Short communication

A new model for the initiation of treatment for obsessive–compulsive disorder: An exploratory study

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A R T I C L E   I N F O

Article history:
Received 9 April 2014
Received in revised form 14 August 2014
Accepted 18 August 2014
Available online 10 September 2014

Keywords:
Obsessive–compulsive Disorder
OCD
Treatment

A B S T R A C T

Exposure and response prevention is a first-line treatment for obsessive–compulsive disorder (OCD). Despite its efficacy, patients often refuse or drop out, and it can require a substantial amount of time and cost. The current study examined the efficacy of a new model for initiating treatment for OCD, which might produce a rapid decrease in symptoms and experiential avoidance. This model uses a brief, intensive group intervention to reduce OCD and related symptoms by modifying OCD-related beliefs and then engaging in behavioral experiments. Cognitive components of treatment are emphasized and patients are encouraged to adopt a simple yet paradoxical mindset. Thirty-three individuals with OCD participated and completed measures of OCD-related beliefs and symptoms, depressive and anxiety symptoms, and experiential avoidance at three time intervals – pre-treatment, post-treatment, and one-month follow-up. Results indicated significant reductions from pre-treatment to post-treatment on nine out of 10 measures. All gains were maintained or decreased further from post-treatment to follow-up. There were significant reductions on all 16 measures from pre-treatment to follow-up, providing preliminary support for the efficacy of this model. It will be important to continue to examine the efficacy of this model in randomized controlled trials.

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1. Introduction

Expert consensus treatment guidelines propose that cognitive behavior therapy (CBT), specifically exposure with response prevention (ERP), is the first-line psychosocial intervention for obsessive–compulsive disorder (OCD; March, Frances, Kahn, & Carpenter, 1997), and meta-analysis supports the efficacy of ERP for OCD (Abramowitz, Franklin, & Foa, 2002). Yet, there are several challenges to implementing ERP, such as patients often refusing or dropping out of the treatment (Foa et al., 2005). Other obstacles to implementing CBT or ERP include the cost (averaging $4300) and time consuming nature (approximately 30 clinical hours) (Turner, Beidel, Spaulding, & Brown, 1995) as well as the possibility that patients with strongly held or overvalued ideation (in which the belief is held with strong conviction, minimal doubt, and little resistance) perceive it as a less acceptable and less effective treatment (Foa, Abramowitz, Franklin, & Kozak, 1999). Thus, augmenting current ERP protocols with strategies designed to address these limitations has the potential to increase the number of patients who are willing to engage in ERP and, in turn, reap the benefits.

A form of CBT, cognitive therapy (CT) has also been used to treat OCD. CT focuses on challenging maladaptive thoughts and beliefs (Clark, 2004) and often includes behavioral experiments, which are exercises used to test beliefs (Abramowitz, Taylor, & McKay 2005). Meta-analyses support the efficacy of both CT alone and CT combined with ERP (Abramowitz et al., 2002; Rosa-Alcázar, Sánchez-Meca, Gómez-Conesa, & Marín-Martínez, 2008). Importantly, treatments that include a cognitive component may be better tolerated and result in less dropout than ERP alone (Whittal, Robichaud, Thordarson, & McLean, 2008; Abramowitz et al., 2005), which has been theorized to be the result of patients perceiving ERP as an aversive treatment (Jones & Menzies, 1998). CT may be a preferred treatment approach for some patients, such as those with overvalued ideation (Neziroglu, Slavin Mashaal & Mancusi, 2013).

Within CT, the process of reappraisal, a form of cognitive distancing (Beck, 1970), aims at changing the interpretation of an emotional situation in such a way that it changes the event’s emotional impact (Gross & John, 2003). In their recent review of the reappraisal literature, Jamieson, Mendes, and Nock (2013) suggested that it has the potential to serve as a powerful tool to
shift negative stress states into positive ones. Reappraisal may assist OCD patients to gain distance from their faulty beliefs and enable them to address two vulnerability factors that are present in anxiety disorders: intolerance of uncertainty and anxiety sensitivity (Carleton, Sharpe & Asmundson, 2007).

