Lifetime History of Sexual Abuse, Clinical Presentation, and Outcome in a Clinical Trial for Adolescent Depression

Rémy P. Barbe, M.D.; Jeffrey A. Bridge, Ph.D.; Boris Birmaher, M.D.; David J. Kolko, Ph.D.; and David A. Brent, M.D.

Received Dec. 16, 2002; accepted June 5, 2003. From the Western Psychiatric Institute and Clinic, University of Pittsburgh Medical Center, Pittsburgh, Pa.

This work was supported by grants MH18269, MH46500, and MH55123 from the National Institute of Mental Health, Bethesda, Md., and by a grant from the University Hospital of Geneva, Geneva, Switzerland (Dr. Barbe).

Corresponding author and reprints: Rémy P. Barbe, Western Psychiatric Institute and Clinic, Child and Adolescent Psychiatry, 3811 O'Hara Street, BFT 327, Pittsburgh, PA 15213-2592 (e-mail: barber@msx.upmc.edu).

Objective: To investigate the impact of sexual abuse on clinical presentation and treatment outcome in depressed adolescents.

Method: 107 adolescent outpatients, 13 to 18 years old, with DSM-III-R major depression were randomly assigned to cognitive-behavioral therapy (CBT), systemic behavioral family therapy (SBFT), or nondirective supportive therapy (NST) from Oct. 1, 1991 through May 31, 1995. Subjects were classified on the basis of the presence or absence of lifetime history of sexual abuse. Since only 1 subject assigned to SBFT had a history of sexual abuse, we restricted our analyses to those 72 subjects assigned to either CBT or NST. The impact of lifetime history of sexual abuse on service use, depression, and treatment outcome was examined.

Results: Depressed adolescents with a past history of sexual abuse were more likely, at 2-year follow-up, to have had a psychiatric hospitalization and have a depressive relapse, even controlling for maternal depression, source of referral, race, and treatment assignment. CBT was more efficacious than NST in absence of sexual abuse but was not better than NST in those with a history of sexual abuse.

Conclusion: Sexual abuse is a negative predictor of long-term outcome in adolescent depression. CBT for depression may not be as efficacious for those depressed adolescents with a history of sexual abuse. These findings suggest that a history of sexual abuse should be assessed not only in clinical practice, but also in research studies of depressive outcome. Further work is indicated to understand the relationship between sexual abuse and poor outcome in order to help restore these high-risk youths to an optimal developmental trajectory.

(J Clin Psychiatry 2004;65:77–83)

Sexual abuse in childhood is associated with an increased risk of depression, suicide attempt, impulsivity, substance abuse, and posttraumatic stress disorder.[1–5] Sexual abuse may also be associated with an earlier age at onset and more adverse course of these conditions. For example, sexual abuse has been reported to be related to earlier onset and more adverse course of bipolar disorder and major depression.[1,6] Sexual abuse has also been reported to be associated with earlier onset of suicide attempt in both community and clinical samples.[5,7]

While numerous cross-sectional studies have documented the effects of sexual abuse, less is known about the impact of sexual abuse on the course of illness or response to treatment. A large health maintenance organization–based study[8] suggests that sexual abuse is associated with more adverse, chronic, and refractory mental and physical health outcomes. However, no controlled treatment trials have thus far reported on the impact of abuse history on response to treatment.

In previous reports, we have described the short-term and long-term results of a psychotherapy clinical trial for depressed adolescents.[9–11] In brief, cognitive-behavioral therapy (CBT) was superior to both systemic behavioral family therapy (SBFT) and nondirective supportive therapy (NST) in depression symptom reduction and rate of remission.[9] Maternal depression and family conflict predicted poorer treatment response, with the latter also predicting relapse and a more chronic course over follow-up.[9,11] Recent reports have documented the adverse impact of sexual abuse on depressive outcome but not its impact on course[2,3,12]; therefore, we now examine the impact of sexual abuse on short-term and long-term outcome in this clinical trial. Here, we address the following questions:

1. Is a history of sexual abuse associated with a more severe clinical presentation at intake into the study?
2. Is a history of sexual abuse associated with a less vigorous response to acute treatment and to a higher risk of relapse and recurrence over the 2-year follow-up period?
3. Are treatment effects moderated by a history of sexual abuse?

