

PTSD in Children and Adolescents

Tanya Anderson
Great Cities Institute
College of Urban Planning and Public Affairs
University of Illinois at Chicago

Great Cities Institute Publication Number: GCP-05-04

A Great Cities Institute Working Paper

November 2005



UIC

The Great Cities Institute

The Great Cities Institute is an interdisciplinary, applied urban research unit within the College of Urban Planning and Public Affairs at the University of Illinois at Chicago (UIC). Its mission is to create, disseminate, and apply interdisciplinary knowledge on urban areas. Faculty from UIC and elsewhere work collaboratively on urban issues through interdisciplinary research, outreach and education projects.



About the Author

Tanya Anderson is Assistant Professor of Psychiatry in the College of Medicine at the University of Illinois at Chicago. She can be reached at tanderson@psych.uic.edu.

Great Cities Institute Publication Number: GCP-05-04

The views expressed in this report represent those of the author(s) and not necessarily those of the Great Cities Institute or the University of Illinois at Chicago. This is a working paper that represents research in progress. Inclusion here does not preclude final preparation for publication elsewhere.

Great Cities Institute (MC 107)
College of Urban Planning and Public Affairs
University of Illinois at Chicago
412 S. Peoria Street, Suite 400
Chicago IL 60607-7067
Phone: 312-996-8700
Fax: 312-996-8933
<http://www.uic.edu/cuppa/gci>

PTSD in Children and Adolescents

Abstract

There are a myriad of challenges and issues faced when working with children and adolescents diagnosed with post-traumatic stress disorder (PTSD). Many children and adolescents that present with PTSD symptoms have been exposed to chronic traumas of community violence, physical injury and maltreatment. Exposure and experiences resulting in a diagnosis of PTSD influences a child's development, their ability to build relationships and their mental well-being. This paper reviews the history of PTSD, common symptomatology among children and adolescents diagnosed with PTSD, issues in diagnosing PTSD in children and adolescents, and lastly, trauma's impact on development.

Introduction

This paper identifies the challenges and issues in diagnosing post-traumatic stress disorder (PTSD) in children and adolescents. Much of the literature on PTSD focuses on children and adolescents that have been exposed to a one-time traumatic event (e.g. school shooting, natural disaster), neglecting chronic traumatization that is characterized by exposure to traumatic stressors within the same overall context over a period of time ranging from months to years. Many children and adolescents that present with PTSD symptoms have been exposed to chronic traumas of community violence, physical injury and maltreatment (physical/sexual abuse) (Carrion, Weems, Ray & Reiss, 2002). Chronic exposure to trauma has implications on the child's global development consisting of cognitive, physiological, social, emotional and behavioral areas. In situations of chronic trauma the environment in which the trauma occurs always contains the implicit risk of danger, even when the actual traumatic event is not present (Kaysen, Resick, Wise, 2003). This has additional implications for the growth and development of the child which are as yet not well understood. Further research is needed to examine the impact and complexity of children's responses to ongoing and/or multiple traumas (Nader, 2004).

History of PTSD


The recognition of PTSD symptoms dates back to the mid 1800's. A physician who treated men who had been in combat in the U.S. American Civil War identified the "DaCosta Syndrome" (Saigh & Bremner, 1999). In the 1900's the symptom presentation was referred to as "shell shock" due to the large number of soldiers

demonstrating similar symptoms. In 1952 the symptom constellation was recognized as a psychiatric syndrome, and was called “gross stress reaction” in the DSM-III. It wasn’t until DSM-III-R that the current nomenclature of PTSD was created.

Although there are some reports in the literature of research on PTSD in youth as early as the 1930’s (Saigh & Bremner, 1999), the criteria for PTSD were based on adult populations and presentation of symptoms. Some modifications have been added to the adult based DSM criteria to attempt to address the presentation in children (e.g. disorganized or agitated behavior in criterion A2; DSM-IV, 1994). However, the current DSM criteria fails to capture the full range of symptoms that occur among youth exposed to traumatic events, particularly those chronically exposed to traumatic events.

