# A Time-Limited Behavioral Group for Treatment of Obsessive-Compulsive Disorder

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In vivo exposure with response prevention is an effective treatment for obsessive-compulsive disorder (OCD) either alone or combined with pharmacotherapy. Widespread application of this technique has been limited by lack of trained therapists and the expense of intensive individual behavioral therapy. This report describes a time-limited 10-session behavioral therapy group for OCD whose key elements are exposure, response prevention, therapist and participant modeling, and cognitive restructuring. In a naturalistic open trial of 90 patients meeting DSM-III-R criteria for OCD who completed the 10-session group, self-administered Yale-Brown Obsessive-Compulsive Scale scores (mean  $\pm$  SD) were 21.8  $\pm$  5.6 at baseline and  $16.6 \pm 6.4$  after the 10-week treatment, a significant decrease. A descriptive analysis of the therapeutic elements of the group and its advantages over individual behavioral treatment are presented.

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long with pharmacologic treatment, be-**1** havioral therapy has been recognized as an effective means of reducing obsessions and compulsions. However, in pharmacotherapy symptom remission is quickly lost when medications are discontinued, whereas clinical trials of exposure and response prevention have produced improvement in obsessive-compulsive symptoms that has lasted up to 6 years. 1,3,4 The use of behavioral treatment has been limited by the lack of trained therapists and the cost of repeated and frequent sessions. Group behavioral treatment provides a way of dealing with both of these problems, allowing for cost containment and efficient use of therapist time.

Despite its benefits, few systematic studies exist of group treatment for any of the anxiety disorders. In anxious and phobic patients, reports have reflected benefits not only in saved therapist time but also in symptom improvement brought about by group processes like social cohesion and modeling.<sup>5-7</sup> However, these reports lack standardized measures of

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change or improvement, making replication difficult.

One of the first reports of the use of a group in treatment of obsessive-compulsive disorder (OCD)<sup>8</sup> mentioned anecdotally that an informal gathering of OCD patients and their families met for 4 to 6 weeks after several weeks of individual behavior therapy. These "family groups" were helpful in assisting patients with in vivo exposure. The groups included up to 16 people.

The first systematic report of OCD patients in behavioral groups, from Hand and Tichatzky, describes an elaborate threephase group process involving a minimum of 12 sessions, including three home visits and some sessions with family members. There were about 6 patients per group and a total of 17 patients over three groups. Like Hand et al. and Teasdale et al. for agoraphobic patients, these authors reported extra benefit for the OCD patients from group cohesion. Hand and Tichatzky<sup>9</sup> note that objective measures for improvement were not readily available, but they did attempt to use some measures of change. A global measure and an initial version of the Maudsley OC inventory were used and revealed some improvement. However, with the home visit. the time and cost savings usually seen in group behavioral treatment were lost. Hand estimated therapist time for the 12 sessions at 122 to 147 hours.

Epsie<sup>10</sup> describes a 10-session behavioral therapy group for OCD with the aim of providing cost-effective treatment that also improves patient compliance. He treated 5 patients who had previously benefited from individual therapy but who had relapsed 8 months after discontinuing therapy. Although 3 of the 5 patients were on medication, he noted additional therapeutic benefits from a group approach, particularly compliance with treatment. A decrease in OC symptoms following the group treatment was maintained at a 1-year follow-up. However, this report also used no standardized measures to record OC symptoms.

One of the few reports of a structured behavioral treatment group that did use standardized measures for a symptom comes from Krone et al. 11 Seven 2-hour sessions (14 therapist hours) were used, with just one session attended by family members. A total of 36 patients were treated. Of the 36 patients, 19 were on medication and 17 were not. Patients were measured before and after treatment with the Yale-Brown Obsessive-Compulsive Scale (YBOCS), 12,13 and significant decreases were seen in both medicated and nonmedicated groups at the end of treatment. YBOCS scores dropped from means of 20.4 to 17.2 in the nonmedicated group and from 21.9 to 15.1 in the medicated group. The patients showed continued improvement at 3-month follow-up despite having no further behavioral therapy sessions. This report supports the belief that behavioral groups in OCD potentially offer not only a savings of therapist time and money but also significant and lasting symptom improvement.

