Reported Pathological Childhood Experiences Associated With the Development of Borderline Personality Disorder

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Objective: The purpose of this study was to assess a full range of pathological childhood experiences reported by patients with criteria-defined borderline personality disorder and comparison patients with other personality disorders. <u>Method:</u> The pathological childhood experiences reported by 467 inpatients with personality disorders were assessed by interviewers who used a semistructured research interview and were blind to clinical diagnosis. Results: Of the 358 patients with borderline personality disorder, 91% reported having been abused, and 92% reported having been neglected, before the age of 18. The borderline patients were significantly more likely than the 109 patients with other personality disorders to report having been emotionally and physically abused by a caretaker and sexually abused by a noncaretaker. They were also significantly more likely to report having a caretaker withdraw from them emotionally, treat them inconsistently, deny their thoughts and feelings, place them in the role of a parent, and fail to provide them with needed protection. The borderline patients with a childhood history of sexual abuse were significantly more likely than those without such a history to report having experienced all but one of the types of abuse and neglect studied. When all significant risk factors were considered together, four were found to be significant predictors of a borderline diagnosis: female gender, sexual abuse by a male noncaretaker, emotional denial by a male caretaker, and inconsistent treatment by a female caretaker. Conclusions: The results suggest that sexual abuse is neither necessary nor sufficient for the development of borderline personality disorder and that other childhood experiences, particularly neglect by caretakers of both genders, represent significant risk factors.

(Am J Psychiatry 1997; 154:1101–1106)

I nitial studies of the childhood experiences of patients with borderline personality disorder focused on the etiological role of early separations (1–4) and various forms of disturbed parental involvement (3–10). However, more recent studies have focused on the role of childhood abuse in the etiology of borderline personality disorder (11–19). These studies found that both physical and sexual abuse are commonly reported by borderline patients. More specifically, they found that 10%–73% of borderline patients report having been physically abused by a parent or other adult caretaker (11–19) and that 0%–33% report having had an incestuous relationship with a full-time adult caretaker

(12-19). The studies that also investigated the preva-

lence of childhood sexual abuse by noncaretakers found that overall rates of childhood sexual abuse re-

ported by borderline patients ranged from 16% to 71%

(11, 13–18). While most of the relevant studies found

that a childhood history of physical abuse is commonly

reported by borderline patients, only two studies found

that such a history discriminated borderline patients from patients with other types of personality disorder

from a chronic form of posttraumatic stress disorder

rather than borderline personality disorder (20, 21).

^{(12, 14).} In contrast, all of the relevant studies found that a significantly higher percentage of borderline patients than near-neighbor comparison subjects reported a childhood history of sexual abuse (11–15, 18, 19). These last results have been interpreted by some to mean that sexual abuse is the main etiological factor in the development of borderline personality disorder (20). They have also been interpreted to mean that patients meeting current criteria for borderline personality disorder might be better conceptualized as suffering

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Supported in part by NIMH grant MH-47588.

The study we report here tried to place the role of childhood sexual abuse in the etiology of borderline personality disorder in perspective by studying a wide range of pathological childhood experiences reported by a group of 358 criteria-defined borderline patients and 109 comparison subjects with DSM-III-R axis II diagnoses. It improved upon the design of earlier studies because of the large size of the patient groups, the rigor with which they were diagnosed, the substantially more inclusive list of pathological childhood experiences that were assessed, and the fact that these assessments were made blind to diagnostic status with the use of a semistructured interview of demonstrated reliability. It also improved upon the design of most earlier studies by using multivariate analyses to assess the relative contributions of these childhood factors.

METHOD

All subjects were inpatients at McLean Hospital (Belmont, Mass.) who were admitted between March 1991 and December 1995. Each patient was initially screened to determine that he or she 1) was between the ages of 18 and 50 years, 2) had normal or better intelligence, 3) had no history or current symptoms of a serious organic condition or major psychotic disorder (i.e., schizophrenia or bipolar I disorder), and 4) had been given a definite or probable axis II diagnosis by the admitting physician.