METHOD

Sample

As described previously,[10,11,13–17] subjects were 13 to 18 years old, met criteria for DSM-III-R[18] major depression based on the Schedule for Affective Disorders and Schizophrenia for School-Age Children, Present Episode and Epidemiologic versions (K-SADS-P and K-SADS-E),[19,20] and had a Beck Depression Inventory (BDI)[21] score greater than or equal to 13. Subjects were nonpsychotic, nonbipolar, and without obsessive-compulsive disorder, eating disorder, substance abuse, or ongoing physical or sexual abuse. Of 122 subjects who were eligible for the study, 107 (87.7%) agreed to randomization. Approximately one third of the subjects entering the protocol came via an advertisement (32.7%), and the rest were recruited from a child psychiatry outpatient clinic in a university setting. No differences were noted between those who responded to an advertisement and those who were clinically referred with respect to past treatment or demographic or clinical variables. Of the 107 depressed adolescents, 37 were randomly assigned to CBT, 35 to SBFT, and 35 to NST.

Because only 1 subject assigned to SBFT had a history of sexual abuse, we restricted our analyses to those 72 subjects assigned to either CBT or NST. There were 10 subjects who had a history of sexual abuse: 6 in the CBT group and 4 in the NST group.

The median socioeconomic score (SES) was 40 (Hollingshead[22]: class IV) and 75.7% of the subjects were female. Subjects were moderately depressed, with a mean BDI score of 24.1 (SD = 8.1) and with substantial rates of comorbid anxiety (31.8%), dysthymic disorder (22.4%), and disruptive disorders (20.6%).

Randomization

Once the patient and family had given written informed consent to the protocol approved by our institutional review board, patients were randomized to 1 of the 3 treatments, balancing for sex, number of parents in the household, and clinically significant suicidality (i.e., ideation with a plan or attempt).

Treatment

Treatment consisted of 12 to 16 sessions delivered in 12 to 16 weeks in each of the 3 cells by experienced therapists.[9] CBT was derived from Beck et al.[23] SBFT combined functional family therapy[24] and the problem-solving model of Robin and Foster.[25] NST was designed to control for the nonspecific effects of psychotherapy and consisted of the provision of support, affect clarification, and active listening. Expert ratings of videotaped sessions demonstrated that the treatments in all 3 cells were delivered with fidelity and were distinct from each other.[9]

Dropout. Eight subjects dropped out during the first 12 weeks of active treatment. There were no significant differences between the 3 treatment groups with respect to rates of dropout (CBT: 8.1% [3/37] vs. SBFT: 5.7% [2/35] vs. NST: 8.6% [3/35]). History of sexual abuse had no effect on rates of dropout. Of the 8 dropouts, 1 subject assigned to CBT had a lifetime history of sexual abuse.

Referral to open treatment. Seven subjects were removed from the protocol during the first 12 weeks of active treatment and referred to open treatment because they continued to meet criteria for major depression, had a BDI score persistently higher than or equal to 13, and had failed to make symptomatic progress. There were no significant differences between the 3 treatment groups with respect to referral to open treatment (CBT: 2.7% [1/37] vs. SBFT: 8.6% [3/35] vs. NST: 8.6% [3/35]). History of sexual abuse had no effect on rates of referral to open treatment. Of the 7 referrals to open treatment, 1 subject assigned to NST had a lifetime history of sexual abuse.

Assessment Schedule

Subjects were assessed at intake, at the sixth session, at the end of treatment (12th to 16th session), at every 3 months thereafter for 1 year, and, finally, at 24 months after treatment ended (8 interviews in total) by a clinical interviewer with a master's degree who was blinded to original treatment assignment. There was an attempt to interview even those subjects who left the protocol at the time that they would have finished treatment. In addition, a BDI score was obtained at each session. Of the 107 subjects entering the protocol, 94 (87.8%) received a 6-week interview and BDI, 99 (92.5%) received a final interview, and 97 (90.7%) had a final BDI. There were no differences among the treatment cells as to proportions with missing data or protocol violations.

Outcome Measures

In this article, the primary outcome examined was the presence of DSM-III-R major depression at the end of treatment, as assessed by a trained interviewer blinded to treatment condition, using K-SADS-P and K-SADS-E. In addition, we ascertained, for a more stringent outcome, failure to achieve clinical remission, where clinical remission was defined as both the absence of major depression at the end of treatment and a BDI score of less than 9 for at least 3 consecutive sessions and sustained until the end of treatment. We also considered the slope of decline of

depression (both interviewer-rated and self-rated). Finally, we examined the presence of functional impairment, defined as a score of less than 60 on the Children's Global Assessment Scale (CGAS),[26] at the end of treatment. The interviewer who completed the K-SADS also rated the CGAS.

