Childhood Trauma in Borderline Personality Disorder

Judith Lewis Herman, M.D., J. Christopher Perry, M.P.H., M.D., and Bessel A. van der Kolk, M.D.

Subjects with borderline personality disorder (N=21) or borderline traits (N=11) and nonborderline subjects with closely related diagnoses (N=23) were interviewed in depth regarding experiences of major childhood trauma. Significantly more borderline subjects (81%) gave histories of such trauma, including physical abuse (71%), sexual abuse (68%), and witnessing serious domestic violence (62%); abuse histories were less common in those with borderline traits and least common in the subjects with no borderline diagnosis. These results demonstrate a strong association between a diagnosis of borderline personality disorder and a history of abuse in childhood.

(Am J Psychiatry 1989; 146:490–495)

In the past two decades, borderline personality disorder has become the subject of intensive theoretical and clinical investigation. Beginning with Stern (1), successive investigators have refined their descriptive formulations, culminating in the development of DSM-III criteria for a reliably identifiable syndrome, stable over time, with serious morbidity (2–9). It is generally agreed that patients with borderline personality disorder are difficult to treat because of the intensity of their engagement with caregivers, the sometimes overwhelming nature of their demands for care, and the strong emotions and conflicts that they provoke in others (10, 11).

Attempts to conceptualize the underlying pathology of borderline personality disorder have generally invoked either a biologic model of affective disorder (12–15) or a psychodynamic model of developmental arrest (10, 11, 16). In the developmental formulation, disruptions in relations with primary caretakers are thought to be an important factor in the genesis of the disorder. Parental neglect and unprotectiveness are cited by Walsh (17), Frank and Paris (18), Gunderson (6), and Feldman and Gutman (19). Early, prolonged separation from or permanent loss of primary caretakers is described anecdotally by Adler (11) and demonstrated in a significant proportion of patients in retrospective studies by Akiskal (13), Soloff and Millward (15), and Bradley (20).

Although disruption of early attachments is frequently cited, the role of childhood trauma, including parental abuse, in the development of this disorder has received less systematic attention. Data from three small clinical studies offer suggestive evidence that histories of childhood abuse may be especially common in borderline patients. A study of 12 hospitalized borderline patients reported by Stone (21) indicated that 75% had a history of incest. In a chart review study of psychiatric outpatients at an urban teaching hospital, Herman (22) found that eight (67%) of 12 patients diagnosed as borderline according to DSM-III criteria had a history of abuse in childhood or adolescence; such histories were found in only 22% of the entire outpatient population. Bryer et al. (23), in an interview study, found that 12 (86%) of 14 hospitalized borderline patients diagnosed by DSM-III criteria had a history of sexual abuse before age 16, whereas early sexual abuse was reported by 21% of the entire inpatient population. Although all of these studies involve small numbers of patients, their findings are consistent and provide sufficient evidence to warrant further investigation.

The present study was undertaken to test the hypothesis that a history of childhood trauma is particularly common among patients with borderline personality disorder. A fuller exposition of this hypothesis has been published (24).

METHOD

Subjects were drawn from an ongoing longitudinal study of borderline personality disorder in comparison to the closely related diagnoses of schizotypal personality disorder, antisocial personality disorder, and bipolar II affective disorder. Subjects were originally recruited from ambulatory mental health settings and from advertisements for symptomatic volunteers. The methods of subject selection have been previously described in detail (9, 25, 26). After full explanation of

Received March 28, 1988; revision received Sept. 22, 1988; accepted Oct. 18, 1988. From the Department of Psychiatry, Harvard Medical School, The Cambridge Hospital, Cambridge, Mass. Address reprint requests to Dr. Herman, 61 Roseland St, Somerville, MA 02143.

Supported in part by NIMH grant MH-34123.

The authors thank Idell Goldenberg, M.A., Beth Hoke, M.A., Barbara Matthews, and Chris Pagano, who served as research assistants.

Copyright © 1989 American Psychiatric Association.
the study, informed consent was obtained from all subjects, who were paid for their time at each interview.

Most diagnostic interviews were conducted by the principal investigator of the longitudinal study (J.C.P.). Definite borderline personality disorder was diagnosed if the subject met the cutoff of five or more DSM-III criteria and had a score higher than 150 on the Borderline Personality Scale, second version, a 52-item precursor of the Borderline Personality Disorder Scale, that rates major features of the disorder in nine subcategories (25, 26). Borderline trait was diagnosed if the subject met at least four DSM-III criteria and had a score higher than 130 on the Borderline Personality Scale. Antisocial and schizotypal personality disorders were diagnosed according to DSM-III criteria. Bipolar II disorder was diagnosed according to Research Diagnostic Criteria (27).