PTSD symptomatology among children and adolescents

The DSM-IVTR has made some modifications, which have attempted to compensate for the difference in symptom presentation in children and adolescents. These current criteria focus on reexperiencing, avoidance and hyperarousal; however even these broad categories of criteria may manifest themselves differently in children which then may lead to failure to fully capture PTSD symptoms displayed in a younger population (Carrion, et. al., 2002; Levendosky, et. al., 2002). PTSD symptomatology may vary greatly among children and adolescents depending upon the traumatic event itself, its severity, duration, and the child’s developmental age at the time of the trauma. Children that do display the “typical” symptoms noted in the DSM may do so differently than their adult counterparts. The manner in which a child re-experiences and manifests their feelings of distress related to a traumatic event is likely to change as they age and



mature (Perrin, Smith & Yule, 2000). Therefore, it is imperative that we more carefully examine symptoms displayed by children and youth that have been exposed to chronic trauma.

Younger children often display their symptoms through play, drawings and/or stories, or may exhibit fears not directly related to the event (e.g. fears of monsters) and separation anxiety (Perrin, et. al, 2000). Children and adolescents often display disruptive behaviors such as impulsivity and inattentiveness, which frequently negatively affects their academic achievement. Additionally children and adolescents may isolate themselves from others and withdraw from their peers. They may also demonstrate regressive behaviors such as enuresis, encopresis and thumb-sucking (Armsworth & Holaday, 1993). Children also experience a sense of foreshortened future as demonstrated through their diminished expectations of having a normal lifespan (e.g. marriage, children or a career), time skew (missequencing of events in recall) and omen formation (retrospective identification of harbingers of the traumatic event) (McNally, 1991; 1996).


It is important to distinguish between adult and child symptoms of PTSD for purposes of assessment, diagnosis and treatment. If we are not recognizing symptoms related to PTSD then we will be unable to provide appropriate intervention and treatment to children and adolescents suffering from PTSD symptoms or prevent psychosocial sequelae of non-treatment. We also need to be able to identify child and adolescent symptomatology as it relates to their functioning in different contexts. Research has shown that children who suffer from PTSD demonstrate difficulties in

academic achievement, social interaction and aggressive behaviors. This may have detrimental effects on their ability to achieve developmental milestones in relation to their peers and on their ability to become fully functioning adults.

PTSD diagnostic issues

The assessment and treatment of PTSD in children and adolescents is often approached according to adult parameters. However, children and adolescents often present symptoms of PTSD very differently from adults (Carrion, Weems, Ray & Reiss, 2002). The applicability of the DSM's criteria to children has been debated by researchers (Nader, 2004). The current diagnostic criterion does not adequately capture the full range of behaviors and symptoms manifested by children and adolescents, because DSM-IVTR criteria for PTSD is based on the symptoms and presentations of adults, children and adolescents are often under-diagnosed or misdiagnosed which leads to lack of and/or inappropriate treatment of PTSD in this population.

Few studies have examined the prevalence rates of PTSD in children and adolescents. The few statistics that do exist suggest that 3-15% of girls and 1-6% of boys that have experienced a trauma could be diagnosed with PTSD. Rates of PTSD in "at-risk" children and adolescents has been reported at 3-100% (National Center for PTSD). This statistical variation in children may be attributed to a variety of factors including the diagnostic issues of using DSM-IVTR criteria based on adult PTSD diagnosis, a lack of instruments that accurately assess PTSD in children or the lack of published data on PTSD prevalence among the child and adolescent population.



Most literature that addresses PTSD in children highlights the limitations of using DSM-IVTR criteria to diagnose children with PTSD. In addition, many of the assessments used to assess and diagnose PTSD are still being developed and tested for validity and reliability. The AACAP Practice Guidelines (1998) notes that there is no “gold standard” assessment to diagnose or monitor PTSD symptoms in children and adolescents. They conclude that none of the existing self or parent report measures are optimal and therefore recommend relying instead on clinician interview of the child and parent(s) when assessing and diagnosing PTSD.