Assessments

Demographic variables. Age, race, sex, referral source, family constellation, and socioeconomic status were ascertained at intake, the latter by means of the Hollingshead Four-Factor Index of Social Status.[22]

Clinical variables. DSM-III-R diagnoses were rendered using the K-SADS-P and K-SADS-E. Relevant clinical predictors of outcome included age at onset, duration of depressive episode, comorbid diagnostic conditions, and severity of depression. The latter was assessed by both interviewer rating, using 13 depression items from the K-SADS-P (DEP-13),[19] and self-reported depression, using the BDI. The presence of clinically significant current and past suicidality was assessed by using a clinical cutoff of 4 or greater on the current and lifetime questions for this domain on the K-SADS-P and K-SADS-E. Functional status was ascertained via interview using the CGAS.[26]

Child cognitive variables. The Children's Negative Cognitive Error Questionnaire (CNCEQ)[27] is a 24-item self-report questionnaire to survey cognitive distortions related to catastrophization, personalization, overgeneralization, and selective abstraction. The Beck Hopelessness Scale (BHS)[28] is a 20-item self-report scale to measure hopelessness.

Family-environmental variables. Both the child and caretaking parent reported on conflict using the Conflict Behavior Questionnaire,[25] a 20-item self-report questionnaire designed to measure conflict and negative communication. The desire for relationship change was measured using the Areas of Change Questionnaire,[29] which evaluates parent-child relationships across specified problem areas using a 32-item child self-report form and a 34-item parent form. Each item is rated from –3 ("much less" change) to +3 ("much more" change) in Likert format. Family climate was assessed using the Family Assessment Device,[30] a 60-item self-report measure filled out by both the caretaking parent and the patient. There are 6 specific subscales (problem-solving, communication, roles, affective responsiveness, affective involvement, and behavioral control) and 1 general functioning subscale.

History of sexual abuse. History of sexual abuse was assessed during the first interview by a yes/no question inquiring about current and lifetime history of abuse. The question was: Have you ever been sexually abused by a relative, acquaintance, or stranger?

In another study by our group, a repeated measure of child trauma with a self-report measure has shown a high reliability with the initial screening question for sexual abuse ($\kappa = 0.74$, SE = 0.11) with subjects older than 18 years.[31] Other studies suggest that errors in assessment of abuse are almost entirely false negatives.[32]

Parental psychopathology. Parental current and lifetime psychopathology were assessed using the SADS-Lifetime version (SADS-L)[33] adapted for DSM-III-R and the BDI for parental self-report of depression.

For all of the above-noted instruments, adequate internal consistency, reliability, and validity have been documented.

Data Analysis

All group comparisons were made using standard parametric and nonparametric statistics. For dichotomous outcomes, Pearson chi-square was used when sample sizes were moderate or large, and Fisher exact test was used when expected cell sizes were < 5. For continuous outcomes, either a 2-sample t test or its nonparametric equivalent, the Mann-Whitney U test, was used. Random effects regression analyses[34] were used to test for sexual abuse–by-time interactions during active treatment (i.e., intake, 6 weeks, posttreatment) and through the end of the 24-month follow-up (i.e., 3, 6, 9, 12, and 24 months after treatment). Logistic regression analyses were used to test the strength of association between predictors and major depression at the end of treatment and through 24-month follow-up.[35] Log-linear analyses were used to test for the potential interaction of sexual abuse, treatment, and major depression. For all pairwise contrasts, alpha was set at .05, 2-sided.

RESULTS

Characteristics at Intake

Subjects with and without sexual abuse history were similar with regard to age, sex, and SES and showed nonsignificant associations with race and referral by advertisement (Table 1).

With regard to clinical characteristics, those with and without a history of sexual abuse were similar with regard to age at onset of depression, severity of depression, rate of past suicide attempt, rate of comorbid conditions, and history of physical abuse (Table 2). The 2 groups were also similar with regard to hopelessness, cognitive distortion, family discord, family climate, and perceived need for family change. Rates of maternal and paternal diagnoses were similar except that the rate of current major depression in mothers was about twice as high in the sexually abused group (78% vs. 39%, Fisher exact test $p = .04$).