Childhood histories were obtained by means of a 100-item semistructured interview, which generally required 2 hours (Herman and van der Kolk, unpublished manuscript). The interview covered a description of primary caretakers and other important relationships in childhood and adolescence, major separations, moves and losses, sibling and peer relationships, family discipline and conflict resolution, family alcoholism, domestic violence, and physical and sexual abuse. Subjects were encouraged to narrate their experiences in detail, rather than simply providing yes or no answers to questions, so that the internal consistency and credibility of the history could be evaluated. All interviews were conducted by one of the authors (J.H. or B.V.d.K.). Interviewers were blind to the subjects’ diagnoses and all other previously obtained information.

The interviews were scored for positive indexes of trauma in three areas: physical abuse, sexual abuse, and witnessing domestic violence. Instances of culturally-accepted corporal punishment and fighting or consensual sexual exploration between peers were not rated as abusive. Equivocal situations were scored as negative.

Protocols were scored for occurrence of each type of trauma at each of three developmental stages: early childhood (0–6 years), latency (7–12 years), and adolescence (13–18 years). Within each developmental stage, no distinction in scoring was made between single and repeated instances of abuse by the same perpetrator; however, additional positive scores in each category were given for abuse by different perpetrators. A rough composite measure of trauma was constructed by adding the positive scores for each category of trauma at each developmental stage. Thus a range of scores was generated from 0 (no trauma at any developmental stage) to 9 or higher (all three forms of trauma at all three stages or multiple perpetrators at one or more stages).

In addition to the structured interview, subjects completed two brief self-report questionnaires: the Impact of Event Scale (28), which was used as a measure of current symptoms of posttraumatic stress disorder, and the Dissociative Experiences Scale (29), which probed familiarity with dissociative states.

Data analysis was conducted by means of cross-tabulation and Kendall’s tau computation for ordinal by categorical tables. General linear models procedure for analysis of variance (ANOVA) with post hoc analysis for comparison of means was used for continuous variables. Spearman correlation coefficients were calculated for bivariate relationships.

RESULTS

Of 75 subjects enrolled in the ongoing longitudinal study, we were able to contact 58 (77%) during the time period in which this investigation was conducted (June 1986 to December 1987). Three subjects refused to participate after being informed of the content of the interview. Of the 55 subjects, 29 women and 26 men, who participated in the trauma interviews, 21 (17 women and 4 men) were diagnosed as having definite borderline personality disorder, 11 (all men) as having borderline traits, 11 (six women and five men) as having bipolar II disorder, six (three women and three men) as having antisocial personality disorder, and six (three women and three men) as having schizotypal personality disorder.

The frequencies of abuse histories in each diagnostic category are given in table 1. The great majority (N=17 or 81%) of subjects with definite borderline personality disorder gave histories of major childhood trauma; 71% (N=15) had been physically abused, 67% (N=14) had been sexually abused, and 62% (N=13) had witnessed domestic violence. Abuse histories were less common in patients with borderline trait and least common in the subjects with no borderline diagnosis. Histories of trauma in early childhood (0–6 years) were found almost exclusively in borderline subjects, and over half of the borderline subjects (N=12 or 57%) reported such experiences in early childhood. Borderline subjects also reported significantly more abuse experiences in latency than other subjects. The differences between the groups diminished with increasing age at onset of abuse, becoming least significant in adolescence.

Borderline subjects not only suffered from abusive experiences more commonly than others but also reported more types of trauma, beginning earlier in childhood and repeated over longer time periods, resulting in higher total trauma scores. The distribution of childhood trauma scores is given in figure 1. Scores ranged from zero (18 subjects) to 10 (one subject). An ANOVA of mean trauma score by borderline diagnosis was significant (F=7.82, df=2, 54, p=0.001), and a post hoc analysis (alpha=0.05) indicated that the mean trauma score for the group with definite borderline personality disorder (4.29±2.89) was significantly higher than the means for the group with borderline traits (1.73±1.95) and the means for those with any nonborderline closely related diagnosis (1.63±2.05).
TABLE 1. Traumatic Childhood Experiences in 55 Subjects in Longitudinal Study of Borderline Personality Disorder

