
Brief Report

Childhood Trauma Histories in Adolescent Inpatients

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The authors describe the prevalence of childhood traumatic experiences among adolescent inpatients. A Childhood Trauma Chart Review Scale (CTCRS) was developed to assess traumatic experiences during childhood and adolescence. The CTCRS was reliably applied to the medical records of 75 adolescent inpatients who had been given structured clinical interviews for DSM-III-R diagnoses at the time of admission. Most subjects (81%) had experienced at least one traumatic event during childhood, with loss of caregiver being the most frequent type of traumatic experience. Many subjects had multiple types of traumatic experiences, during both early and late childhood. A history of childhood trauma was associated with greater functional impairment and higher likelihood of having a personality disorder, but with no difference in Axis I diagnoses.

KEY WORDS: abuse; adolescence; childhood; loss; trauma.

Although clinical investigators have demonstrated the high frequency of traumatic events in adult and child psychiatric populations, there has been relatively less information concerning trauma in adolescents (Ludolph et al., 1990; Sansonnet-Hayden, Haley, Marriage, & Fine, 1987). Several studies have documented the occurrence of trauma in adolescents with dis-

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ruptive behavior disorders. For example, Pelcovitz and co-workers (Pelcovitz et al., 1994) found that physically abused adolescents had higher rates of depression, conduct disorder, internalizing and externalizing problems, and social deficits—though, not of posttraumatic stress disorder (PTSD). Livingston (1987) also found that physical abuse was related to conduct disorder. McManus and colleagues (McManus, Alessi, Grapentine, & Brickman, 1984) found that the majority of seriously delinquent adolescents had experienced parental death or divorce—and that almost half of these subjects were physically abused, neglected, or abandoned by age 10. These findings, taken together, suggest that some adolescent survivors of early life traumas are at risk for behavioral and social difficulties.

Previous investigations that have examined diagnostic issues in trauma victims have focused upon selected diagnostic groups. The question of the specificity of diagnosis for trauma victims within a group of severely ill adolescent inpatients has not been addressed. Moreover, previous studies have tended to focus on specific traumatic events rather than on the cumulative impact of multiple traumatic occurrences.

The present study utilized medical records from the former long-term treatment unit for adolescents at the Yale Psychiatric Institute—which included comprehensive developmental histories that documented a wide range of childhood events—as well as structured diagnostic interviews. The purposes of the study were: (1) to describe the frequency, types, and patterns of traumatic events in the developmental histories of adolescent inpatients; (2) to describe the diagnostic and functional characteristics that differentiate traumatized from non-traumatized patients; and (3) to consider implications for treatment and for further study.

Method

The sample consisted of 75 adolescent inpatients—45 males and 30 females—ranging in age from 13 to 18 years ($M = 15.7$; $SD = 1.3$). Eighty-seven percent were Caucasian, 5% were African American, 3% were Hispanic American, 3% were Asian American, and 8% were of mixed ethnicity. The subjects were predominantly middle-class, using the Two-Factor Index of Social Standing (Hollingshead & Redlich, 1958). The mean number of prior psychiatric hospitalizations was 2.1.

On admission, all subjects received a systematic diagnostic evaluation for *DSM-III-R* disorders. Most Axis I disorders were assessed by the Schedule for Affective Disorders and Schizophrenia for School-Age Children—Epidemiologic Version (K-SADS-E; Orvaschel & Puig-Antich, 1987). Axis I disorders that could not be assessed directly by the K-SADS-E (such as

PTSD) were evaluated through other clinical information (see below). Axis II personality disorders were assessed by the Personality Disorder Examination (PDE; Loranger, 1988). In adult subjects personality disorder traits must be present and pervasive for a minimum of 5 years; in adolescent subjects a trait is considered present if it has persisted for 3 years (Loranger, 1988). Interviews were conducted by doctoral and master's level clinicians who had been trained to a high level of reliability. Interrater reliability of structured interview diagnoses was assessed by simultaneous ratings by pairs of raters: for Axis I, average kappa was .77; for Axis II, average kappa was .84. Final research diagnoses were established by the "best estimate" method, with information not only from structured interviews, but also from admission notes and other aspects of the hospital chart. Subjects' level of functioning was also rated at the time of admission, using the Global Assessment of Functioning (GAF) scale (American Psychiatric Association, 1987).