Impact on Acute Outcome

At the end of acute treatment, there were no differences between those who had a history of sexual abuse

Table 1. Demographic Characteristics of 72 Adolescent Depression Patients With and Without a Lifetime History of Sexual Abuse

Characteristic	Ever Sexually Abused (N = 10)	Never Sexually Abused (N = 62)
Age, mean (SD), y	15.7 (1.4)	15.9 (1.5)
Female, %	90.0	72.6
White, %[a]	60.0	83.9
Socioeconomic status, %[b]		
I	10.0	6.5
II	30.0	11.3
III	20.0	27.4
IV	30.0	40.3
V	10.0	14.5
Recruited by advertisement, %[c]	90.0	61.3

[a]Fisher exact test p = .10.
[b]Measured with the Hollingshead Four-Factor Index of Social Status.[22]
[c]Fisher exact test p = .15.

Table 2. Clinical Characteristics at Intake of 72 Adolescent Patients With Major Depression (MD) With and Without a Lifetime History of Sexual Abuse

Characteristic	Ever Sexually Abused (N = 10)	Never Sexually Abused (N = 62)
Comorbid diagnoses, %		
Dysthymic disorder	20.0	21.0
Anxiety disorder	30.0	33.9
Conduct disorder	0	3.2
Duration of MD, mean (SD), mo	22.2 (27.8)	11.5 (15.6)
Age at onset of MD, mean (SD), y	14.0 (2.3)	14.6 (2.0)
History of suicide attempt, %	10.0	11.3
History of physical abuse, %	20.0	29.3
BDI score, mean (SD)	25.8 (8.7)	24.7 (7.9)
DEP-13 score, mean (SD)	2.9 (0.6)	2.8 (0.4)
CGAS score, mean (SD)	54.1 (8.7)	58.2 (8.4)
Cognitive variables		
BHS score, mean (SD)	11.6 (5.4)	12.5 (5.5)
CNCEQ total score, mean (SD)	80.2 (21.4)	80.0 (20.7)
Family variables		
CBQ score, mean (SD)	9.5 (5.2)	8.6 (6.2)
ACQ score, mean (SD)	39.2 (22.3)	32.2 (19.8)
FAD-GF score, mean (SD)	2.6 (0.6)	2.6 (0.5)
Maternal characteristics		
MD (current), %[a]	77.8	39.0
Any anxiety (current), %	55.6	37.3
Any substance abuse (current), %	12.5	8.6
Paternal characteristics		
MD (current), %	11.1	7.5
Any anxiety (current), %	33.3	15.4
Any substance abuse (current), %	25.0	24.1

[a]Fisher exact test p = .04.
Abbreviations: ACQ = Areas of Change Questionnaire, BDI = Beck Depression Inventory, BHS = Beck Hopelessness Scale, CBQ = Conflict Behavior Questionnaire, CGAS = Children's Global Assessment Schedule, CNCEQ = Children's Negative Cognitive Errors Questionnaire, DEP-13 = 13 depression items from the School Age Schedule for Affective Disorders and Schizophrenia, Present and Lifetime versions, FAD-GF = Family Assessment Device-Global Functioning.

and those who did not with regard to slope of decline of depression (either interviewer or self-rated), rate of depression (44.4% vs. 27.1%, Fisher exact test p = .40), achievement of clinical response, defined as a BDI score < 9 sustained for at least 3 consecutive sessions and until the end of treatment (33.3% vs. 55.2%, Fisher exact test p = .30), functional status (CGAS score ≥ 60; 77.8% vs. 69.5%, Fisher exact test p = 1.0), dropout rate (10.0% vs. 8.1%, Fisher exact test p = 1.0), or having received additional ("open") treatment (10.0% vs. 4.8%, Fisher exact test p = .50).

Impact on 2-Year Outcome

Over the course of the 2-year follow-up, those with a history of sexual abuse were more likely to have a second episode of depression (90% [9/10] vs. 39.7% [23/58], Fisher exact test p = .005) and were more likely to be hospitalized (40% [4/10] vs. 10% [6/60], Fisher exact test p = .03). There was also a trend for differences in the rate of an episode of clinically significant suicidality (ideation with a plan or an attempt: 33.3% [3/9] vs. 8.8% [5/57], Fisher exact test p = .07).