The most recent report, by Fals-Stewart et al.,14 was conducted as a controlled trial of three treatment conditions, each run over 12 weeks, with a total of 24 sessions in each condition. These three conditions were group exposure and response prevention treatment (n = 30), individual exposure and response prevention (n = 31), and individual relaxation (n = 32). The last acted as a control group. The control condition, individual relaxation, showed changes at posttest and follow-up in anxiety only, whereas the two treatment conditions showed significant improvement in anxiety, depression, and OCD symptoms. YBOCS scores for the group treatment decreased from a mean of 22 to 12 after treatment and 14 at follow-up. Scores for individual treatment decreased from a mean of 20 at pretest to 12 at posttest and 13 at follow-up. However, the generalizability of these findings is hampered by strict exclusion criteria (major depression, Beck Depression scores > 22, Axis II diagnoses) and the lack of information about medication use.

What follows is a report of an open clinical

trial and naturalistic follow-up of group behavioral treatment in a large sample (N=90) of OCD patients similar in structure to that reported by Krone et al. 11 and Fals-Stewart et al. 14 Despite some limitations inherent in a naturalistic study, this report adds to a small body of literature on group behavioral treatment for OCD, and the sample receiving group behavioral treatment is larger and the follow-up is longer than in either of the previous reports. Like the Fals-Stewart<sup>14</sup> and Krone<sup>11</sup> teams, we used the YBOCS as an outcome measure, allowing for an objective measure of outcome and comparability to other medication and behavioral therapy trials, where YBOCS has become the gold standard measure of symptom severity.

On the basis of the previous reports outlined above, we hypothesized that 1) this time-limited, systematically applied group treatment would result in significant reductions in YBOCS scores and 2) this group treatment, unlike medication alone, would have good long-term efficacy<sup>2</sup> similar to that shown in individual behavioral treatment trials.<sup>4</sup>

## METHODS

## Subjects

Ninety patients meeting DSM-III-R criteria for OCD completed a 10-session behavioral therapy group. Prior to referral to the behavioral group treatment, patients were evaluated by a psychiatrist in our OCD clinic, who confirmed a DSM-III-R diagnosis of OCD. The age of onset for major OCD symptoms was 22.2  $\pm$  9.2 years (mean  $\pm$  SD). Of the 90 patients, 30% were male and 37% were single. Seventeen patients had not been on any medication for at least 12 weeks prior to starting the group. The remaining 73 patients had been receiving a selective serotonin reuptake inhibitor for varying periods of time before entering the group. Data on the duration of illness were available on 60 of the 90 patients, and in all of these patients, symptoms had been in existence at least 7 years. This was a naturalistic open trial, so patients were not randomly or consecutively chosen to participate; this cohort of 90 patients simply represents those patients treated with group behavioral treatment over a 3-year period.

### Measures

Each patient was interviewed by a psychiatrist, using a semistructured format. The interviewer asked about types of obsessions and compulsions and requested information on course of illness. The primary efficacy measure was the self-report version of the YBOCS. Rosenfield et al. 15 have shown that there is a 0.97 correlation between the observer-rated YBOCS and the self-rated YBOCS. Each item is rated from 0 to 4 with anchor points; the total possible score is 40. A score of 23 reflects 3 to 8 hours of rituals, moderate to severe levels of anxiety and distress, and little or no control over obsessions and compulsions. A score of 15 reflects approximately 1 hour of rituals, mild levels of distress and social and occupational impairment, and moderate control over thoughts and rituals.

YBOCS scores were obtained on patients at the first group session and at the end of the tenth session. Follow-up YBOCS scores were obtained on a subgroup of 46 patients an average of 2 years after the initial 10 weeks of treatment.

# Structural Purpose of the Group

A structured 10-session time-limited (90 minutes) format provided psychological motivation for patients to behaviorally challenge themselves and others. The primary objectives were to teach patients about OCD and how to use behavioral/cognitive techniques to reduce symptoms. More specifically, patients learned to 1) understand the relationship between perceptions, beliefs, emotions (particularly anxiety), and behaviors (rituals and avoidance); 2) use behavioral techniques (emphasis on exposure and response prevention) that

enabled them to challenge obsessions and compulsions; 3) recognize that compulsions or avoidance reinforce irrational beliefs and only temporarily reduce distress; and 4) design and perform behavioral tasks appropriate for the individual.

Before the group began, each patient referred for group treatment received an individual assessment that focused on his or her primary OCD symptoms, course of illness, comorbid disorders, and past treatment history. The evaluating therapist detailed the principles of exposure and response prevention as well as the expectations and objectives of the group to each patient individually before the patient entered the group. We believe that this allowed for a more cohesive group with less dropout once the group began, since expectations were clear from the onset and the therapist could determine appropriateness for group treatment. It was explained to each patient individually that the group was not dynamically oriented. About one-fourth of the patients offered this treatment refused behavioral intervention when the expectations were clearly defined.

