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THE DEVELOPMENT OF A PSYCHODYNAMIC TREATMENT FOR PATIENTS WITH BORDERLINE PERSONALITY DISORDER: A PRELIMINARY STUDY OF BEHAVIORAL CHANGE

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This study examines the effectiveness of a modified psychodynamic treatment called Transference Focused Psychotherapy (TFP) designed specifically for patients with borderline personality disorder (BPD). Twenty-three female patients diagnosed with DSM-IV BPD began twice-weekly TFP. Patients were assessed at baseline and at the end of 12 months of treatment with diagnostic instruments, measures of suicidality, self-injurious behavior, and measures of medical and psychiatric service utilization. Compared to the year prior to treatment, the number of patients who made suicide attempts significantly decreased, as did the medical risk and severity of medical condition following self-injurious behavior. Compared to the year prior, study patients during the treatment year had significantly fewer hospitalizations as well as number and days of psychiatric hospitalization. The dropout rate was 19.1%. This uncontrolled study is highly suggestive that this structured and manualized psychodynamic treatment modified for borderline patients shows promise for the ambulatory treatment of these patients and warrants further study.

Borderline personality disorder (BPD) is a highly prevalent and chronic psychiatric problem and constitutes one of the most important sources of long-term impairment in both treated and untreated populations (Weissman, 1993; Oldham, et al., 2000). Approximately 11% of psychiatric outpatients and 19% of inpatients meet the DSM-IV (American Psychiatric

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Association, 1994) criteria for BPD (Skodol, et al., 2001). Suicidal (McGlashan, 1986; Stone, 1993) and self-injurious behavior is particularly prevalent among BPD patients, with rates ranging from 69% to 75% (Cowdry, Pickar, & Davies, 1985; Clarkin, Widiger, Frances, Hurt, & Gilmore, 1983).

Psychotherapy is the most widely practiced technique for treating borderline patients. Among other common treatment approaches to BPD is the object relations approach based on Kernberg's clinical theorizing (1984, 1996). Kernberg and his colleagues have published a treatment manual describing a modified psychodynamic treatment of patients with borderline personality organization called Transference-Focused Psychotherapy (TFP; Clarkin, Yeomans, & Kernberg, 1999).

TFP relies principally on the techniques of clarification, confrontation, and interpretation within the evolving transference relationship between the patient and the therapist. The primary focus of TFP is on the dominant affect-laden themes that emerge in the relationship between borderline patients and their therapists in the here-and-now of the transference. During the first year of treatment, TFP focuses on a hierarchy of issues: the containment of suicidal and self-destructive behaviors, the various ways of destroying the treatment, and the identification and recapitulation of dominant object relational patterns, as they are experienced and expressed in the here-and-now of the transference relationship. Although psychoanalytic psychotherapy based on Kernberg's theory is a widely practiced technique for treating BPD, research concerning the effectiveness and efficacy is limited and is greatly needed.

THE PRESENT STUDY

We report findings from an NIMH-funded treatment development study examining pre-post changes observed in the 1-year outpatient treatment of borderline patients with TFP. Our primary hypotheses were that subjects would show a significant reduction in the number and severity of suicidal and self-injurious behavior; a decrease in physical harm resulting from suicidal and self-injurious behavior; a significant reduction in hospitalizations, emergency room visits, and number of days hospitalized; and improved psychosocial functioning.

METHOD

PROCEDURE

Subjects were recruited from all treatment settings (i.e., inpatient, day hospital, and outpatient clinics) within the New York-Presbyterian Hospital—Weill Cornell Medical Center system. Written informed consent was obtained after all study procedures had been explained. Potential subjects were screened with both clinical and semi-structured interviews. Women who met the following selection criteria were eligible for the study: (1) five or more DSM-IV criteria for BPD as assessed on the SCID-II; (2) at least two incidents of suicidal or self-injurious behavior in the last 5 years; (3) absence

of DSM-IV criteria for schizophrenia, bipolar disorder, organic pathology, and/or mental retardation as assessed using the SCID-I; (4) between the ages of 18 and 50; and (5) agreement to the study conditions, including termination from other individual psychotherapy. Upon admission to the study, patients were given a number of additional assessment instruments described in detail below. Subjects were reevaluated after 12 months of treatment.

