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Research Articles

GROUP BEHAVIORAL THERAPY OF OBSESSIVE-COMPULSIVE DISORDER: SEVEN VS. TWELVE-WEEK OUTCOMES

Joseph A. Himle, Ph.D.,* Stephen Rassi, M.S.W., Hedieh Haghighatgou, M.S.W., Kathleen P. Krone, M.S., R.N., Randolph M. Nesse, M.D., and James Abelson, M.D., Ph.D.

Previous research has demonstrated that individualized behavioral exposure and response prevention therapy is an effective treatment for Obsessive-Compulsive Disorder. In our prior preliminary report, 7-week group exposure and response prevention therapy was also found effective in reducing obsessions and compulsions. The present report describes a larger sample (N=113) of treatment seeking obsessive-compulsives who received group behavioral therapy. As before, group exposure and response prevention significantly improved ratings of obsessions, compulsions, and depression. These improvements were maintained at 3-month and long-term follow-up. A sub-sample of patients who received 12 weeks of treatment had outcomes at the end of the group and at follow-up that did not significantly differ from those who received 7 weeks of treatment. These results confirm the efficacy of a 7-week behavioral treatment program administered in a group format. Depression and Anxiety 13:161–165, 2001. *© 2001 Wiley-Liss, Inc.*

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INTRODUCTION

Individual behavioral exposure and response prevention for Obsessive-Compulsive Disorder (OCD) has been established as an effective treatment method [Rachman and Hodgson, 1980; Foa et al., 1984]. In our prior preliminary report, we found that a 7-week behavioral group program was an effective treatment for OCD in a sample of 36 patients [Krone et al., 1991]. Similar rates of improvement were observed for patients who were taking medication vs. those who were not.

Six other reports have been published that describe behavioral group treatment of obsessive-compulsive disorder. In an uncontrolled case series, Hand and Tichatzky [1979] reported improved OCD symptoms among patients who participated in a 30 week, three phase, outpatient treatment program, which included both individual and group exposure sessions. The group treatment component involved three group formats, therapist lead groups, consumer lead groups, and a group for only family members. Epsie [1986], in another uncontrolled study, reported significant improvement from a 10-week group treatment for patients who had relapsed after previously benefiting from individual behavioral treatment. Improvement was maintained at up to 1-year follow-up. Enright [1991] found only modest reduction of OCD symptoms among patients given group cognitive-behavioral therapy. This group included additional behavioral treatments beyond exposure and response prevention therapy, including stress management techniques and assertiveness training. Fals-Stewart et al. [1993], in the first controlled study of group behavioral therapy for OCD, found group exposure and response prevention more effective than relaxation therapy but somewhat less effective than individual behavioral treatment in reducing OCD symptoms. Patients with co-morbid

Department of Psychiatry, University of Michigan, Ann Arbor, Michigan

*Correspondence to: Dr. Himle, Anxiety Disorders Program, University of Michigan Department of Psychiatry, 1500 East Medical Center Drive, Med-Inn Building Room C-443, Ann Arbor, Michigan, 48109-0840. E-mail: himlej@umich.edu

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depression were excluded from this study. This is a significant issue, given that OCD and depression very often co-occur [Karno and Golding, 1991]. Van Noppen and associates [1997], highlighting the significance of family issues in OCD, compared a 10 session group that included OCD patients and their family members to a similar group without family participation. Both groups improved but patients in the family group were more likely to meet study criteria for clinically significant improvement. Finally, Van Noppen et al. [1998], in an uncontrolled naturalistic study of a 10-week behavioral group, found significant improvement in obsessions and compulsions. Those patients receiving medication showed greater improvement than those who were medication-free.

The present paper adds to the growing literature on group treatment of OCD by addressing the optimal duration of group behavioral therapy. This paper compares the efficacy of a 7 vs. 12-week group behavioral therapy program in 113 subjects who presented for treatment of OCD.