Multivariate analyses, controlling for maternal depression, source of referral, race, and treatment assignment, found a significant association between sexual abuse and depression on follow-up (odds ratio = 10.5, 95% confidence interval = 1.2 to 511.0) (Table 3). Associations between lifetime history of sexual abuse and both suicidality and hospitalization during follow-up were not significant in the multivariate analyses.

Moderating Effects of Sexual Abuse on Treatment

CBT was superior to NST treatment with regard to the rate of depression at the end of acute treatment and rate of decline in interviewer-rated depressive symptoms.[9] However, it appears that these effects are limited to cases where a history of sexual abuse is not present (Figure 1).

Furthermore, within the CBT group, those subjects with a history of sexual abuse had a higher rate of major depression at the end of acute treatment, compared with the nonabused subjects (40% [2/5] vs. 13.3% [4/30], Fisher exact test p = .1912, effect size [phi]=0.248), suggesting that a history of sexual abuse impaired the effect of CBT. No moderation of treatment effects was observed with regard to rates of dropout or subsequent hospitalization.

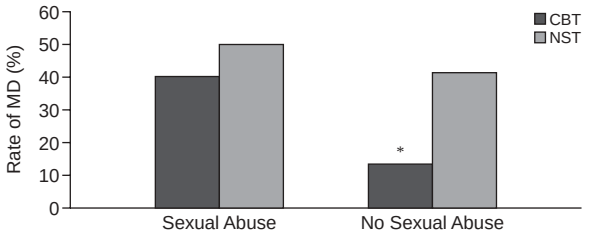
DISCUSSION

In this report, the impact of sexual abuse on the outcome of depressed adolescents who participated in a clinical psychotherapy trial and 2-year naturalistic follow-up was examined. Those with a past history of sexual abuse were more likely to have, even controlling for covariate factors, a second episode of depression and also to have been psychiatrically hospitalized at the 2-year follow-up. While there was no impact of sexual abuse on acute outcome overall, within those treated with CBT, those with a

Table 3. Logistic Regression Analyses: Major Depression at Any Time During 2-Year Follow-Up of 72 Adolescents With and Without a Lifetime History of Sexual Abuse

Characteristic	Odds Ratio	95% Confidence Interval
Lifetime history of sexual abuse	10.5	1.2 to 511.0
Treatment assignment	0.7	0.2 to 2.4
Maternal depression	1.3	0.4 to 4.3
Race	0.5	0.1 to 2.3

Figure 1. Rate of Major Depression in 72 Adolescents at the End of 12 to 16 Weeks of Treatment by Treatment Assignment Stratified by Lifetime History of Sexual Abuse[a]



[a]Test of interaction: $\chi^2 = 0.64$, df = 1, p = .43.
*p = .02.
Abbreviations: CBT = cognitive-behavioral therapy, NST = nondirective supportive therapy.

history of sexual abuse were less likely to respond to treatment.

Although, at intake, a history of sexual abuse was not associated with a more severe clinical presentation, subjects with a lifetime history of sexual abuse were twice as likely as nonabused subjects to have a currently depressed mother, which in turn has been associated with poor treatment response to CBT.[10]

These findings will be discussed in the context of the extant literature and for clinical care after we discuss the limitations of the study.

Limitations

While the sample is large by the standards of adolescent clinical trials of depression, the sample of subjects who were sexually abused is small, and results from this study must be considered preliminary. Since only 1 subject assigned to family therapy had a history of sexual abuse, we cannot comment on the impact of sexual abuse on the efficacy of this particular psychotherapeutic modality.

Information about sexual abuse was obtained by a single, dichotomous question inquiring only about the presence of lifetime abuse; therefore, we cannot comment on other parameters of the abuse, such as severity, frequency, and relationship to the perpetrator, that have been shown to influence outcome.[32,36]

The entry criteria excluded those subjects who may have been more acutely suicidal, those with comorbid substance abuse, or those with ongoing physical or sexual abuse. This limits our ability to generalize our findings to the treatment of patients with a history of sexual abuse who present with a more severe clinical presentation. Finally, the small number of males with a history of sexual abuse and those who were from ethnic minorities limits our abilities to generalize results beyond white females.