SUBJECTS

Twenty-three patients met criteria for BPD, agreed to the study conditions, and entered the treatment. Two patients dropped out around the 4-month mark and two patients dropped out after 8 months of treatment. An additional two patients were administratively discharged from TFP early in the process because of protocol violations (i.e., consistent failure to adhere to the treatment contract despite verbal assurances to the contrary).

The treatment group (N = 17) had a mean age of 32.7 years (SD = 7.52; range of 19 to 48). Thirteen (76.5%) subjects were Caucasian, and four (23.5%) were Hispanic. Ten were single and never married, four were married, and three divorced. At the beginning of the treatment period, eight were unemployed, seven worked at the technical or clerical level, one was a minor professional, and one was a student/homemaker. Most subjects met criteria for more that one Axis I disorder and at least one Axis II personality disorder. The most common clinical Axis I diagnoses in this sample were: major depression (n = 8; 47.1%); dysthymia (n = 4; 23.5%) and eating disorder (n = 3; 17.6%). The most common Axis II conditions comorbid with BPD were narcissistic (82%), paranoid (76%), obsessive compulsive (71%), and avoidant personality disorder (65%).

THERAPISTS

The therapists ranged from six experienced, senior individuals with at least 10 years of experience, to six faculty/staff psychologists and postdoctoral trainees in psychology, all of whom had 2 or more years of experience treating BPD patients with psychodynamic treatment and training in TFP. All therapists selected for this phase of the study were judged by independent supervisory ratings to be both competent and adherent to the TFP manual. Throughout the study, all therapists regularly videotaped sessions and were supervised on a weekly basis. Consensual adherence and competence ratings were made during the weekly supervision sessions.

ASSESSMENT INSTRUMENTS

The Parasuicidal History Interview. (PHI; Linehan, Wagner, & Cox, 1989) was used to assess the number of suicidal and parasuicidal behaviors as well as the medical severity and physical outcomes of these behaviors for the year prior to treatment and during the treatment year. The methodology for assessing medical risk and physical condition was derived using the scales described by Linehan (Linehan, Wagner, & Cox, 1989).

The Treatment History Interview. (THI; Linehan, 1987) was used to assess the types and amount of treatment received during the target period, including emergency room visits, and number and length of psychiatric hospitalizations.

The Global Assessment of Functioning Scale. (GAF; APA, 1994) provides a single global rating of functioning and symptomatology. We used a modified version of the GAF included in DSM-III-R. In this version, scores range from a low of 1 (e.g., needs constant supervision, serious suicide act with clear intent and expectation of death) to a high of 90 (e.g., superior functioning in a wide range of activities, no symptoms).

DATA ANALYSIS

Two sets of analyses were conducted. The first set compared pre- and post-treatment scores in the intent-to-treat group, that is, all patients who agreed to enter treatment. The intent-to-treat group included the 17 patients who completed TFP, the 4 therapy dropouts, and the 2 subjects who were administratively discharged (N= 23). In order to be statistically conservative, pretreatment scores were carried forward in those cases where post-test scores were not available. The two subjects who were administratively discharged were only available at pre-treatment. The second set compared patients who completed TFP (N=17) pre- and post-treatment. For both analyses, three repeated multivariate analyses of variance measures (MANOVAs) were performed, one on the set of suicide variables (number of suicide attempts, average medical risk of all attempts, average resulting physical condition after the attempts), one on the set or parasuicide variables (number of parasuicide attempts, average medical risk of all attempts, average resulting physical condition after the attempts), and finally, one for the set of treatment utilization variables (number of hospitalizations and length of hospitalizations). In each MANOVA, time was the repeated factor and there was no between-subjects grouping variable. Individual treatment effects were considered significant only when the overall multivariate model was significant and the α level for the individual effect was less than 0.05. All comparisons employed two-tailed tests. For each outcome variable, we also investigated the effect size that treatment had on outcome using a formula provided by Cohen (1992). In that formula, effect size equals the difference in mean score pre- and post-treatment divided by the pre-therapy standard deviation.