The Childhood Trauma Chart Review Scale (CTCRS; Becker & Weine, 1992) was developed in order to identify and to quantify five types of traumatic event in each of three developmental epochs—early childhood (0–6 years), late childhood (6–12 years), and adolescence (12–18 years). *Physical abuse* is defined as any experience of physical assault from an older person in a position of authority, excluding ordinary corporal punishment. *Sexual abuse* is defined as any kind of sexual contact, or attempted contact, by an older person in a position of authority. *Loss of caregiver* is separation from a primary care-giver, permanently or temporarily, for a period of at least six months (or at least one month during early childhood). *Domestic violence* is any experience of observing violence within the home, which may be perpetrated by someone toward another—or toward oneself. *Gross neglect* is defined as neglect of the basic needs of a child, of a magnitude that it would warrant reporting to the authorities. Ratings were based entirely upon information obtained from the written protocol of the Initial Treatment Review meeting.

The written protocol for the Initial Treatment Review included extensive sections on the developmental, family, and psychiatric histories of the patient. Although semi-structured interviews were not used in obtaining the developmental history, both the individual therapist and the family therapist routinely asked the patient/family about the types of traumatic experiences assessed by the CTCRS; responses were recorded in the written protocol. Any inconsistencies in the facts of the case were discussed in the Treatment Review meeting—and the written protocol was amended before becoming part of the permanent medical record.

Reliability of the CTCRS was demonstrated in a previous study (Weine, Becker, Levy, & McGlashan, under review). Intraclass correlation coefficients (ICC) ranged from .74 to .99, with an average ICC for total trauma

of .90. Kappa coefficients for the presence or absence of trauma for each type of traumatic experience were generally good, ranging from .59 to 1.0, with an average kappa of .75. Because our subjects were adolescents, we examined only the childhood traumatic experiences by combining the early and late childhood epochs. For the purpose of this study, each type of traumatic event was scored as either absent or present during the epochs under consideration. The CTCRS was applied to the charts by a master's level research assistant, who was trained to a high level of reliability.

Results

Table 1 shows the frequencies of the various types of traumatic experience for the overall sample. Sixty subjects (81%) suffered at least one childhood traumatic experience. Loss of caregiver was the most frequently experienced type of event, followed by domestic violence, sexual abuse, physical abuse, and gross neglect. The number of childhood traumatic experiences ranged from 0 to 10 ($M = 2.1$, $SD = 2.1$). The majority of traumatized subjects experienced multiple traumas: 36 subjects experienced two or more traumas; 24 subjects experienced three or more traumas; and 15 subjects experienced four or more traumas. Twenty seven subjects experienced traumatic events in both early and late childhood.

Table 1 also shows the distribution of types of traumatic experience, by gender. Chi-square analyses revealed one significant group difference: girls were more likely to have experienced loss of a caregiver. There were no other gender differences.

Table 1. Frequency (and %) of Traumatic Experience, by Gender

Type of Trauma	Males ($n = 45$)	Females ($n = 30$)	Total ($N = 75$)
Any traumatic experience	34 (76%)	26 (87%)	60 (81%)
Physical abuse	6 (13%)	4 (13%)	10 (13%)
Sexual abuse	7 (16%)	5 (17%)	12 (16%)
Loss of caregiver	27 (60%)	25 (83%)	52 (69%) ^a
Domestic violence	9 (20%)	5 (17%)	14 (19%)
Gross neglect	5 (11%)	3 (10%)	8 (11%)

^a $\chi^2 = 4.61$, $p = .03$.

When the traumatized group was compared to the non-traumatized group, no group differences were noted in age, ethnicity, socio-economic status, or number of prior hospitalizations.

Table 2 compares the traumatized and non-traumatized groups for Axis I disorders and Axis II personality disorders. All subjects had at least one Axis I diagnosis. Mood disorders and disruptive behavior disorders were common—though not more likely to occur in either group. Anxiety disorders were twice as common in the traumatized group, though the chi-square was not significant. There were no diagnoses of PTSD, nor of a dissociative disorder, in either group. The traumatized group was more likely to be diagnosed with a personality disorder. Further analysis, however, showed no differences in the rates of Cluster A, B, or C disorders.

Finally, traumatized subjects were more severely impaired than non-traumatized subjects, as reflected in lower mean GAF scores (35.9 vs. 41.5), $t = 2.72, p = .01$.