Written informed consent was obtained from each patient. Three semistructured diagnostic interviews were then administered to the patient by one of five interviewers who were blind to clinical diagnosis. These instruments were 1) the Structured Clinical Interview for DSM-III-R (22)—a semistructured interview designed to assess the lifetime prevalence of many of the most common axis I disorders described in DSM-III-R, 2) the Revised Diagnostic Interview for Borderlines (DIB-R) (23)—a semistructured interview that can reliably distinguish clinically diagnosed borderline patients from those with other DSM-III and DSM-III-R axis II disorders, and 3) the Diagnostic Interview for DSM-III-R Personality Disorders (24)—a semistructured interview that reliably assesses the presence of the 13 axis II disorders described in DSM-III-R. All five interviewers had been trained in the administration and scoring of these instruments by the first author (M.C.Z.), who is one of the developers of both the DIB-R and the Diagnostic Interview for DSM-III-R Personality Disorders. Adequate levels of interrater reliability had been obtained during this training period (e.g., kappa=0.85 or higher for the DIB-R and DSM-III-R diagnoses of borderline personality disorder).

Information concerning pathological childhood experiences was assessed by one of seven clinically experienced interviewers (A.A.W., R.E.L., R.B.R., S.C.V., M.F.M., A.L., L.Y.), each of whom was blind to all other data concerning each patient, including his or her current diagnostic status. Pathological childhood experiences that were reported to have occurred before the age of 18 were assessed with the Revised Childhood Experiences Questionnaire—a semistructured interview whose psychometric properties have been described elsewhere (19). Briefly, this instrument inquires about four forms of abuse and seven forms of neglect by full-time caretakers, sexual abuse by noncaretakers, and 12 types of separations from full-time caretakers that lasted 1 month or more. For an item to be given a positive rating, detailed information concerning the event in question had to be provided. In addition, the rates of physical and sexual abuse reported in this study are not the result of psychotherapeutic efforts and thus do not represent "recovered" memories.

Between-group comparisons involving categorical data were computed by means of the chi-square statistic corrected for continuity; between-group comparisons involving continuous data (age and socioeconomic status) were computed by means of Student's t test. The Bonferroni correction for multiple comparisons was applied where appropriate.

RESULTS

Five hundred four patients were given diagnostic interviews, and 467 (92.7%) also participated in interviews about their childhood. Of these 467 patients, 358 met both the DIB-R and the DSM-III-R criteria for borderline personality disorder, and 109 met the DSM-III-R criteria for at least one axis II disorder other than borderline personality.

There were no significant demographic differences between the 467 patients who had a childhood interview and the 37 (7.3%) who did not. However, a significantly higher percentage of the borderline patients (94.4%, N=338) than of the comparison subjects (87.2%, N=95) had a childhood interview (χ^2 =6.25, df=1, p= 0.01). This was probably because the borderline patients tended to have slightly longer hospitalizations than the comparison subjects, and most of the 37 patients without a childhood interview had been discharged from the hospital before they could be interviewed.

The borderline patients were found to be quite similar to the comparison subjects in terms of race (11% of each group was nonwhite) and socioeconomic background as measured by the 5-point Hollingshead-Redlich Scale (25) (1=highest status, 5=lowest). The mean socioeconomic status of the borderline patients was 2.6 (SD=1.3), and that of the comparison subjects was 2.7 (SD=1.3). However, the borderline patients were found to be slightly, but significantly, younger than the comparison subjects (mean age=27.6 years, SD=6.8, versus mean=29.3 years, SD=9.1; t=2.10, df=465, p<0.04). In addition, a significantly higher percentage of the borderline patients (77.1%, N=276) than of the comparison subjects (56.0%, N=61) were female (χ^2 =17.54, df=1, p=0.00003).

Because a significantly higher percentage of the borderline patients were women, we conducted two subanalyses to control for gender. Since the results of these analyses were basically the same as those obtained for the mixed-gender group, we decided to present only our overall results. However, we controlled for gender in the multivariate analysis.

Table 1 shows the reported rates of abuse and neglect of the borderline patients and the patients with other axis II diagnoses. At the Bonferroni-corrected alpha level of p<0.003, a significantly higher percentage of the borderline patients reported each of the childhood experiences assessed except caretaker's verbal abuse, caretaker's sexual abuse, physical neglect by a caretaker, and lack of a real relationship with a caretaker.

About equal percentages of borderline patients (29.1%, N=104) and comparison subjects (22.9%, N=25) reported having experienced a prolonged separation from a caretaker before the age of 6 (χ^2 =1.27, df=1, n.s.). The mean numbers of early childhood separations reported by the borderline patients and the comparison subjects were also basically the same: the borderline patients reported a mean of 2.3 (SD=2.3) early separations, while the comparison subjects reported a mean of 1.9 (SD=0.63) such separations (t=1.51, df=465, n.s.).