RESULTS

PRELIMINARY ANALYSES

Before analyzing pre-post changes for the intent-to-treat group and treatment completers, demographic and study variables were compared for patients who completed treatment and those who declined to enter treatment, dropped out, or were administratively discharged using chi-square analysis and t-test for independent samples. There were no significant differences

between the groups in terms of age, education, employment, marital status, ethnicity, or religion. Similarly, no significant differences were found between the groups in distribution of Axis I and II diagnoses except for the diagnosis of schizoid personality disorder based on the SCID-II-Q. Those in the treatment group were more likely to meet criteria for schizoid personality disorder (treatment completers = 6 [35%]; treatment decliners, dropouts, and discharged = 0; $\chi^2 = 6.52$, $p < .01$). We also compared the two groups on the amount of psychotropic medications prescribed and used. Results of chi-square analyses indicated that at pre-treatment there were no between-group differences in the number of subjects using psychotropic medications.

OUTCOME

For both the intent-to-treat and the completer analyses, the overall multivariate model was not significant for the set of suicide variables. Although the multivariate results were not significant, we did observe a suggestive decrease in the number of suicide attempts from the year prior to the treatment year (see Table 1). In addition, a decrease is also reflected in the number of patients who made suicide attempts. In the prior year, 9 of the 17 (53%) patients made a suicide attempt, and during the 1-year treatment, only 3 of 17 (18%) made such an attempt (McNemar's test (1) = 4.64, $p = < .03$).

For the completer analyses, the overall multivariate model was significant for the parasuicide variables (Pillai's trace = 0.42, $F(3,14) = 3.38$, $p < .05$). In the intent-to-treat group, this model approached significance (Pillai's trace = 0.31, $F(3,20) = 3.01$, $p < .06$). Means, standard deviations, F tests, and effect sizes from subsequent univariate tests are shown in Table 1. There was not a significant decrease in the number of self-injurious behaviors, but there was a significant decrease in average medical risk and average physical condition following such incidents. The intent-to-treat results parallel these results for completers.

With regard to service utilization, the overall MANOVA was significant for the completer group (Pillai's trace = 0.35, $F(2,15) = 3.97$, $p < .05$) as well as the intent-to-treat group (Pillai's trace = 0.26, $F(2,21) = 3.61$, $p < .05$). Means, standard deviations, F tests, and effect sizes from subsequent univariate tests for these models are shown in Table 1. There was a significant reduction in the number of hospitalizations (72%) for the completer group, with the reduction in days hospitalized approaching significance (88%, $p < .06$). Parallel results were obtained for the intent-to-treat group.

EFFECT SIZES

The magnitude of effect was investigated by calculating the effect size (d') for each of the variables. Almost all of the effect sizes indicated favorable change. The average effect sizes were 0.38 and 0.56 for the intent-to-treat analyses and completer analyses, respectively.

TABLE 1. Univariate Tests on the Intent-to-Treat Group and the Computer Group

	Intent-To-Treat Analysis (*N* = 23)							
	Baseline		Follow-up					
	M	*SD*	*M*	*SD*	*F*	*df*	*p*	*d prime*
Parasuicide								
Number of Incidents	4.39	6.34	3.44	4.57	0.60	1,22	0.45	0.15
Medical Risk	2.06	1.17	1.62	1.24	6.88	1,22	0.02	0.37
Physical Condition	2.10	1.24	1.54	1.17	8.46	1,22	0.01	0.46
Pillai's trace = 0.31, $F(3,20) = 3.01$, $p < .06$.								
Services								
Hospitalizations	1.48	1.59	0.83	1.4	6.89	1,22	0.02	0.41
Days Hospitalized	55.33	84.32	29.7	70.83	4.21	1,22	0.06	0.31
Pillai's trace = 0.26, $F(2,21) = 3.61$, $p < .05$.								
	Completer Analysis (*N* = 17)							
	Baseline		Follow-up					
	M	*SD*	*M*	*SD*	*F*	*df*	*p*	*d prime*
Parasuicide								
Number of Incidents	5.18	7.25	4.24	5.08	0.6	1,16	0.45	0.13
Medical Risk	1.72	1.13	1.14	0.99	7.61	1,16	0.02	0.51
Physical Condition	1.89	1.31	1.12	0.99	9.64	1,16	0.01	0.58
Pillai's trace = 0.42, $F(3,14) = 3.38$, $p < .05$.								
Services								
Hospitalizations	1.24	1.35	0.35	0.61	7.63	1,16	0.02	0.61
Days Hospitalized	39.21	67.03	4.53	9.61	4.45	1,16	0.06	0.52
Pillai's trace = 0.35, $F(2,15) = 3.97$, $p < .05$.								