Inclusion criteria were a DSM-III-R diagnosis of OCD, expressed motivation to participate in treatment, and a commitment to attend all 10 sessions. Patients were excluded from the group if they were unable to tolerate a group setting because of cognitive deficits or psychosis or were active substance abusers. Patients with problems related to other severe Axis I or Axis II comorbidity were excluded only if the severity of symptoms was at risk of interfering with participation in the group. Subjects were not automatically excluded because of depression. The intake process played a critical role in determining the overall success of the group. Patients who were not prepared or motivated to take on behavioral challenges were advised to return when they were ready to do so. It had been our experience that patients who did not meet inclusion criteria could interfere with the group's objectives and goals.

The optimal size of the group is 8 to 10 participants. In order to achieve a group of this size, in our experience, at least 10 participants should be enrolled, allowing for 1 or 2 dropouts. The group met once a week for a 90-minute session. A consistent co-therapy team was used during this open clinical trial to ensure consistent group leadership if one leader was absent and to facilitate discussion in smaller groups in the context of the larger group.

## First Meeting

YBOCS was administered. (It was also administered at 5 weeks and 10 weeks.) Group format, confidentiality, and goals and objectives of the group were outlined by the therapists. The concepts of behavioral therapy were explained. The techniques of exposure with response prevention, participant modeling, flooding, habituation, and the need to tolerate short-term anxiety for long-term reduction of OC symptoms were emphasized. Cognitive concepts, including core beliefs, perception with interpretation, emotions, and confirmation of old beliefs were discussed. The theory of how behavioral intervention affects cognitive concepts to produce change was also emphasized.

Ways to change cognitive distortions were discussed. For example, patients were instructed to replace the affirmation "I have to do the ritual or avoid the situation" with "Because I have OCD and my anxiety is high, I feel like I have to do the ritual or avoid, but I really don't have to." It has been said by some patients that this cognitive/linguistic exercise has helped them become more aware of which of their behaviors are OCD-related and which are "normal," making it easier for them to challenge themselves.

To identify obsessions, compulsions, and avoidance and to establish a fear hierarchy, patient reported their primary OC symptoms and what their expectations of the group were. Unwanted intrusive thoughts, ideas, urges, impulses, or worries that run through a person's mind repeatedly, as well as rituals and

avoidance, were highlighted. The patient's degree of conviction about each fear was assessed and challenged within the group context.

The principles of exposure and response prevention (ERP) were reviewed. The group members were divided into pairs, and the therapists circulated through the group to help devise homework tasks. The group was reformed in 15 to 20 minutes. Each person, in turn, discussed his or her selected homework task and practiced ERP in the group with the assistance and modeling of others. Feedback and therapist intervention modified the homework task challenges to ensure a high likelihood of completion outside of the group. Ideally, each behavioral task was challenging enough to evoke moderate anxiety that would lessen over time as the patient became habituated to the task. Behavioral homework challenges were formulated and rehearsed, using distress ratings, within the group, so that each patient left the session with a commitment to a clear homework task or goal. This process facilitated group cohesion, universality, imitative behavior, and competition.<sup>16</sup>

Behavioral rating charts were distributed to the patients for self-monitoring of homework tasks. The charts promote daily accountability, structure, and self-help. The self-monitoring provides concrete evidence of gradual improvement, although the patient may continue to report anxiety and discomfort. By reviewing the charts week to week, one is able to more systematically get group feedback and troubleshoot obstacles that may interfere with behavioral task completion.

## Meetings 2-10

Sessions began with discussion of any issues that might have developed over the past week. Each member in turn reported on the past week's homework tasks and chose new tasks for the upcoming week. The patients and therapists participated in feedback, troubleshooting, and support.

From the second meeting on, therapists encouraged members to challenge themselves

and each other. When applicable, therapist and participant modeling were used. Patients reported that seeing others with similar symptoms expose themselves to the feared stimulus made it possible to challenge their own conviction and anxiety. During the group and in preparing homework tasks, patients were encouraged to help each other challenge themselves. For example, for those group members with fear of contamination, other group members joined in to sit on the floor, touch faucets in bathrooms, and handle food from a shared bag of potato chips. For homework, a patient who obsesses about poisoned food baked brownies and brought them in to the group to serve while others "dirtied" their hands before eating. Similarly, hoarders have accompanied one another to their cars during or after the group and have coached "throw-out sessions." Some hoarders brought in bags of items to dispose of in group. By the fourth to sixth meeting, members were encouraged to take greater risks, choose tasks that were more challenging, and be more independent of the therapists.