TABLE 1. Pathological Childhood Experiences Reported by Patients With Borderline Personality Disorder and Patients With Other Personality Disorders

	Patients With Borderline Personality Disorder (N=358)		Patients With Other Personality Disorders (N=109)		Analysis	
Childhood Experience	N	%	N	%	χ^2 (df=1)	p ^a
Caretaker's emotional abuse	260	72.6	56	51.4	16.29	0.00005
Caretaker's verbal abuse	273	76.3	68	62.4	7.47	0.006
Caretaker's physical abuse	211	58.9	37	33.9	19.97	0.00001
Caretaker's sexual abuse	98	27.4	17	15.6	5.63	0.02
Noncaretaker's sexual abuse	200	55.9	26	23.9	33.02	0.00001
Any sexual abuse	220	61.5	35	32.1	27.85	0.00001
Any abuse	327	91.3	80	73.4	22.46	0.00001
Caretaker's physical neglect	94	26.3	14	12.8	7.72	0.005
Caretaker's emotional withdrawal	196	54.7	35	32.1	16.24	0.00006
Caretaker's inconsistent treatment	187	52.2	34	31.2	14.01	0.0002
Caretaker's denial of patient's feelings	252	70.4	49	45.0	22.50	0.0001
Lack of real relationship with caretaker	250	69.8	61	56.0	6.62	0.01
Caretaker's placing patient in parental role	211	58.9	43	39.4	12.02	0.0005
Caretaker's failure to protect patient	199	55.6	36	33.0	16.12	0.00006
Any neglect	330	92.2	82	75.2	21.50	0.00001

^aApplication of the Bonferroni correction for multiple comparisons indicates statistical significance at p<0.003.

TABLE 2. Pathological Childhood Experiences Reported by Sexually Abused and Not Sexually Abused Patients With Borderline Personality Disorder

Childhood Experience	Sexually Abused Patients (N=220)		Not Sexually Abused Patients (N=138)		Analysis	
	N	%	N	%	χ^2 (df=1)	p ^a
Caretaker's emotional abuse	180	81.8	80	58.0	23.07	0.00001
Caretaker's verbal abuse	181	82.3	92	66.7	10.56	0.001
Caretaker's physical abuse	154	70.0	57	41.3	27.68	0.00001
Any abuse	204	92.7	107	77.5	15.85	0.00007
Caretaker's physical neglect	76	34.5	18	13.0	19.15	0.00001
Caretaker's emotional withdrawal	138	62.7	58	42.0	13.84	0.0002
Caretaker's inconsistent treatment	134	60.9	53	38.4	16.32	0.00005
Caretaker's denial of patient's feelings	170	77.3	82	59.4	12.13	0.0005
Lack of real relationship with caretaker	165	75.0	85	61.6	6.61	0.01
Caretaker's placing patient in parental role	151	68.6	60	43.5	21.15	0.00001
Caretaker's failure to protect patient	156	70.9	43	31.2	52.68	0.00001
Any neglect	212	96.4	118	85.5	12.40	0.0004

^aApplication of the Bonferroni correction for multiple comparisons indicates statistical significance at p<0.004.

Table 2 shows the rates of abuse and neglect reported by the 220 borderline patients with a childhood history of sexual abuse and the 138 without such a history. At the Bonferroni-corrected alpha level of p<0.004, a significantly higher percentage of the sexually abused borderline patients than of the borderline patients who were not sexually abused reported each of the childhood experiences assessed except lack of a real relationship with a caretaker.

Å significantly higher percentage of the sexually abused borderline patients (33.6%, N=74) than of those who were not abused (21.7%, N=30) reported having experienced a prolonged separation from a caretaker before the age of 6 (χ^2 =5.26, df=1, p=0.02). The mean number of early childhood separations reported by the sexually abused borderline patients (mean=0.95, SD=2.9) was also slightly but nonsignificantly higher

than that reported by those who were not sexually abused (mean=0.65, SD=1.9) (t=1.08, df=356, n.s.).

These numerous univariate analyses reveal that reported sexual abuse almost always occurred in conjunction with at least one other type of reported abuse or neglect. A forward stepwise logistic regression with diagnostic status (borderline personality disorder versus other personality disorders) as the dependent variable was conducted next, to determine the relative importance of these numerous pathological childhood experiences. Seventeen independent variables that were significant at a Bonferroni-corrected alpha level were studied: the patient's gender and eight abuse and neglect variables broken down by gender of the caretaker (or in the case of noncaretaker sexual abuse, the gender of the person who was not a caretaker).

