

Research Article

Abuse Characteristics and Posttraumatic Stress Disorder among Child and Adolescents Victims of Sexual Abuse: A Preliminary Investigation

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Abstract

This pilot study reports the preliminary results of an ongoing research addressing the psychological assessment of traumatized children and adolescents in forensic settings. Specifically, prevalence of Post Traumatic Stress Disorder (PTSD) was assessed in a sample of 26 Italian children and adolescents alleged sexual abuse victims (14 males, 12 females; mean age, 13.34 ± 2.48 years; range, 6-17 years). The association between PTSD and the following Characteristics of Sexual Abuse (CSA) were explored: typology and severity of sexual abuse, duration and frequency of acts, perpetrator relationship, and form of coercion. Participants were administered a sociodemographic questionnaire, the Statement Validity Analysis, and the Clinician-Administered PTSD Scale. The rate of PTSD was 26.9%. PTSD was associated with type of act and form of coercion. No associations were found between PTSD and duration of abuse, frequency of abuse, and perpetrator relationship. Preliminary results of the study suggest that the development of PTSD was associated with the type of sexual abuse (oral, anal, or vaginal violent penetration), regardless of the nature of the relationship with the perpetrator and the frequency/duration of the acts. Such results are consistent with previous data suggesting that the painful experience of the sexual abuse per se is a traumatogenic factor.

Keywords: Sexual abuse; Trauma; Violence; Posttraumatic stress disorder; Childhood; Adolescence

Introduction

The association between sexual abuse and Post Traumatic Stress Disorder (PTSD) is a well-established finding. The occurrence of sexual traumatic events is associated with the development of the core psychopathological symptoms of PTSD: re-experiencing the event, avoidance of traumatic event-related stimuli, and hyper arousal [1-5]. The rate of PTSD among children and adolescent victims of sexual abuse has been estimated up to 38.5 % in nonclinical samples [6], 48.9 % in forensic samples [4], and 88 % in clinical samples [7].

Some studies attempted to identify Characteristics of Sexual Abuse (CSA) associated with PTSD in samples of children and adolescents. Examining a forensic sample of children and adolescents (mean age 12.4 years), Wolfe et al [4] found that PTSD was associated with duration of abuse and use of coercion, but not with frequency of abuse, type of act, and relationship with the offender. Lawyer et al [8] in a large nationally representative sample of adolescents aged 12-17 years found that the victims who had been sexually abused by non-strangers were at increased risk for developing PTSD. In a sample of 31 sexually abused children, assaults made by father or father figures resulted more easily associated with PTSD [2]. McLean et al. [9] found that CSA such as trauma type, relationship to the accused, and duration of abuse were not associated with PTSD severity in a sample of adolescents seeking treatment for PTSD.

The present study reports the preliminary results of an ongoing

research addressing the psychological assessment of traumatized children and adolescents in forensic settings. Specifically, the purpose of the study was to further investigate the prevalence of PTSD via semi-structured clinical interview. To the best of our knowledge, there are no studies that have assessed PTSD with standardized methods in alleged sexual abuse victims. The association between PTSD and the following CSA were also explored: typology and severity of sexual abuse, duration and frequency of acts, perpetrator relationship, and form of coercion.

Materials and Methods

The study was performed on 26 children and adolescents from the Courts of Palermo and Termini Immerge (Italy) alleged sexual abuse victims (14 males, 12 females; mean age, 13.34 ± 2.48 years; range, 6-17 years). The inclusion criteria were: sexual assault, and age ranging between 6 and 18 (Table 1). Assessment procedure was initially conducted by one of the authors, who served as an eyewitness expert for these allegations (Giuseppe Scimeca); protocols were subsequently recoded by the other authors under blind conditions. Participants were administered a sociodemographic questionnaire; the Statement Validity Analysis [10] was conducted to retrieve information about the characteristics of sexual abuse (Table 1). Allegations of sexual abuse were not taken into consideration unless they passed the screening for credibility as assessed via the Criteria-Based Content Analysis [11]. Diagnosis of PTSD was determined using the Clinician-Administered PTSD Scale (CAPS) [12]. The study

Table 1: Comparison of PTSD Positive and Negative Groups on Victim and Abuse Characteristics.