Preliminary studies have explored the efficacy of brief and intensive interventions for OCD, offering the possibility that patient contact and cost can be reduced. Abramowitz, Foa and Franklin (2003) showed that daily treatment over three weeks and twice-weekly treatment over eight weeks were both effective. Two meta-analyses of psychosocial treatments for OCD (Abramowitz, 1996; Rosa-Alcázar et al., 2008) suggested that shorter interventions might be just as efficacious as longer interventions. Group treatments may offer timelier, cost-effective therapy, as well as other benefits, including modeling and group pressure to enhance compliance with exposure practice. Anderson and Rees (2007) reviewed seven studies of successful OCD group treatment and then showed that a protocol with as few as seven two-hour group sessions can produce comparable results as individual treatment. Even structured self-help materials show potential. For instance, Andersson et al. (2011) found that a 15-week internet-based CBT, with only email contact with the therapist, significantly reduced OCD symptoms and depressive symptoms. Results such as these lend support to the stepped care approach to treatment (Davison, 2000), currently in a large-scale initiation in England (Clark, 2011), where patients begin with the least expensive and least time-consuming treatment and progress to more costly treatment as needed. In a pilot study, Tolin, Diefenbach, Maltby and Hannan (2005) indicated that stepped care within OCD treatment may be both effective and cost-effective.

In a recent article, Rotheram-Borus, Swedeman and Chorpita (2012) suggested that evidence-based interventions can be distributed more broadly and quickly through “disruptive innovations” that refine our understanding of a problem’s causes and solutions. They suggest one way to accomplish this is through models that simplify the protocol. Two tactics that show promise in other domains might enhance and even simplify current OCD treatment. First is the introduction of an emotional state that competes with the anxiety of approaching a threatening event. Several researchers have explored novel ways to modify the primacy of dysfunctional emotions by activating competing emotions. A summary of their theories is shown in Table 1. A second strategy is to take advantage of self-talk cues (Brinthaupt, Hein, & Kramer, 2009) to direct and support the behavioral goals in OCD treatment. The therapeutic use of self-talk has been well established and is outlined in Table 2.

If patients can experience a significant reduction in symptoms at the initial phase of treatment through self-directed activity that is congruent with a newly acquired behavior system, then this approach might increase the number of individuals with OCD who are willing to remain in treatment long enough to benefit clinically. The current study explored the efficacy of such a model of treatment initiation, delivered through a brief (two-day), intensive (15-h) group (eight participants) cognitive-behavioral intervention for OCD. The primary goal of the intervention was to provide patients with a protocol in which they could challenge their OCD beliefs and then help them to engage in behavioral experiments to discover if they could rapidly reduce their obsessions and compulsions. It was hypothesized that an intervention model that employs cognitive distancing, reappraisal, activating competing emotions, and self-talk would lead to rapid reduction in OCD symptoms as well as anxiety symptoms and experiential avoidance.

2. Methods

2.1. Participants

Thirty-three individuals with a primary diagnosis of OCD (21 female, 12 male) participated in an intensive two-day cognitive-behavioral group treatment for OCD. Participants were recruited through requests for study volunteers within seven treatment groups from two sources – the annual International Obsessive–Compulsive Foundation conference and the first author’s treatment clinic – over a two-year period. All participants required diagnosis and referral from a health professional who then submitted a written statement confirming the diagnosis. Thirteen participants (39%) had co-morbid diagnoses. Twenty-nine participants (88%) were currently taking psychotropic medications and 32 participants (97%) had received other types of psychotherapy in the past. Their ages ranged from 17 to 73 (M=39.58, SD=14.80). All participants gave consent to participate in the treatment and study and completed all measures. Inclusion criteria were limited to an OCD diagnosis and age of at least 17 years.

2.2. Measures

The following self-report measures were administered to assess OCD-related beliefs, OCD symptoms, depressive symptoms, anxious symptoms, and experiential avoidance.

Obsessive Beliefs Questionnaire – 44 (OBQ-44; Obsessive Compulsive Cognitions Working Group, 2005). The OBQ-44 is a 44-item self-report measure designed to assess dysfunctional cognitions that commonly occur among OCD patients. The OBQ-44 uses three

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<td>Theory</td>
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<tr>
<td>Greenberg (2012)</td>
<td>Withdrawal emotions such as fear, once accessed, can be modified by approach tendencies, such as activating anger</td>
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<tr>
<td>Davidson (2000)</td>
<td>Within brain mechanisms associated with affective style, right hemispheric withdrawal-related negative affect can be modified by activating the approach system of the left prefrontal cortex</td>
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<td>Harmon-Jones, Vaughn-Scott, Mohr, Sigelman and Harmon-Jones (2004)</td>
<td>Fear or shame can be overridden by anger</td>
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<td>Fredrickson, Mancuso, Branigan and Tugade (2000)</td>
<td>Activating a positive emotion has the ability to loosen the dominance of a negative emotion</td>
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<td>Fredrickson (2001)</td>
<td>Activating positive emotions enhances recovery from anxiety-related sympathetic arousal</td>
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<th>Authors</th>
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<td>Meichenbaum (1977)</td>
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subscases of beliefs: Responsibility/Threat Estimation, Perfectionism/Certainty, and Importance/Control of Thoughts.