As table 3 shows, four factors were significantly as-

TABLE 3. Results of Forward Stepwise Logistic Regression to Determine Risk Factors Associated With the Diagnosis of Borderline Personality Disorder^a

Variable	Beta	SE	df	p	Odds Ratio
Female gender Male noncaretaker's sex-	0.3142	0.1245	1	0.01	1.4
ual abuse Female caretaker's incon-	0.5579	0.1344	1	0.0001	1.7
sistent treatment Male caretaker's denial of	0.2833	0.1384	1	0.04	1.3
patient's feelings	0.4105	0.1243	1	0.001	1.5

 $^{^{\}mathrm{a}}$ The dependent variable was a diagnosis of borderline personality disorder according to the Revised Diagnostic Interview for Borderlines (23); N=358 with the diagnosis, and N=109 without the diagnosis.

sociated with an adult diagnosis of borderline personality disorder: being female, a childhood history of sexual abuse by a male who was not a caretaker, denial of one's thoughts and feelings by a male caretaker, and inconsistent treatment by a female caretaker. In terms of these four variables, a patient's risk of being diagnosed as having borderline personality disorder was about one and one-half times greater than the risk for a patient who was male or who did not report having had these childhood experiences.

DISCUSSION

Four important results emerged from this study. First, we found that childhood experiences of both abuse and neglect were basically ubiquitous among our borderline patients. More specifically, we found that 91% of the borderline patients reported some type of childhood abuse, and 92% reported some type of childhood neglect. In terms of specific forms of abuse, about 75% of the borderline patients reported a childhood history of emotional abuse (i.e., frequent experiences of being shamed or humiliated, being frustrated by being given mixed messages, or being put in impossible situations) or verbal abuse, while about 60% reported a childhood history of physical or sexual abuse. In terms of specific forms of neglect, about 70% of the borderline patients reported a caretaker's denial of their thoughts or feelings and reported that they lacked a real emotional relationship with one or more caretakers. About 60% reported often being put in the position of a parent, where they felt the need to take care of a caretaker or other family members. About one-half reported a caretaker's withdrawing from them emotionally, treating them inconsistently, and failing to provide them with needed protection; and about one-fourth reported being physically neglected during childhood.

The results of this study are consistent with those of earlier studies which found that a high percentage of borderline patients report having been abused and/or neglected during childhood (11–19). In terms of sexual abuse, we found that 27.4% of the borderline patients reported being sexually abused by a caretaker during childhood. This rate falls within the range of the 25%—

33% reported by most of the studies that have assessed the prevalence of this type of childhood experience (12-14, 17-19). We also found an overall rate of childhood sexual abuse of 61.5%. This rate is quite consistent with the 40%-71% reported for most other groups of borderline patients (11, 13-15, 17, 18). The rates of caretakers' and overall sexual abuse that we found are much higher than the 0%-16% reported by Salzman et al. (16). However, these differences are not surprising, as we were studying severely impaired inpatients and Salzman et al. were studying symptomatic volunteers who had never been hospitalized for psychiatric reasons and who had not been self-destructive or suicidal for 4 years before entry into their study.

The second major finding of this study was that childhood experiences of both abuse and neglect were significantly more common among the borderline patients than among the comparison subjects. More specifically, emotional abuse, physical abuse, sexual abuse by noncaretakers, overall sexual abuse, emotional withdrawal by a caretaker, inconsistent treatment by a caretaker, denial of the patient's thoughts and feelings by a caretaker, being placed in the role of a parent by a caretaker, and failure of a caretaker to provide needed protection were reported by significantly higher percentages of the borderline patients than of the comparison subjects (at the Bonferroni-corrected alpha level of p<0.003). The results of this study are consistent with those of earlier studies which found that childhood experiences of both abuse and neglect are reported by a significantly higher percentage of borderline patients than comparison subjects (12, 18, 19).

The third major finding of this study was that the sexually abused borderline patients seemed to come from more chaotic environments than the borderline patients who were not sexually abused. The sexually abused patients were significantly more likely (at the Bonferroni-corrected alpha level of p<0.004) to report having been emotionally, verbally, and physically abused. They were also significantly more likely (at the Bonferroni-corrected alpha level of p<0.004) to report having been physically neglected by a caretaker, having a caretaker withdraw from them emotionally, being treated inconsistently by a caretaker, having a caretaker deny their thoughts and feelings, being placed in the role of a parent by a caretaker, and having a caretaker fail to provide needed protection. This, to the best of our knowledge, represents a new finding. It also emphasizes that sexual abuse does not typically occur in families where the preborderline child is otherwise well cared for but, rather, in a context of ongoing abuse and neglect. This finding suggests, in addition, that the childhood sexual abuse reported by borderline patients may represent a marker of the severity of the familial dysfunction they experienced, as well as being a traumatic event or series of events in itself.