<table>
<thead>
<tr>
<th>Age at Onset and Type of Trauma</th>
<th>Borderline Personality Disorder (N=21)</th>
<th>Borderline Trait (N=11)</th>
<th>No Borderline Personality Disorder (N=23)</th>
<th>Kendall’s Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N %</td>
<td>N %</td>
<td>N %</td>
<td>tau   Z   p</td>
</tr>
<tr>
<td>Early childhood (0–6 years)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical abuse</td>
<td>7 33</td>
<td>0 0</td>
<td>1 4</td>
<td>0.34  3.14  &lt;0.005</td>
</tr>
<tr>
<td>Sexual abuse</td>
<td>4 19</td>
<td>1 9</td>
<td>0 0</td>
<td>0.28  3.39  &lt;0.001</td>
</tr>
<tr>
<td>Witness to domestic violence</td>
<td>7 33</td>
<td>0 0</td>
<td>2 9</td>
<td>0.28  2.20  &lt;0.05</td>
</tr>
<tr>
<td>Any trauma</td>
<td>12 57</td>
<td>1 9</td>
<td>3 13</td>
<td>0.40  3.48  &lt;0.001</td>
</tr>
<tr>
<td>Latency (7–12 years)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical abuse</td>
<td>15 71</td>
<td>2 18</td>
<td>5 22</td>
<td>0.42  3.63  &lt;0.001</td>
</tr>
<tr>
<td>Sexual abuse</td>
<td>7 33</td>
<td>2 18</td>
<td>2 9</td>
<td>0.26  2.22  &lt;0.05</td>
</tr>
<tr>
<td>Witness to domestic violence</td>
<td>10 48</td>
<td>4 37</td>
<td>5 22</td>
<td>0.23  1.87  &lt;0.10</td>
</tr>
<tr>
<td>Any trauma</td>
<td>17 81</td>
<td>6 55</td>
<td>8 35</td>
<td>0.39  3.49  &lt;0.001</td>
</tr>
<tr>
<td>Adolescence (13-18 years)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical abuse</td>
<td>13 62</td>
<td>3 27</td>
<td>8 35</td>
<td>0.23  1.79  &lt;0.10</td>
</tr>
<tr>
<td>Sexual abuse</td>
<td>11 52</td>
<td>2 18</td>
<td>6 26</td>
<td>0.23  1.80  &lt;0.10</td>
</tr>
<tr>
<td>Witness to domestic violence</td>
<td>10 48</td>
<td>2 18</td>
<td>5 22</td>
<td>0.23  1.83  &lt;0.10</td>
</tr>
<tr>
<td>Any trauma</td>
<td>17 81</td>
<td>5 45</td>
<td>12 32</td>
<td>0.25  2.07  &lt;0.05</td>
</tr>
<tr>
<td>All ages (0–18 years)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical abuse</td>
<td>15 71</td>
<td>4 36</td>
<td>9 39</td>
<td>0.27  2.20  &lt;0.05</td>
</tr>
<tr>
<td>Sexual abuse</td>
<td>14 67</td>
<td>3 27</td>
<td>6 26</td>
<td>0.34  2.87  &lt;0.005</td>
</tr>
<tr>
<td>Witness to domestic violence</td>
<td>13 62</td>
<td>4 36</td>
<td>7 30</td>
<td>0.27  2.16  &lt;0.05</td>
</tr>
<tr>
<td>Any trauma</td>
<td>17 81</td>
<td>8 73</td>
<td>12 32</td>
<td>0.31  2.67  &lt;0.01</td>
</tr>
</tbody>
</table>

FIGURE 1. Distribution of Childhood Trauma Scores Among 55 Subjects in a Longitudinal Study of Borderline Personality Disorder

RATING total childhood trauma as a continuous variable allowed for correlation with degree of personality pathology, as measured by the Borderline Personality Disorder Scale, antisocial personality disorder lifetime symptom count, and schizotypal personality disorder lifetime symptom count (table 2). Degree of borderline psychopathology was positively correlated with all three forms of childhood trauma. No such correlation was found for antisocial or schizotypal personality pathology, although a trend relationship was found between antisocial symptom count and total trauma score (p<0.10).