Discussion

Multiple and Repeated Early Life Traumatic Events

These findings suggest that early life traumatic events are overwhelmingly present in the developmental histories of most adolescent inpatients, and that they therefore may be relevant in the pathogenesis of psychiatric disorders in adolescents. We found frequency rates of physical abuse, sexual

Table 2. Frequency (and %) of Diagnoses, by Group

Diagnosis	Nontraumatized Group (<i>n</i> = 15)	Traumatized Group (<i>n</i> = 60)
Psychotic disorders	2 (13%)	4 (7%)
Mood disorders	12 (80%)	42 (70%)
Anxiety disorders	2 (13%)	15 (25%)
Disruptive behavior disorders	13 (87%)	48 (81%)
Eating disorders	2 (13%)	7 (12%)
Dissociative disorders	0 (0%)	0 (0%)
Substance use disorders	18 (53%)	29 (48%)
Personality disorders	7 (47%)	44 (73%) ^a

^a $\chi^2 = 3.92, p = .05$.

abuse, and witnessing domestic violence that are comparable with the studies of borderline adults, violent juvenile delinquents, and borderline children. The frequency of different types of traumatic experiences in this inpatient sample was nearly equivalent in boys and girls, with the exception of loss of caregiver. Conventional opinion, which suggests higher rates of abuse in girls than in boys, may not hold for more severely ill populations.

The multiplicity and repetitiveness of the traumatic events experienced by our subjects deserves special focus. Overall, this pattern of traumatization is not isolate and circumscribed, but continuous and pervasive. It appears consistent with the pattern of prolonged, repeated, and multiple traumatization that is represented in Herman's "Complex PTSD" and Terr's "Type II Childhood Trauma" (Herman, 1993; Terr, 1991). This pattern of prolonged, repeated, and multiple traumas calls for detailed assessments of both particular traumatic events and of the age-related developmental periods when the traumatic events occurred. Although there is not yet research demonstrating the specificity of traumatic events for psychiatric diagnosis, there is evidence to suggest that one traumatic event is not the same as another (Aber & Cicchetti, 1984).

Comparing Diagnostic and Functional Characteristics

Our findings demonstrate that, among adolescent inpatients, a history of childhood traumatization is associated with a psychopathologic presentation that is not distinct in terms of Axis I disorders. Traumatized adolescent inpatients were not significantly different in their rates of Axis I disorders when compared to nontraumatized adolescent inpatients. It is interesting to note that this lack of group difference also applies to PTSD and dissociative disorders. However, traumatized adolescents may not manifest adult forms of PTSD. Rather the trauma may result in traumatic play, behavioral disturbances, or disturbances of the self.

This study also demonstrated that, among adolescent inpatients, histories of childhood trauma were associated with two indicators of negative outcome: (1) traumatized patients had greater functional impairment than non-traumatized patients; and (2) traumatized patients were more likely to be diagnosed with a personality disorder. In the currently used diagnostic system, there is no Axis I diagnosis that attempts to describe a trauma-related syndrome other than PTSD. The diagnosis of "DES NOS" has been proposed to describe the psychiatric sequelae of chronic interpersonal traumatization (Pelcovitz et al., 1997).

Study Limitations and Implications for Future Research

Due to the limitations of the K-SADS-E, our method of assessing PTSD was not standardized. Given current evidence that children can be diagnosed with PTSD, this is a shortcoming of our study. Indeed, our discordance with others who have found PTSD in children may be largely due to our assessment method.

The trauma-related data for this study were collected by chart review, and can be no more accurate than the clinical records. And because we relied on clinical records, there were limitations on our ability to distinguish between specific forms of trauma within broader trauma categories. However, our method of identifying early life trauma did not rely only upon the individual patient's recollection of prior abuse, but also upon the family and other sources that could corroborate the occurrence of a traumatic event. Although false reporting of traumatic events cannot be conclusively ruled out (Loftus, 1993), it is unlikely when clinicians or researchers thoroughly investigate claims and rely upon corroborative evidence (Herman & Schatzow, 1987; Hussain & Chapel, 1983). Thus, our chart review method, which relied on the data of multiple observers, is likely more conservative than most other methods of reporting, and probably underestimates frequency rather than overestimates it. Also, we do not have data about how the traumatic events were appraised. It is possible that, for some or many, the events in question may not have been seen as traumatic. Finally, our chart-review instrument assessed only for interpersonal traumatic experiences, and did not take into account natural—or impersonal—traumas.

Future studies are needed to elucidate further the broad range of symptomatic and dysfunctional sequelae of childhood trauma in adolescent inpatients. Ultimately, prospective studies will be most helpful in answering critical questions regarding the effects of childhood traumatic events upon pathogenesis later in life.

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