Overall Findings

A history of sexual abuse was related to poor long-term outcome, namely recurrent depression, and higher risk for psychiatric hospitalization. This is consistent with a study of adult depressed outpatient women, which found that a history of childhood sexual abuse, even controlling for borderline personality disorder and posttraumatic stress disorder, was associated with a greater duration of the index episode.[37] Additionally, this poorer outcome could be related to the fact that a history of trauma is a marker for chronic environmental stress, which in turn leads to more adverse psychiatric outcome in young adults.[36] The high rate of hospitalization is consistent with other studies showing an association between history of abuse and greater physical and mental health service use.[8]

Depressed adolescents treated with CBT fared more poorly if they had a history of sexual abuse, whereas subjects treated with NST did equally well (or poorly) regardless of history of sexual abuse. This suggests that the efficacy of CBT may be markedly diminished in depressed adolescents with a history of sexual abuse. No obvious explanation for this emerges. Since depressed adolescents with a history of sexual abuse were more likely to have depressed mothers, and maternal depressive symptoms have been shown to adversely affect outcome in CBT, we examined whether in fact the relationship between sexual abuse and poor outcome in CBT was mediated by maternal depression.[10] In fact, it was not. CBT that is focused on posttraumatic stress disorder and the consequences of child sexual abuse has been shown to be superior to NST for treating sexually abused children seen acutely after the abuse.[38] However, no studies have examined CBT targeting past abuse experiences in children, and the CBT for this particular study did not address past abuse. Therefore, studies that address abuse issues in the context of treating depression may improve depressive outcome. These interventions may also involve reducing parental distress, since there was a close relationship between child sexual abuse and maternal depression in this and other samples.

We did not find a relationship between symptom severity, comorbidity, or suicidality and a history of sexual abuse. This may have been due to small sample size but may also have been related to exclusionary criteria for the study. The 2 most clinically significant correlates of sexual abuse that one might expect in this population are suicidality and comorbid substance abuse, both of which

were exclusionary criteria for the study. We did find that subjects with a history of sexual abuse had a higher rate of maternal depression. Since sexual abuse often runs in families, one explanation for this finding is that many of the mothers also had a history of abuse, which in turn increased their risk of depression.[31,39] However, maternal history of abuse was not assessed in this study. Another possible explanation for this association is that maternal depression has been shown to be associated with impaired parenting abilities,[40] which represents a risk factor for sexual abuse.[36,41] A general risk of exposure to abuse may occur through the failure of a depressed parent to properly supervise the child.[42] This is consistent with the previous report that there is a 4-fold increased risk of maternal depression in those with a history of sexual abuse.[43] A third explanation could be that sexual abuse occurs in the context of chronic familial and environmental difficulties, which could precipitate or exacerbate maternal depression. However, in our sample, a history of child sexual abuse was unrelated to measures of current family climate or discord.

Clinical Implications

A history of sexual abuse appears to affect the depression course and treatment response of depressed adolescents. Therefore, it is important to inquire about a history of sexual abuse. This study does not provide clear guidance as to intervention but suggests that CBT, as it was conducted in this study without focusing on past trauma, is not particularly efficacious in the acute treatment of depression for those with a history of sexual abuse. Moreover, a history of sexual abuse seems to convey an increased risk of depressive relapse and hospitalization, so that if treatment could address the clinical issues that accompany a history of sexual abuse, then long-term outcome could be improved.

CONCLUSION

In spite of the limitations of this study, it appears that sexual abuse is a negative predictor of long-term outcome in adolescent depression. CBT may not be as efficacious for those depressed adolescents with a history of sexual abuse. These findings suggest that a history of sexual abuse should be assessed not only in clinical practice, but also in research studies of depressive outcome, including treatment studies. Further work is indicated to understand the relationship between sexual abuse and poor outcome in order to help restore these high-risk youths to an optimal developmental trajectory.

Acknowledgment: The authors gratefully acknowledge the following colleagues who aided in the conduct of this study: Marianne Baugher, M.A., Robert Berchick, Ph.D., Carl Bonner, Ph.D., Mary Beth Boylan, M.A., Marlane Cully, M.Ed., Tom Devereaux, M.S.W., Terry Feinberg-Steinberg, M.S.W., Tom Gigliotti, M.S.W., Diane Holder, M.S.W., Satish Iyengar, Ph.D., Hope Jacobs, M.Ed., Barbara Johnson, M.D., Ann Kolar, Ph.D., Maureen Maher, M.S.W., James Matta, M.A., Barbara McDonnell, Apryl Miller, L.S.W., Elizabeth Perkins, M.S.W., Kim Poling, M.S.W., and Claudia Roth, M.S.W. Above all, the authors thank the patients and families for their participation in this study.