Throughout sessions 2-10, psychoeducational information was constantly discussed. A handout entitled "What Is OCD?", the book Learning to Live With OCD, 17 and a suggested reading list were distributed. Patients were encouraged to read materials on their own and bring their questions to the group. Some time in each group session was used to talk about phenomenology, etiology, course of illness, pharmacology, and adjunct treatments. Also given some attention over the course of the group were dilemmas about "whom to tell" and "how to tell" about OCD; feelings of shame and stigma; and the impact of OCD on work, school, interpersonal relationships, and family functioning. Although this group did not have family members or friends attend, suggestions were made about how to enlist interpersonal support without involving family members or friends in rituals; for example, how to resist asking family and friends to wash their hands, or provide reassurance, or participate in checking compulsions.

At the last session, follow-up options were discussed. Patients were encouraged to join the OC Foundation and to be active in our self-help support groups.

# **Data Analysis**

Pre- and posttreatment data were analyzed with paired t-tests, both for the whole sample and for subgroups with and without medication. A separate paired t-test analysis was done for a smaller group of patients (n = 46), for whom pre, post, and follow-up data were available.

#### RESULTS

The effectiveness data reflect symptomatic improvement in both groups of patients—those without medication and those with medication. Of the 90 patients who started treatment (72 with medication and 18 without medication), 73 patients completed the study (58 with medication and 15 without medication). The patients without medication (n = 18) had initial YBOCS scores of  $21.1 \pm 4.8$ , and those with medication (n = 72) had initial scores of 21.9  $\pm$ 5.7; the change in YBOCS scores from baseline to postgroup reached levels of significance for both groups. Paired t-tests performed for the whole sample were also significant (pre:  $21.8 \pm 5.6$ ; post:  $16.6 \pm 6.1$ ; P < 0.00001). The patients without medication experienced less of a drop in YBOCS scores (pre:  $21.1 \pm 4.8$ ; post:  $18.5 \pm 4.8$ ; P < 0.05) than the patients on medication (pre:  $21.9 \pm 5.7$ ; post:  $16.2 \pm 6.3$ ; P < 0.00001).

On naturalistic follow-up, patients with and without medication continued to maintain their treatment benefits with no significant change in YBOCS scores, as measured by paired t-tests done from end of group to follow-up period ( $16.6 \pm 6.1$  at posttreatment and  $15.9 \pm 6.7$  at follow-up for whole sample;  $16.2 \pm 6.3$  and  $15.5 \pm 6.8$  with medication;  $18.5 \pm 4.8$  and  $17.6 \pm 6.0$  without medication). The follow-up was conducted at  $25.0 \pm 14.8$  months. Follow-up was achieved on a subsample of

patients (9 of 18 in the no-medication group and 37 of 72 in the medication group). However, because follow-up was naturalistic, what treatments subjects had received during the follow-up period was not controlled or monitored in any way. In all, YBOCS scores fell from a moderate-to-severe level of symptomatology at pretreatment to a mild level of distress and a moderate level of control over obsessions and compulsions at follow-up.

It is interesting that the only notable difference in the demographics and clinical features of patients who were in the behavioral group alone versus those who were in the medications plus behavioral group was that patients with somatic obsessions were more likely to be in behavioral therapy alone: 56% of patients in behavioral therapy alone had somatic obsessions, versus only 29% of those in combined treatment. Clinical features such as gender, symptom types, washing and checking, and age were comparable between the medication no-medication groups.

#### Discussion

Time-limited group behavioral treatment leads to significant improvement in OC symptoms, as measured by the YBOCS, in patients who complete the group either alone or as an adjunct to pharmacotherapy. However, the patients who were on medication showed a greater improvement than those who were medication-free. This finding stands in contrast to recent preliminary findings of Foa et al., 18 who noted no extra benefit from adding medication to a behavioral therapy regimen. Confidence in our finding of greater improvement in group participants who were on medication, however, must be tempered by the comparatively small sample size of the unmedicated group (n = 15).