METHOD

SUBJECTS

The 113 patients who participated in the group treatment program were outpatients at the University of Michigan Anxiety Disorders Program. All received a primary diagnosis of Obsessive-Compulsive Disorder [American Psychiatric Association, 1994] from both an experienced clinician and a faculty psychiatrist who specialize in the diagnosis and treatment of anxiety disorders. Eighty-nine patients participated in the 7-week program and 24 participated in the 12-week program. Patients were assigned to the 7- and 12-week groups consecutively. The patients were not given a choice as to which group (7 week vs. 12 week) they attended. The sample included 70 women and 43 men and the mean age at intake was 37 (SD = 10.86) years. Sixty-eight of the patients were taking medication for their OCD symptoms concurrent with group participation.

GROUP TREATMENT

As described in our prior report [Krone et al., 1991], the group therapy sessions included the following: 1) education about OCD and its treatment, 2) instruction in the behavioral approach to the self-treatment of OCD, and 3) therapist guided and group supported individualized behavior therapy planning. Participants received workbooks containing educational material and forms for recording behavioral exercises. A treatment manual is available by contacting the corresponding author.

The 7-week group met weekly for 2 hours. The first hour included education about OCD and its treatment. Educational topics included: (week 1) the nature of OCD and the principles of behavior therapy; (week 2) causes of OCD; (week 3) other treatments for OCD; (week 4) family life and OCD; (week 5) specialized techniques for making behavior therapy more effective; and (week 6) lifestyles and OCD. The seventh educational session involved a summary and review of the previous sessions. The second hour of the group was devoted to behavioral treatment. During this hour, the principles of behavioral exposure and response prevention were used to design individualized treatment programs for each participant. These sessions included behavioral analysis of OCD symptoms, development of goals for behavioral treatment, and formulation of behavioral exercises to be completed as homework. In addition to homework assignments, brief in vivo exposure exercises were conducted in order to assist participants in initiating difficult assignments, in overcoming obstacles to treatment, or when the presence of group members facilitated exposure. During later group sessions, patients were encouraged to design their own behavioral exercises, with assistance from the therapist.

The 12-week program included a similar 7-week, 2 hour, course of education and behavioral treatment planning, augmented by five extra 1-hour sessions. These sessions involved a continuation of the behavior therapy planning portion of the group.

Finally, both groups included a 2-hour family session. During this evening session, family members were given information about the nature of OCD and its treatment. In addition, patients and their families discussed family issues related to OCD and how these might be effectively addressed.

MEASURES

Obsessive-Compulsive and depressive symptoms were rated before entry into the group, upon group completion, 3 months after treatment completion, and at long-term follow-up (mean follow-up length = 49.19 months; SD = 16.64 months). Pre- and post-group ratings were obtained in person and follow-up ratings were obtained over the telephone. OCD symptoms were rated using the Yale-Brown Obsessive-compulsive Inventory (Y-BOCS) [Goodman et al., 1989]. Depression symptoms were evaluated using the Beck Depression Inventory (BDI) [Beck et al., 1961], a widely used self-report instrument for assessing severity of depression.

STATISTICAL ANALYSIS

Analyses of variance for repeated measures, Student's *t*-tests, and chi-square analyses were used as indicated. The repeated measures analyses were conducted by using the SAS statistical software package and the PROC MIXED technique. Owing to limited space, only especially important repeated analyses will be reported.

RESULTS

Selected demographic variables, Y-BOCS scores, and BDI scores are presented in Table 1. There were

TABLE 1. YBOCS and BDI scores*

	All subjects			7 week group			12 week group		
Measures	n	Mean	(SD)	n	Mean	(SD)	n	Mean	(SD)
Y-BOCS									
Time 1	113	22.27	(6.60)	89	22.32	(6.53)	24	22.08	(7.01)
Time 2	113	15.47	(6.53)	89	15.62	(6.47)	24	14.92	(6.83)
Time 3	60	13.88	(7.94)	45	13.34	(7.23)	15	15.47	(9.89)
Time 4	26	14.62	(6.81)	15	15.27	(5.96)	11	13.73	(8.04)
Y-BOCS obsession									
Time 1	113	11.08	(3.72)	89	11.00	(3.92)	24	13.83	(2.79)
Time 2	113	7.83	(3.73)	89	7.87	(3.75)	24	7.71	(3.72)
Time 3	60	7.08	(4.03)	45	6.70	(3.81)	15	8.23	(4.57)
Time 4	26	7.52	(3.74)	15	7.83	(3.46)	11	7.09	(4.21)
Y-BOCS compulsion									
Time 1	113	11.20	(3.57)	89	11.28	(3.26)	24	10.88	(4.61)
Time 2	113	7.81	(3.62)	89	7.98	(3.58)	24	7.21	(3.78)
Time 3	60	6.80	(4.45)	45	6.66	(3.98)	15	7.23	(5.77)
Time 4	26	7.00	(3.67)	15	7.43	(3.45)	11	6.64	(4.08)
Beck Depression Inventory									
Time 1	104	15.89	(9.37)	83	15.24	(8.82)	21	18.43	(11.18)
Time 2	101	11.14	(9.71)	82	10.21	(8.33)	19	15.16	(13.81)
Time 3	55	10.47	(10.73)	42	8.83	(8.94)	13	15.77	(14.34)
Time 4	26	10.89	(8.31)	15	10.47	(7.86)	11	11.46	(9.26)