Variable	PTSD Positive (n = 7)	PTSD Negative (n = 19)	Test
Sex:			
Males	7	14	$\chi^2 = 11.175^{**}$
Females	0	5	
Age (years)	14.71	12.84	$F = 3.165$
SD	2.36	2.36	
Mean education (years)	8	7.84	$F = .035$
SD	.81	2.16	
Type of Act			
Indecent exposure	0	4	$\chi^2 = 9.227^*$
Attempted/simulated intercourse	0	2	
Touching	1	9	
Intercourse	6	4	
Form of coercion			
Use of force	6	3	$\chi^2 = 13.293^{**}$
Threat	1	1	
Manipulation	0	15	
Perpetrator relationship			
Stranger	1	2	$\chi^2 = .248$
Nonfamily member	3	13	
Extended family	0	2	
Parent	3	2	
Frequency of acts			
Once	1	9	$\chi^2 = .294$
2 to 5	2	4	
> 5	4	6	
Duration (months)			
SD	14.42	9.36	$F = .310$
	25.85	14.42	
Mean age at first abuse (years)			
SD	11.42	11.57	$F = .018$
	2.43	2.54	

Note: * $p < .05$; ** $p < .01$.

was approved by the review board of the Department of Neuroscience at the University of Messina. Statistical analysis was performed with SPSS for Windows 16.0.

Results and Discussion

On the basis of the administration of the CAPS, 7 minors met the DSM-IV diagnostic criteria for posttraumatic stress disorder (26.9%, $N = 7$). For the purpose of this study, the sample was divided into two subsamples of abused minors who met the PTSD criteria (PTSD positive subsample) and who did not meet PTSD criteria (PTSD negative subsample, $N=19$). No differences between groups in age, level of education, and age at first abuse were found. A relevant effect of gender, with all the traumatized minors being females, was found; this finding is consistent with current evidence suggesting that females are more likely than males to report a history of sexual traumatic events [4, 13, 14].

Concerning the association between PTSD and CSA, results showed that PTSD was associated with the type of act and the form of coercion. No associations were found between PTSD and the duration or frequency of abuse, and with perpetrator relationship. Preliminary results of the study suggest that the development of PTSD was associated with the type of sexual abuse (oral, anal, or vaginal violent penetration), regardless of the nature of the relationship with the perpetrator and the frequency/duration of the acts. It can be hypothesized that the painful experience of the boundary violations and intrusiveness characterizing a coerced penetration may be more important than the number of times it happens. This result is consistent with a retrospective study of Mennen and Meadow [15],

who found that penetration and use of force were the main factors associated with distress level in a sample of 134 sexually abused children.

Regarding frequency and duration of sexual abuse, further analyses were conducted. Since PTSD symptomatology was significantly related with the presence of multiple abusive episodes [16], a Spearman rho correlation between frequency and duration of sexual abuse and severity of PTSD was performed. A significant correlation between duration of sexual abuse and severity of PTSD was found ($\rho = .882$; $p = .004$; $N = 7$). Accordingly, it can be hypothesized that the duration of sexual abuse perpetration may have a significant role in determining the severity of PTSD symptoms rather than the pathogenesis of the disorder. It should be noted that the great amount of research assessing PTSD in childhood and adolescence mainly relies on PTSD self-report measures or symptom checklists. Nevertheless, such psychometric instruments may not be enough sensitive for evaluating whether emotional difficulties deriving from traumatic events reach the severity of a mental disease. Future research on sexually abused children and adolescents using standardized structured clinical interview may help to overcome this limitation [17].

Furthermore, our findings did not support the commonly held belief that PTSD is more likely to occur among sexual abuse victims of a family member perpetrator [8, 9]. As suggested by Lucenko et al. [18], it can be hypothesized that the nature of the relationship (e.g. trust, attachment, caretaking) may be more important than the proximity to perpetrator.

The results of this preliminary study may have interesting implications for forensic practice. Eyewitness experts dealing with credibility of allegations of sexual abuse have to analyze the coherence between CSA and the related emotional distress. As suggested by our findings, the expert should evaluate PTSD in the presence of at least one act of violent penetration; conversely, PTSD is unlikely to occur when a child or an adolescent refer less severe forms of sexual abuse (such as indecent exposure, attempted/simulated intercourse, and touching) or when the act is experienced without the use of coercion (such as sexual experiences involving manipulation).

This study has the main limitations of a pilot study, such as the small sample size that reduces statistical power and generalizability of findings. Additionally, participants with PTSD were only 7 females: this further limits the possibility of finding relevant statistical associations.

