  - Re-experiencing
  - Avoidance/Numbing
  - Arousal
  - A global score
Participants & Event Exposure

ITSEA Validation Study (Carter & Briggs-Gowan)

- 917 families (<18 months; >36 months).
- 215 (n=23.4%) of children experienced at least one event between 6 and 36 months of age.
- Among children who experienced at least one event, 19.2% (n=42) of parents, or 4.6% of the entire sample reported a dramatic change following the event(s).
Sociodemographic Risk & Event Exposure

• Sociodemographic risks included as covariates (brief review):
  • Single Parent Household
  • Poverty
  • Racial/Ethnic Minority status
  • Maternal Age – young
  • Low Education
What we learned about impact:

• Exposure to potentially traumatic events was significantly associated with toddler PTSD symptoms:
  • scores on the Modified CBCL PTSD Scale, ITSEA TRSS Scale, and the ITSEA TRSS Arousal and Re-experiencing Indices, controlling for sociodemographic risk (all $p$-values < 0.05).

Toddlers do experience post-traumatic stress!
More of what we learned about impact

- Exposure was not significantly associated with the ITSEA TRSS Avoidance Index.
  - consistent with prior work – Scheeringa 2003.

Post-traumatic stress may look DIFFERENT in young children than it does in adults
ITSEA TRSS (Carter & Briggs-Gowan, 2008)

ITSEA PTSD Scale Summary Score

• **Re-Experiencing Subscale**
  - Acts out same pretend theme over and over
  - *Started doing something he/she had outgrown*
  - *Is afraid of certain animals, places, or things*
  - Puts things in a special order over and over
  - *Repeats same action or phrase over and over*
  - Spaces out. Unaware of what is happening
  - Talks about strange, scary or disgusting things
  - Wakes up from scary dreams or nightmares
  - When upset stills, freezes or doesn't move

• **Avoidance/Numbing Subscale**
  - Avoids physical contact
  - Does not make eye contact
  - *Has less fun than other children*
  - Is affectionate with loved ones (rev)
  - Interested in other babies or children (rev)
  - Laughs and smiles less than other children
  - Likes being cuddled, hugged or kissed (rev)
  - Looks unhappy or sad without any reason
  - Seems to have no energy
  - Seems withdrawn
Not just PTSD:

- Elevated scores on the **Externalizing** Domains of the ITSEA and CBCL, as well as on the ITSEA **Dysregulation, Atypical** and **Maladaptive** domains among toddlers who experienced an event-related change in functioning

  - Perry’s (2000) hypothesis that psychological trauma experienced in the first year of life may interfere with **neurobiological development associated with stress modulation and emotion regulation**.
Not all children with exposures showed “dramatic change”

- As predicted, among toddlers who experienced one or more potentially traumatic life events, those whose parents reported a **dramatic change in their functioning** following the event(s) exhibited greater symptom severity on measures of social and emotional functioning than those whose parents did not report a change.
References & Resources

• National Child Traumatic Stress Network (NCTSN): www.nctsn.org