As anticipated, gender differences were also significant. The mean total trauma score was 3.64±2.97 for women and 1.58±1.81 for men (alpha=0.05). Women reported more physical and more sexual abuse in childhood, whereas witnessing domestic violence was reported equally by men and women. After controlling for diagnosis, the gender difference disappeared with respect to reports of physical abuse (F=0.28) but remained significant with respect to reports of sexual abuse (F=8.74, df=4, 50, p=0.005). The positive association between a borderline diagnosis and total childhood trauma score remained significant when the effects of gender differences were controlled. An ANOVA showed main effects for gender (F=10.46, df=4, 50, p=0.002) and diagnosis (F=4.51, df=4, 50, p=0.016) and no significant interaction effect between gender and diagnosis (F=0.02).
After controlling for diagnosis, the gender effect diminished to a significant trend \((F=3.28, df=4, 50, p=0.08)\). After gender was controlled for, the effect of diagnosis remained significant \((F=3.71, df=4, 50, p=0.03)\).

The subjects with personality disorders generally reported high levels of dissociative symptoms. Bivariate analyses with scores on the Dissociative Experiences Scale demonstrated a significant correlation with scores on the Borderline Personality Disorder Scale \((r_s=0.29, N=55, p=0.03)\) and a trend correlation with lifetime schizotypal symptoms \((r_s=0.26, N=55, p=0.06)\) but no correlation with lifetime antisocial symptoms \((r_s=0.19)\). Hierarchical regressions were conducted to predict the Dissociative Experiences Scale on the basis of the Borderline Personality Disorder Scale and the total childhood trauma scores. The scores on the Borderline Personality Disorder Scale were significant when entered first \((F=4.83, df=2, 52, p=0.03)\) but not significant when the childhood trauma scores were entered first \((F=0.34)\); however, the total childhood trauma score was significant even when entered second \((F=5.42, df=2, 52, p=0.02)\). No differences were found between borderline, borderline trait, and nonborderline subjects with respect to posttraumatic symptoms as measured by the Impact of Event Scale \((F=0.27)\).

**DISCUSSION**

These results demonstrate a strong association between borderline personality disorder and a reported history of childhood abuse. The great majority of borderline subjects reported such a history. Although abuse experiences were also reported by some subjects with closely related diagnoses, they were less common and cumulatively less severe. Early childhood histories of abuse and multiple childhood abuse experiences as reflected by very high trauma scores were found almost exclusively among borderline subjects.

The importance of our findings is enhanced by the conservative definitions that were used in scoring trauma histories as positive. We found no evidence to suggest that such histories were exaggerated or fabricated. The following case examples, disguised for protection of subjects’ identities, illustrate the contrasting types of histories reported by our subjects and the judgments that were made in assigning trauma scores.

**Case 1.** Ms. A, a 35-year-old woman with borderline personality disorder, was the fourth of five siblings born to two alcoholic parents. After her father deserted the family when she was 3 years old, the household became increasingly chaotic; her mother enforced unclear and inconsistent rules by screaming, hair pulling, hitting on the head and face, and kicking in the knees and genital area. In Ms. A’s words, “You never knew when to expect it. You could do something really wrong and she wouldn’t notice, and then you could knock over your milk and she would fly off the handle.” Her mother remarried when Ms. A was 9 years old, and the level of violence in the home diminished. Shortly after entering the home, however, the stepfather began sexually molesting Ms. A and her three sisters. The incestuous relationship, which proceeded to oral sex and intercourse, continued until she ran away from home at age 15. While on the road, Ms. A frequented bars where she would pick up older men, offering sex in exchange for shelter. At age 17 she was brutally raped and beaten in one such encounter, requiring hospitalization for her injuries. Ms. A received a trauma score of 5 (physical abuse in early childhood and latency, sexual abuse in latency and adolescence, and rape in adolescence).

**Case 2.** Mr. B, a 28-year-old man with borderline traits, described an intact family with a capricious and domineering father and a compliant, submissive mother. He described very restrictive family rules, “like boot camp,” and frequent corporal punishment (hitting with a belt) and stated that “If my father had been left to his own devices, I would have been a battered child, but my mother protected me.” He described one incident at age 11 in which his father became enraged, chased him into his room screaming “I’ll kill you,” cornered him, and began to strangle him. His mother attempted to intercede, at which point his father attacked her, struck her in the face with a closed fist, and knocked her to the ground. After this attack, his father was remorseful, and no similar incidents occurred. Mr. B received a trauma score of 2 (one incident each of physical abuse and witnessing domestic violence).