Levensdosky et. al. (2002) found that although many children suffer from PTSD symptoms, few meet DSM-IV criteria that would support that actual diagnosis. The traumas often associated with PTSD in children are intrafamilial child sexual abuse, neglect and emotional abuse in the household. Although these events are recognized as being related to the development of PTSD symptoms in children and adolescents, the chronic stress of living in such circumstances is often overlooked as a factor that contributes to chronic traumatization (Kaysen, et. al, 2003).


The DSM-IVTR PTSD diagnostic criteria does not include symptoms that may be socially or emotionally distressing to children, adolescents and their caregivers, such as regressive behaviors that may lead to peer rejection(e.g. enuresis, thumb-sucking), and limit their ability to function in various social contexts (Armsworth & Holaday, 1993). PTSD may manifest itself differently in children due to its adverse affects on their biological, psychological and social development (Davis & Siegel, 2000). This may be especially true for adolescents, as they must cope with significant changes in their

physical and psychosocial development in addition to the psychological symptoms of PTSD.

Impact of trauma on development

Trauma impacts children differently at each developmental stage. In order to understand the constellation and severity of PTSD symptoms, it is important to acknowledge the age at which a person experiences a traumatic event (Maercker, Michael, Fehm, Becker & Margraf, 2004). Studies that have addressed the intersection of developmental age and traumatic events have primarily been based on victims of single episode traumas such as natural disasters and war. It is, however, equally important to examine this phenomenon in children who have been exposed to trauma on a chronic, ongoing basis (e.g. child abuse).

Davis and Seigel (2000) categorize the effects of abuse (trauma) as having proximal and distal developmental effects. Proximal effects result in a disruption of recently acquired developmental skills, whereas distal effects may impact future developmental areas such as personality, perceptions of danger, representations of self and others and regulation of cognition and affect. Additionally, Pfefferbaum (1997) notes that a child's age and developmental level influences their response to risk, perception and understanding of the traumatic event, the development of cognition and attention, social skills, personality style, self-concept, self-esteem and impulse control. Furthermore, repeated victimization results in a much more complex impact on development in which the child integrates their traumatic experiences into their daily life



(Kaysen, et. al, 2003). Further investigation of how trauma is interpreted and understood by children is necessary for appropriate diagnosis and treatment.

Children exposed to danger that is unpredictable and uncontrollable such as child abuse must designate resources that would normally be devoted to their growth and development to survival. This reallocation of developmental resources coupled with a lack of nurturance and support from the child's primary caregiver places the child at risk for poorer development and an inability to regulate their emotional and physical states (Cook, Blaustein, Spinazzola & van der Kolk, 2003). This may manifest itself in multiple ways depending upon the child. For example two children living in an abusive household may respond differently to the same environment. One may become angry and violent, while the other becomes depressed and withdrawn. This difference in symptom presentation may at least in part be attributable to the developmental stage of the child at the time of the trauma. This may explain why children exposed to traumatic experiences at early ages are at risk for a variety of psychiatric problems (Cook et. al, 2003). Children may be diagnosed with specific psychiatric illnesses (e.g. ADHD, ODD separation anxiety, etc.), but the true underlying issue may be PTSD. This certainly contributes to the misdiagnosis and subsequent ineffective treatment of children with PTSD.

During adolescence, children are in the process of cognitive development that will lead to their ability to process complex and abstract ideas. Literature that addresses the cognitive effects of trauma on children report the following: confusion, academic difficulties, lowered IQ, learning disabilities, poor language and communication skills as

well as developmental delays (Armsworth & Holaday, 1993). Cognitive development is vital for children's learning and functioning in academic and social contexts, particularly for the successful transition from adolescence to adulthood.

Self-awareness begins to develop during adolescence. As such, adolescent's involvement with others and his/her ability to learn from past experiences can be affected by trauma at this stage. This is extremely important for children that have been exposed to chronic abuse and/or neglect, as they develop an understanding of what has and is occurring in their environment. Without the development of self-awareness an adolescent will have trouble processing and understanding experiences, which leads to ineffective reasoning and decision making. As these adolescents reach adulthood they will continue to utilize ineffective cognitive processing and reasoning skills when interacting with the larger world. The consequences are often much more detrimental in adulthood, frequently resulting in involvement with the criminal justice system. Children and adolescents will process information and experiences differently than adults due to their lack of fully developed judgment. This helps explain why PTSD manifests itself differently at various developmental levels. A child's lack of ability to comprehend and respond to the traumatic events appropriately may be attributed to their less developed cognitive and emotional capacities (Levendosky, Huth-Bocks, Semel & Shapiro, 2002). Cognitive deficits may mask underlying PTSD symptoms, therefore we may need to take them into consideration when assessing for PTSD symptomatology in children.