Although our results about combined medication and behavioral treatment are interesting, unfortunately no specific measures of the adequacy of the pharmacotherapy, in terms of either duration or dose, were made. Thus, it is not possible to determine whether

the treatment given the medication sample was in fact adequate. In addition, because there was no group that received only medication in this study, we cannot determine the comparative effectiveness of each treatment alone versus combined treatment. However, the effect size obtained from YBOCS data in our report, 0.89 total sample (0.95 with medication and 0.54 without medication), is similar to that seen in pharmacologic treatment trials, 0.80 to 1.53<sup>19</sup> and 0.35 to 1.48.<sup>20</sup> It also falls within the range of that obtained in group behavioral treatment, 0.29<sup>11</sup> to 2.69, 14 though it is somewhat lower than reported effect sizes seen with individual behavioral treatment, 1.47<sup>21</sup> to 2.10.<sup>14</sup> Although it should be noted that the number of treatment sessions has differed among the various reports, it appears that our treatment was effective.

Theoretical concerns of cost-effectiveness are more clear-cut, however, particularly in comparison to individual behavioral treatment. This group behavioral treatment allowed for simultaneous treatment of 10 patients for 10 weeks with 2 therapists in 1.5 hours/week, or a total of 30 hours of therapist time. The same 10 patients each treated with individual behavior treatment would have

each required 15 hours for the same 10 sessions, or a total of 150 hours of therapist time. Thus, group treatment took only one-fifth of the therapists' hours. The saving in dollars is substantial, with individual therapy sessions at \$70 per hour (\$1,050 per patient) and group sessions at \$25 to \$40 per hour (roughly \$400 per patient). In a time of increasing health care costs and a clamoring from all sectors for cost containment, <sup>22</sup> group behavioral treatment appears to be a viable alternative to individual behavioral treatment.

It has been our observation that group treatment may offer other advantages over traditional individual behavioral therapy, since group dynamics in the area of universality, altruism, and competition can potentially help to promote and maintain change (as outlined in Table 1, adapted from Yalom<sup>16</sup>). After a favorable experience in this therapist-run group, patients also seemed to be more willing to engage in self-help strategies and more productive in using them. Admittedly, though, these additional benefits await systematic study.

From a diagnostic perspective, it was interesting that the only clinical feature that showed an uneven representation among our two subsamples was somatic obsessions. In

Advantage	Description
Universality	Disclosure of OC symptoms that are experienced by others decreases isolation, shame, and stigma.
Imparting information	In addition to receiving therapist's didactic instruction, patients learn from one another's advice and experience. New techniques to control the symptoms and different ways of thinking are introduced.
Instillation of hope	Patients observe others who improve by using behavioral techniques, and this makes their own improvement seem an achievable goal.
Imitative behavior	OC patients are more willing to take risks after seeing others with similar symptoms doing so.
Altruism	Helping others build self-esteem and confidence focuses attention on external rather than internal events. The group setting provides support and motivation for change.
Competition <sup>b</sup>	Social facilitation allows patients to take more risks. Seeing others "in the same boat" increases the urge of patients to try harder to make gains for themselves. Often patients make contracts with one another to achieve their goals: "If you do this, then I'll do that."

<sup>b</sup>Not a Yalom "curative" factor, but one that is clinically observed in a group treatment of OCD patients.

particular, those with somatic obsessions were more likely to be found in the no-medication group (56%) than in the medication group (29%). From a clinical perspective this is not surprising, since patients with somatic obsessions are especially unwilling to take medications because of their worries about side effects. With this small sample size, we could not determine whether somatic obsessions were implicated in the difference in response between the two groups.

A number of reports<sup>4</sup> have shown longterm efficacy of individual behavior treatment for OCD. To our knowledge, ours is the first follow-up of a large cohort of OCD patients (N= 46) who received group behavioral treatment. The results showed good maintenance of gains. Again, despite the naturalistic study limitations, this is an important finding and requires further controlled investigation.

Group behavioral treatment of patients suffering from OCD is a cost-efficient and effective method for bringing about symptom improvement. Preliminary findings from this study indicate that the combined behavioral treatment and medication may be more effective than either treatment alone.

More recently, we have begun piloting two types of groups: a group behavioral treatment and a multifamily behavioral treatment. Both include a didactic psychoeducational component, rigorous in vivo exposure and response prevention, and weekly homework, taking advantage of the opportunities afforded in a group context. These programs have been compiled into a manual, which should permit more systematic administration and provide a basis for reproducible findings.

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