Conclusion

Studies addressing the relationship between PTSD and the characteristics of sexual abuse in children and adolescents have relevant theoretical and practical forensic applications. The results of this study showed that 26.9% of children and adolescents that serve as witness for their allegations of sexual abuse report PTSD. Also, characteristics of sexual abuse associated with PTSD are oral, anal, and vaginal penetration, and the use of force. Implications for eyewitness experts dealing with credibility of allegations of sexual abuse are discussed.

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References

- Burgess AW, Hartman CR, Mc Causland MP, Powers P. Response patterns in children and adolescents exploited through sex rings and pornography. *Am J Psychiatry*. 1984; 141: 656-662.
- McLeer SV, Deblinger E, Atkins MS, Foa EB, Ralphe DL. Post-traumatic stress disorder in sexually abused children. *J Am Acad Child Adolesc Psychiatry*. 1988; 27: 650-654.
- Wolfe VV, Gentile C, Wolfe DA. The impact of sexual abuse on children: A PTSD formulation. *Behav Ther*. 1989; 20: 215-228.
- Wolfe DA, Sas L, Wekerle C. Factors associated with the development of posttraumatic stress disorder among child victims of sexual abuse. *Child Abuse Negl*. 1994; 18: 37-50.
- Timmons-Mitchell J, Chandler-Holtz D, Semple WE. Post-Traumatic Stress Disorder Symptoms in Child Sexual Abuse Victims and Their Mothers. *J Child Sex Abus*. 1998; 6: 1-14.
- Perkonig A, Kessler RC, Storz S, Wittchen HU. Traumatic events and post-traumatic stress disorder in the community: prevalence, risk factors and comorbidity. *Acta Psychiatr Scand*. 2000; 101: 46-59.
- Carey PD, Walker JL, Rossouw W, Seedat S, Stein DJ. Risk indicators and psychopathology in traumatised children and adolescents with a history of sexual abuse. *Eur Child Adolesc Psychiatry*. 2008; 17: 93-98.
- Lawyer SR, Ruggiero KJ, Resnick HS, Kilpatrick DG, Saunders BE. Mental health correlates of the victim-perpetrator relationship among interpersonally victimized adolescents. *J Interpers Violence*. 2006; 21: 1333-1353.
- McLean CP, Morris SH, Conklin P, Jayawickreme N, Foa EB. Trauma Characteristics and Posttraumatic Stress Disorder among Adolescent Survivors of Childhood Sexual Abuse. *J Fam Violence*. 2014; 29: 559-566.
- Yuille JC, Hunter R, Joffe R, Zapamiuk J. Interviewing children in sexual abuse cases. Goodman GS, Bottoms BL, editors. *Child Victims, Child Witness*. New York-London: Guilford Press. 1993; 95-116.
- Steller M, Kohnken G. *Criteria-Based Content Analysis*. Raskin DC, editor. In: *Psychological Methods in Criminal Investigation and Evidence*. New York: Springer-Verlag. 1989; 217-245.
- Blake DD, Weathers FW, Nagy LM, Kaloupek DG, Gusman FD, Charney DS, et al. The development of a Clinician-Administered PTSD Scale. *J Trauma Stress*. 1995; 8: 75-90.
- Breslau N, Davis GC, Andreski P, Peterson E. Traumatic events and posttraumatic stress disorder in an urban population of young adults. *Arch Gen Psychiatry*. 1991; 48: 216-222.
- Kessler RC, Sonnega A, Bromet E, Hughes M, Nelson CB. Posttraumatic stress disorder in the National Comorbidity Survey. *Arch Gen Psychiatry*. 1995; 52: 1048-1060.
- Mennen FE, Meadow D. The Relationship of Abuse Characteristics to Symptoms in Sexually Abused Girls. *J Interpers Violence*. 1995; 10: 259-274.
- Briggs L, Joyce PR. What determines post-traumatic stress disorder symptomatology for survivors of childhood sexual abuse? *Child Abuse Negl*. 1997; 21: 575-582.
- Scimeca G. La valutazione psicodiagnostica dell'abuso sessuale. Strategie per la soluzione dei quesiti peritali. [Psychodiagnostic assessment of sexual abuse. Strategies for solving expert questions]. Milano: FrancoAngeli. 2011.
- Lucenko BA, Gold SN, Cott MA. Relationship to Perpetrator and Posttraumatic Symptomatology Among Sexual Abuse Survivors. *J Fam Violence*. 2000; 15: 169-179.