The fourth major finding of this study is that when all significantly different pathological childhood experiences are considered together, sexual abuse (particularly, sexual abuse by a noncaretaker) seems to be an important factor in the etiology of borderline personality disorder but that other factors (particularly, neglect by caretakers of both genders) also play an important role. This too, to the best of our knowledge, represents a new finding. It also underscores the idea that the development of borderline personality disorder seems to be linked to the lack of optimal parenting by caretakers of both genders (26).

This finding concerning neglect by both of the parents and sexual abuse by noncaretakers makes intuitive clinical sense. It may be that neglect by both of the parents puts the preborderline child at risk for being sexually abused by making it clear to potential perpetrators that no one will notice or care if the child is abused. Such neglect may also put the preborderline child at risk for being sexually abused by leaving him or her with a strong unmet need for attention, care, and closeness that may be misinterpreted and/or manipulated by unscrupulous, sexually predatory individuals.

However, the pathological childhood experiences noted by our borderline patients are almost certainly not the "whole story" of the etiology of borderline personality disorder. Rather, we believe that a multifactorial model of the etiology of borderline personality disorder best captures the complexity of borderline psychopathology (27, 28). This model suggests that borderline symptoms and their comorbid manifestations are the final product of a complex admixture of innate temperament, difficult childhood experiences, and relatively subtle forms of neurological and biochemical dysfunction (which may be sequelae of these childhood experiences or innate vulnerabilities).

This model is supported by recent research which has found that borderline personality disorder is associated with a temperament characterized by a high degree of neuroticism (i.e., emotional pain) as well as a low degree of agreeableness (i.e., strong individuality) (29-31). Borderline personality disorder has also been found to be the only axis II disorder that is associated with a high degree of both harm avoidance (i.e., compulsivity) and novelty seeking (i.e., impulsivity) (32). In addition, a series of studies have found that borderline patients often suffer from difficult-to-diagnose forms of neurological dysfunction (33-36), and biochemical studies have found decreased serotonergic activity in patients with problematic impulsivity, including patients with criteria-defined borderline personality disorder (37, 38).

The major limitation of the present study is that its findings may not be generalizable to less severely disturbed borderline outpatients. Another limitation is that all of the information concerning pathological childhood experiences was obtained through retrospective self-report. Although many of the types of childhood experiences assessed in this study were not assessed in other studies, those that were, such as physical abuse and various types of sexual abuse, were reported by percentages of borderline patients similar to those

found in previous studies (11–19). However, despite the fact that we made strenuous efforts to assess the validity of reports of childhood experiences of neglect through the use of detailed case vignettes, the possibility remains that what we are reporting in this area reflects the heightened sensitivity of borderline patients to perceived failures in parenting.

In future research there is a need for studies of carefully defined groups of borderline patients that simultaneously investigate basic temperament, a full range of pathological and protective childhood experiences, caretaker psychopathology to which patients may have been exposed, and the possible genetic influence of a family history of selected psychiatric disorders. Longitudinal studies that prospectively assess the effects of childhood sexual abuse on the long-term adult functioning of borderline patients are also needed. In addition, studies of high-risk children, as well as twin and/or adopted-away studies, are needed. Finally, prospective studies that examine the effects of difficult childhood experiences in a large group of "normal" children would help to clarify the role of these experiences in the development of later personality disorders. In this regard, it is important to note that over 30% of the comparison subjects in our study reported a childhood history of physical or sexual abuse.

CONCLUSIONS

Overall, the results of this study suggest that child-hood sexual abuse is neither necessary nor sufficient for the development of borderline personality disorder. For about 60% of our borderline patients, childhood sexual abuse appears to be an important etiological factor. However, this abuse usually seems to be embedded in an atmosphere of general chaos and neglect by both parents. For the rest of our patients, other forms of abuse in conjunction with various forms of neglect probably play a more central etiological role.

In time, the etiology of borderline personality disorder will be understood more fully. While enormous strides have been made in the last decade, research into the multifactorial basis of borderline personality disorder has barely begun. For now, we suggest patience and common sense in conceptualizing the role of pathological childhood experiences in the etiology of borderline personality disorder.

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