DISCUSSION

We examined the treatment outcome for patients diagnosed with BPD who were treated in a 1-year modified psychodynamic outpatient psychotherapy. The major finding in this study is that TFP appears to be a promising psychotherapeutic technique that warrants additional research. In both the intent-to-treat and treatment completion groups, borderline patients receiving TFP showed considerable improvement in a number of important areas.

The 1-year dropout rate was low (19.1%; 4 of 21 of patients dropped out of treatment) and no patient committed suicide. This dropout rate compares well with previous studies (Bateman & Fonagy, 1999; Linehan, Armstrong, Suarez, Allmon, & Heard, 1991; Linehan, Schmidt, Dimeff, & Craft et al., 1999; Stevenson & Meares, 1992), which reported a range between 16.7% to 21.0%. Additionally, none of the treatment completers deteriorated or were adversely affected by the treatment. Therefore, it appears that TFP is tolerated quite well.

There was a significant reduction in the number of patients who had made a suicide attempt during the treatment year compared with the year prior to treatment (18% vs. 53%). However, the number of suicide attempts, the medical risk of these acts, and the patients' physical condition afterward were not significantly improved. Although non-suicidal self-injurious be-

havior did not decrease in frequency, the medical risk was significantly reduced, and the physical condition of the patients was significantly improved.

Compared to the year prior, study patients during the treatment year had significantly fewer psychiatric hospitalizations (67% reduction) and days of inpatient hospitalization (89% reduction). While 64.7 % of patients were hospitalized the year prior, only 29.4 % were hospitalized during the treatment year.

Two other points are worth noting. First, TFP relies principally on transference interpretations, which are controversial (Piper, Azim, Joyce, & McCallum, 1991; Gabbard, 1991). Future research should examine the role of transference interpretation more directly as one of the specific mechanisms of change in TFP. Second, Linehan et al. (1991), Stevenson and Meares (1992), Bateman and Fonagy (1999), and this study all employed close supervision, a team approach, and provided structured treatments. Future research should examine these as common factors in the successful treatment of BPD.

As a preliminary study, there are a number of design issues that limit the interpretation and the generalizability of our results. First, the absence of a comparison group limits the interpretation of positive change, as the changes we observed in our patients may have occurred over time without TFP or even without treatment. However, previous research with borderline patients has found fair stability over 2- to 5-year periods in terms of the diagnosis and severity of emotional difficulties (Hoke, Lavori, & Perry, 1992; Vaglum, Friis, Karterud, Mehlum, & Vaglum, 1993). Nevertheless, a randomized controlled trial of TFP would constitute a more stringent test of the efficacy of this treatment, and with the positive results presented here we are proceeding to such a study.

The sample in the present study was a relatively homogeneous group of severely disturbed, chronically self-destructive borderline women. It is unclear if our results would generalize to less severely disturbed borderline individuals or whether the treatment would be as effective for men.

Another important issue with regard to generalizability concerns the fact that none of our treated patients was currently abusing substances at the time of entry into the study. A number of studies have found a high prevalence of alcohol and substance use in individuals with BPD. Although none of our patients met criteria for alcohol or substance dependence at the beginning of treatment, more than half of our treatment completers ($N = 9$) had significant drug use/abuse histories. Therefore, while our findings may not generalize to patients with current alcohol or substance dependence, certainly our findings are generalizable to borderline patients with significant drug and/or alcohol histories.

CONCLUSIONS

This study, which used the patients as their own controls, is highly suggestive that extended TFP is well-tolerated and may result in considerable improvement in functioning in a broad range of areas. Based on the present findings, future research with TFP is warranted. Future studies should in-

clude a randomized controlled trial of TFP, as well as an exploration of the treatment process and underlying mechanisms of action that result in change for these patients (Shea, Benjamin, Clarkin, & Magnativa, 1999). Additionally, given the severity and chronicity of BPD, follow-up data is imperative to establish the long-term significance of these findings.

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