**Case 3.** Ms. C, a 38-year-old woman with bipolar II disorder, was the youngest daughter among eight children. Her father was a severe alcoholic, and she described her mother as raising the family single handedly. She described her mother’s discipline as very strict: “She was very old country; she was trying to cope too.” Although discipline was carried out by means of frequent hitting with a cane or a “bony Irish hand.” Ms. C stated that “It was not traumatic, she did it with everybody, it seemed all right; the nuns at school did it too.” When Ms. C was 10 years old, her 14-year-old brother began to involve her in sexual games, including showing and fondling of genitals, kissing, and imitation of activities shown in pornographic magazines. She idealized his brother, was grateful for the attention, and in spite of the age difference did not perceive the sexual relationship as exploitative until she was 12 years old, at which time her brother attempted to bribe her to perform the same activities with his friends. She felt deeply betrayed and angrily refused. Ms. C received a trauma score of 0 (harsh but nonabusive corporal punishment, equivocal sexual abuse).

Although no definitive conclusions regarding the etiology of borderline personality disorder can be drawn from correlations based on retrospective data, the hypothesis that childhood abuse has a major formative role in the development of the disorder is strongly supported by our findings. The strength of the association between childhood trauma and borderline personality disorder suggests that it is an important factor but not alone sufficient to account for borderline psychopathology. It is possible that trauma is most pathogenic for children with vulnerable temperaments or for those most lacking protective factors, such as positive relationships with other caretakers or siblings.

Despite severe abuse histories, the borderline sub-
jects did not report current symptoms of posttraumatic stress disorder, at least as measured by the Impact of Event Scale. It appeared that memories of the abuse had become integrated into the total personality organization and had become essentially ego syntonic. The subjects generally did not perceive a direct connection between their current symptoms and abusive experiences in childhood. This finding is compatible with observations from follow-up studies of trauma victims (30, 31) which indicate that fragments of the trauma may be transformed over time and reified in a variety of disguised forms, e.g., as somatic sensations, affect states, visual images, behavioral reenactments, or even dissociated personality fragments. Our finding that dissociative symptoms were more strongly correlated with childhood trauma than with borderline psychopathology per se is consistent with the recent finding of Spiegel et al. (32) that dissociation and trauma are highly correlated.

Childhood trauma has been implicated as an etiological factor in such diverse psychiatric conditions as somatoform disorder (33), panic disorder (34), and multiple personality disorder (35–38). Thus, it might be possible to conceptualize a range of adaptations to childhood trauma, or trauma spectrum disorders, with multiple personality disorder representing an extreme adaptation to severe chronic abuse, borderline personality disorder representing an intermediate form of adaptation to chronic abuse, and some forms of somatoform, panic, and anxiety disorders representing dissociated somatic reexperiencing of more circumscribed traumatic events (30).

Childhood abuse as an important antecedent to the development of borderline personality disorder could explain in part the higher prevalence of borderline personality disorder in women. Epidemiologic data on child abuse (39) indicate that although boys and girls are at approximately equal risk for physical abuse, girls are at two to three times greater risk for sexual victimization. Moreover, sexual abuse is apparently more prevalent, and often more prolonged, than physical abuse (40). Thus, girls may be more frequently exposed to conditions favoring the development of borderline personality disorder.

Conceptualizing borderline personality disorder as a complicated posttraumatic syndrome has direct implications for the treatment of patients. Clinical literature on the treatment of posttraumatic syndromes (41–48) has shown the importance of recovery and integration of traumatic memories with their associated affects and the necessity for validation of the patient’s traumatic experiences. The integration of the trauma is a precondition for development of improved affect tolerance, impulse control, and defensive organization; the validation of the trauma is a precondition for restoration of an integrated self-identity and the capacity for appropriate relationships with others. Posttraumatic states are often undiagnosed in cases in which secrecy or stigma prevents recognition of the traumatic origins of the disorder; such patients may show remarkable improvement when the connection between symptom and trauma is recognized. Whether some of the negative therapeutic reactions so frequently observed in borderline patients might be avoided by early and appropriate recognition of the relationship between the patient’s current symptoms and traumatic experiences in childhood remains to be determined.

REFERENCES

35. Bliss EL: Multiple personalities: a report of 14 cases with implications for schizophrenia and hysteria. Arch Gen Psychiatry 1980; 37:1388–1397
41. Kardiner A: The Traumatic Neuroses of War. New York, Hoeber, 1941
42. Niederland WG: The role of the ego in the recovery of early memories. Psychoanal Q 1965; 34:564–571