**Time 1, begin group; Time 2, end group; Time 3, 3 month follow-up; Time 4, long term follow-up.*

no significant differences in sex ratio (df = 1, chi-square = 1.02, $P = .312$), mean age (df = 111; t = –0.24, $P = .810$), initial Y-BOCS score (df = 111; t = 0.15, $P = .885$), and initial BDI score (df = 102; t = –1.40, $P = .165$) between members who participated in the 7 vs. the 12-week program. There was also no significant difference in medication status between the two groups (df = 1, chi-square = 1.31, $P = .252$) (58% medication, 7-week group; 71% medication, 12-week group).

The data were first analyzed for the entire sample of group participants regardless of whether they received the 7 (n = 89) or 12 (n = 24) week program. Significant reductions in Y-BOCS and Beck Depression scores were observed for subjects following treatment and these differences were maintained through long-term follow-up. Analysis of variance for repeated measures showed a significant difference over time in Y-BOCS total (df = 3, 196; F = 58.70; $P < 0.0001$), Y-BOCS obsession (df = 3, 196; F = 48.30; $P < 0.0001$), Y-BOCS compulsion (df = 3, 196; F = 55.5; $P < 0.0001$), and Beck depression (df = 3, 173; F = 18.1; $P < 0.0001$) scores. A second repeated measures analysis of variance (group ×time period interaction) failed to find a significant difference in outcome for those who were taking medication compared to those who were not (Y-BOCS total (df = 1, 82; F = 0.84; $P = .363$); Y-BOCS compulsion (df = 1, 82; F = 1.88; $P = .174$); Y-BOCS obsession (df = 1, 82; F = 0.65; $P = 0.421$); Beck Depression (df = 1, 68; F = 0.62; $P = 0.434$).

A third analysis was performed by using the baseline score as a covariate in the repeated measures analysis. Coefficients less than one for all outcome measures (Y-BOCS total, beta = 0.61; Y-BOCS obsession, beta = 0.49; and Y-BOCS compulsion, beta = 0.66) indicated that patients with the most severe OCD symptoms at baseline achieved the largest improvements.

No significant differences in outcome were observed between the 7-week and the 12-week treatment groups (Fig 1). Analyses of variance for repeated measures (group ×time period interaction) did not show a significant difference between the two groups in Y-BOCS total (df = 1, 84; F = 1.62; $P = .207$), Y-BOCS obsession (df = 1, 84; F = 0.00; $P = 0.997$), Y-BOCS compulsion (df = 1, 84; F = 0.02; $P = 0.900$), or Beck depression scores (df = 1, 69; F = 2.96; $P = 0.090$).

DISCUSSION

This study provides evidence that short-term group behavioral therapy is an efficient and effective form of treatment for obsessive-compulsive disorder. Significant improvements in Yale-Brown scores were found for both the 7 and 12-week groups. Significant improvements in Beck Depression scores were also observed. The amount of improvement in obsessive-compulsive and depressive symptoms was not influenced by whether subjects were taking medication. The findings of this study are also consistent with other reports indicating the effectiveness of group behavioral treatment for OCD [Hand and Tichatzky, 1979; Epsie, 1986; Fals-Stewart et al., 1993; Van Noppen et al., 1997, 1998]. The improvement in obsessive-compulsive symptoms from the beginning to the end of the group is similar to that observed in other studies of behavioral and pharmacological treatment for OCD [Abramowitz, 1997].

