

PTSD in Maltreated Children: A Closer Look at Diagnostic Criteria

Riley Spuhler Rhodes, M.A. – DU Consortium

Abstract

- The suitability of DSM-IV-TR PTSD diagnostic criteria for children has been under increasing scrutiny despite being frequently diagnosed in children who have been maltreated/abused.
 - The present study examined diagnostic validity of PTSD in a cohort of maltreated children and adolescents who received treatment at the Mental Health Center of Denver (N = 933).
 - The applicability of modified PTSD diagnostic criteria and the differential symptom patterns of children based on age and maltreatment types were investigated.
- Results indicated that symptom presentation varied by both age and maltreatment type.
 - Children under the age of 10 years were more likely than older children to meet Cluster B and Cluster D criteria but children rarely attained the DSM-IV threshold of three Cluster C symptoms before the age of 7 years.
 - Modified Cluster C requirements – lower symptom threshold and more behaviorally-based symptom descriptions – produced more reasonable PTSD prevalence rates.
 - Regardless of age, children who have experienced sexual abuse plus other types of abuse are at highest risk for developing PTSD. Lowest risk: Emotional maltreatment only.

Expanded Hierarchical Type (EHT) Maltreatment Coding System

In response to problems with studying the consequences of child maltreatment due to the variability in ways in which researchers code maltreatment, the EHT system was developed. The EHT system is a recently developed system with the most thorough – empirically and theoretically sound – classification scheme available (Lau et al., 2005).

Six Categories:

- Sexual abuse only
- Sexual abuse plus any other type of abuse
- Physical abuse only
- Neglect only
- Physical abuse plus neglect
- Emotional maltreatment only - includes witnessing caregiver violence or verbal abuse.

Present Study

Goals

- Explore reliability and validity of DSM-IV-TR PTSD diagnostic criteria and alternative PTSD criteria.
- Examine how age and type of maltreatment history impact PTSD symptom presentation

Participants

- 933 children and adolescents seeking outpatient treatment at MHCD between 2004 and 2006
- Inclusion criteria:
 - Child was under the age of 18 years at time of admission assessment
 - Child or child's caregiver reported a history of maltreatment which may include sexual abuse, physical abuse, neglect, verbal abuse or witnessing domestic violence.

Instruments

This study involved the use of archival data, stripped of identifying information. The original data was collected from the child's initial admission assessment completed by his/her therapist. The following instruments were used by the therapists:

- CCAR:** Colorado Client Assessment Record (CCAR) were used to gather demographic information from clients including age, race, and child maltreatment history.
- eCET:** Mental health symptoms were evaluated through a standardized computer-based system that uses a structured clinical data-recording sheet called the Electronic Clinical Expert Technology® (eCET) Assessment Module.

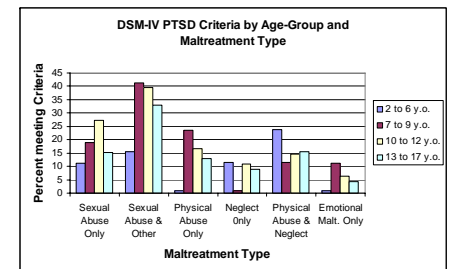
Demographics

Demographic Profile of Participants (N = 933)	%	N
Gender		
Male	54.7	510
Female	45.3	423
Age Group		
Group 1: 2 thru 6 years-old	15.8	147
Group 2: 7 thru 9 years-old	17.5	163
Group 3: 10 thru 12 years-old	19.9	186
Group 4: 13 thru 17 years-old	46.8	468
Race Group		
American Indian	1.5	14
Asian	.10	1
African-American	22.9	214
Hawaiian/Pacific Islander	.20	2
Hispanic	40.4	377
White	20.0	187
Mixed Race	14.8	138
EHT Maltreatment Category		
Sexual Abuse Only	9.3	87
Sexual Abuse Plus Other Maltreatment Type	19.9	186
Physical Abuse Only	8.8	82
Neglect Only	23.3	217
Physical Abuse Plus Neglect	18.0	168
Emotional Maltreatment Only	20.7	193