REFERENCES

1. Brodsky BS, Oquendo MA, Ellis SP, et al. The relationship of childhood abuse to impulsivity and suicidal behavior in adults with major depression. Am J Psychiatry 2001;158:1871–1877
2. Fergusson DM, Horwood LJ, Lynskey MT. Childhood sexual abuse and psychiatric disorder in young adulthood, 2: psychiatric outcomes of childhood sexual abuse. J Am Acad Child Adolesc Psychiatry 1996; 35:1365–1374
3. Molnar BE, Buka SL, Kessler RC. Child sexual abuse and subsequent psychopathology: results from the National Comorbidity Survey. Am J Public Health 2001;91:753–760
4. Brown J, Cohen P, Johnson JG, et al. Childhood abuse and neglect: specificity of effects on adolescent and young adult depression and suicidality. J Am Acad Child Adolesc Psychiatry 1999;38:1490–1496
5. Kaplan SJ, Pelcovitz D, Salzinger S, et al. Adolescent physical abuse and suicide attempts. J Am Acad Child Adolesc Psychiatry 1997;36:799–808
6. Leverich GS, McElroy SL, Suppes T, et al. Early physical and sexual abuse associated with an adverse course of bipolar illness. Biol Psychiatry 2002;51:288–297
7. Molnar BE, Berkman LF, Buka SL. Psychopathology, childhood sexual abuse and other childhood adversities: relative links to subsequent suicidal behavior in the U.S. Psychol Med 2001;31:965–977
8. Walker EA, Unutzer J, Rutter C, et al. Costs of health care use by women HMO members with a history of childhood abuse and neglect. Arch Gen Psychiatry 1999;56:609–613
9. Kumar G, Steer RA. Psychosocial correlates of suicidal ideation in adolescent psychiatric inpatients. Suicide Life Threat Behav 1995; 25:339–346
10. Brent DA, Kolko D, Birmaher B, et al. Predictors of treatment efficacy in a clinical trial of three psychosocial treatments for adolescent depression. J Am Acad Child Adolesc Psychiatry 1998;37:906–914
11. Birmaher B, Brent DA, Kolko D, et al. Clinical outcome after short-term psychotherapy for adolescents with major depressive disorder. Arch Gen Psychiatry 2000;57:29–36
12. Fergusson DM, Woodward LJ. Mental health, educational, and social role outcomes of adolescents with depression. Arch Gen Psychiatry 2002;59:225–231
13. Brent DA, Kolko D, Birmaher B, et al. A clinical trial for adolescent depression: predictors of additional treatment in the acute and follow-up phases of the trial. J Am Acad Child Adolesc Psychiatry 1999;38: 263–270
14. Brent DA, Birmaher B, Kolko D, et al. Subsyndromal depression in adolescents after a brief psychotherapy trial: course and outcome. J Affect Disord 2001;63:51–58
15. Kolko DJ, Brent DA, Baugher M, et al. Cognitive and family therapies for adolescent depression: treatment specificity, mediation, and moderation. J Consult Clin Psychol 2000;68:603–614
16. Renaud J, Brent DA, Baugher M, et al. Rapid response to psychosocial treatment for adolescent depression: a two-year follow-up. J Am Acad Child Adolesc Psychiatry 1998;37:1184–1190
17. Stein D, Brent DA, Bridge J, et al. Predictors of parent-rated credibility in a clinical psychotherapy trial for adolescent depression. J Psychother Pract Res 2001;10:1–7
18. American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders, Third Edition, Revised. Washington, DC: American Psychiatric Association; 1987
19. Chambers WJ, Puig-Antich J, Hirsch M, et al. The assessment of affective disorders in children and adolescents by semistructured interview: test-retest reliability of the schedule for affective disorders and schizophrenia for school-age children, present episode version. Arch Gen Psychiatry 1985;42:696–702
20. Orvaschel H, Puig-Antich J, Chambers W, et al. Retrospective assessment of prepubertal major depression with the Kiddie-SADS-E. J Am