Future Directions

- Modify PTSD criteria for children, specifically chronic trauma

- Assessment—more empirical research to test validity/reliability of current child assessments.
- Education—educate clinicians, staff, families, etc. on difference in presentation, what that means for treatment and on a child's ability to function.

References

- AACAP (1998). Practice Parameters for the Assessment and Treatment of Children and Adolescents with Posttraumatic Stress Disorder. *Journal of the American Academy of Child and Adolescent Psychiatry*, 37(10S): 4S-26S.
- Armstrong, MW & Holaday, M. (1993). The Effects of Psychological Trauma on Children and Adolescents. *Journal of Counseling & Development*, 72: 49-56.
- Carrion, V., Weems, C., Ray, R. & Reiss, A. (2002). Toward an Empirical Definition of PTSD: The Phenomenology of PTSD symptom's in youth. *American Academy of Child and Adolescent Psychiatry*, 41(2): 166-173.
- Cook A., Blaustein, M., Spinazzola, J., and van der Kolk, B (Eds.). (2003). Complex trauma in children and adolescents. Washington, DC: U.S. Department of Health and Human Services, National Child Traumatic Stress Network.
- Davis, L. & Siegel, L. (2000). Posttraumatic Stress Disorder in Children and Adolescents: A review and analysis. *Clinical Child and Family Psychology Review*, 3(3): 135-154.
- Hamblen, J. PTSD in Children and Adolescents. A National Center for PTSD Fact Sheet. <http://www.ncptsd.va.gov/index.html>, Accessed April 2005.
- Kaysen, D., Resick, P. & Wise, D. (2003). Living In Danger: The Impact of chronic traumatization and the traumatic context on posttraumatic stress disorder. *Trauma, Violence and Abuse*, 4(3): 247-264.

- Levendosky, A., Huth-bocks, A., Semel, M. & Shapiro, D. (2002). Trauma Symptoms in Preschool-age Children Exposed to Domestic Violence. *Journal of Interpersonal Violence*, 17(2): 150-164.
- Maercker, A.; Michael, T.; Fehm, L.; Becker, E. & Margraf, J. (2004). Age of Traumatization as a Post-traumatic Stress Disorder or Major Depression in Young Women. *British Journal of Psychiatry*, 184: 482-487.
- McNally, R.J. (1991). Assessment of Posttraumatic Stress Disorder in Children. *Journal of Consulting and Clinical Psychology*, 3(4): 531-537.
- McNally, R.J. (1996). Assessment of Posttraumatic Stress Disorder in Children and Adolescents. *Journal of School Psychology*, 34(2): 147-161.
- Nader, K.O. (2004). Assessing Traumatic Experiences in Children and Adolescents: Self-reports of DSM PTSD criteria B-D symptoms. In Wilson, J.P and Keane, T.M. (Eds.) *Assessing Psychological Trauma and PTSD* (pp.513-537). New York: Guilford Press.
- Perrin, S., Smith, P. & Yule, W. (2000). Practitioner Review: The Assessment of post-traumatic stress disorder in children and adolescents. *Journal of Child Psychology and Psychiatry*, 41(3): 277-289.
- Pfefferbaum, B (1997). Posttraumatic Stress Disorder in Children: A review of the Past 10 years. *Journal of the American Academy of Child and Adolescent Psychiatry*, 36(11): 1503-1511.

Saigh, P. A., & Bremner, J. D. (1999). The history of post-traumatic stress disorder. In P. A. Saigh & J. D. Bremner (Eds.) Post-traumatic stress disorder: A comprehensive text (pp. 1-17). Boston: Allyn & Bacon.