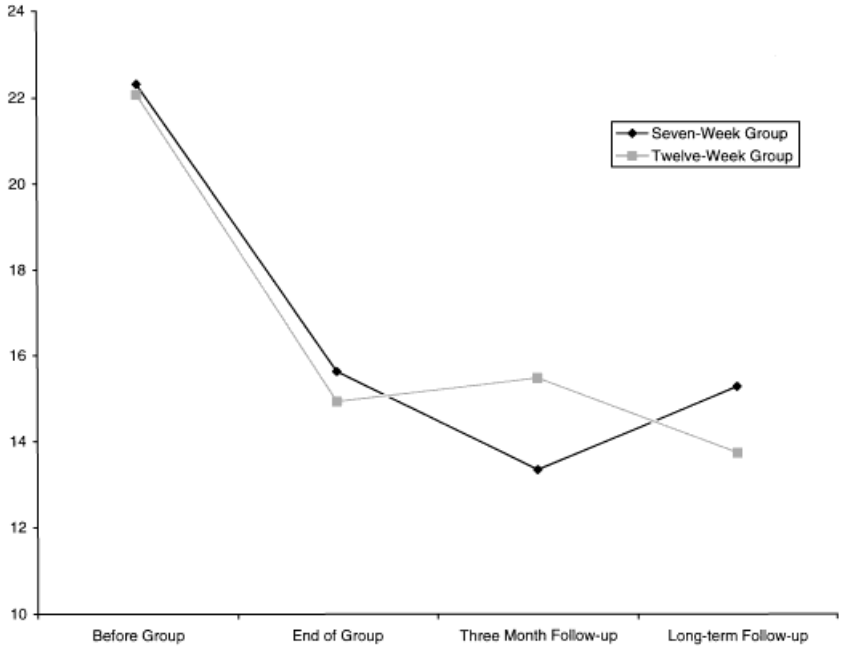

Figure 1. Mean Yale-Brown scores.

Extending the duration of the group to 12 weeks did not enhance eventual outcome. Clinical impressions suggest that patients in the 12-week group paced themselves more slowly with the behavioral exposure and response prevention exercises and also were absent from the group more often than patients attending the 7-week program. Apart from saving time, the reduction in number of sessions resulted in a cost saving of $350.00 per case treated (this savings assumes attendance/billing for all sessions). Clearly, longer is not always better with respect to group behavioral treatment for OCD patients. This result stands in contrast to what our patients expected. The 12-week program was initiated after several members who received the 7-week group expressed the desire for an extended format. The fact that the shorter treatment program was as effective as the extended format may have implications for other conditions and methods of treatment. Also, it would be interesting to learn if seven sessions are more effective than five or three. It would not be surprising if fewer sessions could be effective given that anxiety disorders often respond to self-conducted behavioral programs [Ghosh and Marks, 1987].

The present study also demonstrated that most patients maintained gains made during the group at long-term follow-up. Maintenance of gains was apparent for both the seven and 12-week groups. However, caution is advised when interpreting our long-term follow-up data given the small number of patients who participated. It is extremely difficult to obtain long-term follow-up data in a naturalistic study with a transient population of subjects but the available data was included given the importance of tracking long-term outcome. However, it is important to note that patients who provided long-term follow-up data did not significantly differ in response to treatment compared to those who did not provide long-term follow-up.

Given that OCD is not known to respond to inert treatments [Katz et al., 1990], it is unlikely that the observed improvement in this study resulted from non-specific effects. However, future controlled studies, with random assignment, of the 7-week treatment model are needed to further confirm the efficacy of the treatment program. In addition to comparison to a credible attention control group, the outcomes of this treatment model must be compared with other effective treatments such as individual behavior therapy [Rachman and Hodgson, 1980; Foa et al., 1984] and medication [Pigott et al., 1990; Insel, 1990]. Similarly, it would be useful to explore further whether a combination of medication and group behavioral treatment has additional benefit over group treatment alone.

Despite the limitations of this study, it demonstrates the utility of short-term behavioral group therapy as an effective and efficient treatment of obsessive-compulsive disorder. In addition, the study provides important data regarding the appropriate length of group behavioral therapy for OCD. The group program is standardized, easily implemented, and requires less therapist time than individual behavioral treatment.

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