Acad Child Psychiatry 1982;21:392–397
21. Beck AT, Steer RA, Garbin MG. Psychometric properties of the Beck Depression Inventory: twenty-five years of evaluation. Clin Psychol Rev 1988;8:77–100
22. Hollingshead A. Four-Factor Index of Social Status. New Haven, Conn: Yale University; 1975
23. Beck AT, Rush AJ, Shaw BF, et al. Cognitive Therapy of Depression. New York, NY: The Guilford Press; 1979
24. Alexander JF, Parsons BV. Functional Family Therapy. Monterey, Calif: Brooks/Cole; 1982
25. Robin AL, Foster SL. Negotiating Parent-Adolescent Conflict: a Behavioral-Family Systems Approach. New York, NY: The Guilford Press; 1989
26. Shaffer D, Gould MS, Brasic J, et al. A Children's Global Assessment Scale (CGAS). Arch Gen Psychiatry 1983;40:1228–1231
27. Leitenberg H, Yost LW, Carroll-Wilson M. Negative cognitive errors in children: questionnaire development, normative data, and comparisons between children with and without self-reported symptoms of depression, low self-esteem, and evaluation anxiety. J Consult Clin Psychol 1986;54: 528–536
28. Beck AT, Weissman A, Lester D, et al. The measurement of pessimism: the Hopelessness Scale. J Consult Clin Psychol 1974;42:861–865
29. Jacob T, Seilhamer RA. Adaption of the Areas of Change Questionaire for parent-child relationship assessment. Am J Fam Ther 1985;13:28–38
30. Epstein NB, Baldwin LM, Bishop DS. The McMaster Family Assessment Device. J Marital Fam Ther 1983;9:171–180
31. Brent DA, Oquendo MA, Birmaher B, et al. Familial pathways to early-onset suicide attempts: a high-risk study. Arch Gen Psychiatry 2002;59: 801–807
32. Fergusson DM, Horwood LJ, Woodward LJ. The stability of child abuse reports: a longitudinal study of the reporting behaviour of young adults. Psychol Med 2000;30:529–544
33. Endicott J, Spitzer RL. A diagnostic interview: the Schedule for Affective Disorders and Schizophrenia. Arch Gen Psychiatry 1978;35:837–844
34. Gibbons RD, Hedeker D, Elkin I, et al. Some conceptual and statistical issues in analysis of longitudinal psychiatric data: application to the NIMH treatment of depression collaborative research program dataset. Arch Gen Psychiatry 1993;50:739–750
35. Schlesselman J. Case-Control Studies: Design, Conduct, Analysis. New York, NY: Oxford University Press; 1982
36. Fergusson DM, Lynskey MT, Horwood LJ. Childhood sexual abuse and psychiatric disorder in young adulthood, 1: prevalence of sexual abuse and factors associated with sexual abuse. J Am Acad Child Adolesc Psychiatry 1996;35:1355–1364
37. Rudd MD, Joiner TE Jr. An integrative conceptual framework for assessing and treating suicidal behavior in adolescents. J Adolesc 1998;21: 489–498
38. Brent DA, Gaynor ST, Weersing VR. Cognitive-behavioral approaches to the treatment of depression and anxiety. In: Rutter M, Taylor E, eds. Child and Adolescent Psychiatry: Modern Approaches. 4th ed. London, England: Blackwell Scientific Publications; 2002:921–937
39. Herrenkohl EC, Herrenkohl RC, Toedter LJ. Perspectives on the intergenerational transmission of abuse. In: Finkelhor D, Gelles RJ, Hotaling GT, et al, eds. The Dark Side of Families: Current Family Violence Research. Beverly Hills, Calif: Sage; 1983:305–316
40. Downey G, Coyne JC. Children of depressed parents: an integrative review. Psychiatry Bull 1990;108:50–76
41. Stern AE, Lynch DL, Oates RK, et al. Self esteem, depression, behaviour and family functioning in sexually abused children. J Child Psychol Psychiatry 1995;36:1077–1089
42. Brent DA, Perper JA, Moritz G, et al. Psychiatric risk factors for adolescent suicide: a case-control study. J Am Acad Child Adolesc Psychiatry 1993;32:521–529
43. Jayson D, Wood A, Kroll L, et al. Which depressed patients respond to cognitive-behavioral treatment? J Am Acad Child Adolesc Psychiatry 1998;37:35–39