Results

- Although DSM-IV-TR PTSD symptom scale reliability was moderate-Cronach's alpha of .75, variation by age was evident with the youngest group having the lowest reliability (k = .64) and the oldest group having the highest (k = .82)
- The addition of some more behaviorally based symptoms increased scale reliability (k = .66) for youngest group.
- Children under the age of 10 years were more likely than older children to meet reexperiencing (Cluster B) and hyperarousal (Cluster D) symptom criteria (p < .001)
- Children under the age of 10 rarely attained the DSM-IV-TR threshold of 3 avoidance/numbing (Criterion C) symptoms (p = .01).
- Modified Criterion C requirements (i.e., lowering symptom threshold to 2 symptoms and adding more behaviorally-based symptom descriptions) produced more reasonable PTSD prevalence rates for young children in this sample (22% vs. 8%).

- Significant differences were evident based on types of maltreatment experienced, with children who experienced sexual abuse plus other types of maltreatment having the highest rates of meeting Cluster B, C, D and overall PTSD criteria. Chi-square analysis revealed that the differences were significant below the .001 level for all symptom clusters and for PTSD diagnosis.
- Children who experienced sexual abuse plus other types of maltreatment were most likely to meet all cluster criteria and PTSD diagnostic criteria. The children least likely to meet diagnostic and cluster criteria were those that experienced only emotional maltreatment.
- Young Children (2 to 6 y.o.) also show increased sensitivity to *neglect only* and *physical abuse and neglect*, compared to children in the older three age-groups.



Conclusions and Implications

- DSM-IV-TR PTSD diagnostic criteria has limited applicability for children, even those who have significant trauma reactions. Therefore the Cluster C symptom threshold should be lowered to 2 symptoms and more behaviorally based descriptors should be used.
- Children in this study who were under the age of 10-years displayed marked hyperarousal and reexperiencing symptoms; more so than older children. This may be explained by the developmental shifts that occur at age 10, including the development of a more sophisticated understanding of complex relationships (Ayoub et al., 2006), more varied emotion regulation strategies (Losoya et al., 1998), and greater cognitive and behavior management skills (Salmon & Bryant, 2002; Streeck-Fischer & van der Kolk, 2000).
- This study also shows that different rates of PTSD symptoms are associated with type of maltreatment experiences. Sexual abuse plus other types of abuse is associated with particularly high PTSD rates, while emotional maltreatment only seems to rarely result in the development of PTSD in this sample. The implication is that clinicians should take care in carefully assessing the types of maltreatment experiences that children have had.
- This study also showed that children of different ages may show different rates of PTSD based on variability in maltreatment experiences. For instance, young children who have been both physically abused and neglected or neglected only seem to show higher rates of PTSD than older children with the same abuse background. Further research is needed to sort out these age by maltreatment-type differences.

DSM-IV-TR PTSD Criteria

- Criterion A:** Exposure to Traumatic Event: Definition of traumatic stressor gives the clinician latitude in diagnosis.
- Criteria B (Reexperiencing):** 1 of the following: Intrusive memories of the event/repetitive play with traumatic themes; distressing dreams; acting/feeling as if the trauma were recurring; intense distress at exposure to triggers; and physiological reactivity.
- Criterion C (Avoidance/Numbing):** 3 of the following: Avoidance of thoughts/things associated with the trauma; amnesia; diminished interest or participation in normal activities; feeling detached or estranged from others; restricted affective range; and a sense of a foreshortened future.
- Criterion D (Hyperarousal):** 2 of the following: difficulty sleeping; irritability, or angry outbursts; difficulty concentrating; hypervigilance; and exaggerated startle response
- Functional impairment is also required.

Acknowledgements

I have many people to thank for their assistance in developing me personally and professionally such that this paper was made possible. I thank my committee members Dr. Lavita Nadkarni, Dr. Claire Poole, and Dr. Mary Stall for their invaluable contributions to this project. I thank MHCD for giving me the opportunity to explore this topic and Dr. Antonio Olmos in particular for his expertise and positive attitude. I also thank several faculty at the Kempe Children's Center: Dr. Rob Clyman and Dr. Christina Litle for opening my eyes to the tragedy of child maltreatment and developing me into a researcher and to Dr. Heather Taussig for her patience and support. Lastly I thank my family and friends, especially Alec, for putting up with topic tangents and late nights of crunching endless amounts of data.