Overvalued Ideas Scale (OVIS; Neziroglu, McKay, Yaryura-Tobias, Stevens, & Todaro, 1999). The OVIS measures OCD-related beliefs by assessing overvalued ideation using 10-items regarding a main belief: strength of the belief, how reasonable the belief is, the fluctuation of belief over the past week, accuracy of the belief, the extent to which others share the same belief, how the patient attributes similar or differing beliefs in other people, how effective and important the patient’s compulsions are in preventing negative consequences, the extent to which the patient’s OCD has caused the obsessive belief, and the patient’s degree of resistance toward the belief. The primary author reviewed each participant’s main belief listed on the questionnaire and asked the participant for clarification and/or modification if needed.

Padua Inventory – Washington State University Revision (PI-R; Burns, Keortge, Formea, & Sternberger, 1996). The PI-R is a self-report measure of OCD symptoms using 39 items assessing five content areas: Contamination Obsessions and Washing Compulsions, Dressing/Grooming Compulsions, Checking Compulsions, Obsessional Thoughts about Harm to Self/Others, and Obsessional Impulses to Harm Self/Others.

Dimensional Obsessive–Compulsive Scale (DOCS; Abramowitz et al., 2010). The DOCS, also a measure of OCD symptoms, is a 20-item self-report assessing the four most common dimensions of OCD: Contamination, Responsibility for Harm and Mistakes, Unacceptable Thoughts, and Symmetry/Ordering. Each symptom dimension is composed of five items assessing the following aspects of severity over the past month: time occupied by obsessions and compulsions, avoidance behavior, associated distress, functional interference, and difficulty discrediting the obsessions and refraining from the compulsions.


Beck Anxiety Inventory (BAI; Beck & Steer, 1990). The BAI is a 21-item self-report measure designed to assess physiological and cognitive aspects of anxiety.

The Acceptance and Action Questionnaire (AAQ; Hayes et al., 2004). The AAQ is a 16-item self-report measure designed to assess aspects of experiential avoidance, i.e. negative evaluations of anxiety, attempts to control or eliminate negative thoughts and emotions, and the ability to distance oneself from the content of negative evaluation.

2.3. Procedure

First, participants completed a demographic questionnaire and a series of pre-treatment self-report measures during the week prior to treatment. Next, they participated in the intensive, two-day group cognitive-behavioral treatment for OCD (described below). Following the treatment, participants completed a series of self-report measures – once within 24 h after the intervention (i.e., post-treatment) and again one-month later (i.e., follow-up). Four measures were administered at pre-treatment, post-treatment and follow-up (OBQ-44, PI-R, OVIS, and AAQ). The remaining three measures were administered only at pre-treatment and follow-up (DOCS, BDI-II, and BAI), since they require more than one week between assessments.

The first author (RW), a licensed clinical psychologist, conducted the treatment in a group setting of eight participants each time for a total of 15 h over two days. Within the 12 h of direct contact the therapist persuasively presents the logic, value and structure of this protocol, and then the therapist and each participant collaboratively design three sessions of behavioral experiments—held during a 1.5-h period each day and then during the overnight break—to practice their new beliefs and activate new tactics when confronted by their fears.

Table 3 outlines the principles of the four change strategies that are taught: cognitive distancing, reappraisal, activation of competing emotions, and employing self-talk cues. Table 4 outlines how this model modifies the typical protocol of behavioral experiments. During these three sessions of skill development, success is defined as purposefully stepping into an environment that will stimulate OCD symptoms and then congruently delivering a self-talk message that encourages their new stance. Participants are not to look for a diminution of obsessions, distress, or the urge to ritualize. This strategic stance aligns them with the primary therapeutic task: to deliberately move into the feared situation in order to seek out their symptoms, and when the symptoms arise, to paradoxically support their presence and encourage them to stay, and then engage in their chosen activity as the symptoms either remain or dissipate.

We conducted a series of dependent-samples t-tests to examine changes over time. Tests were conducted separately to examine changes from pre-treatment to post-treatment, post-treatment to follow-up, and pre-treatment to follow-up, given that some measures were administered at all three time points and other measures were only administered at pre-treatment and follow-up. Cohen’s D was calculated as a measure of effect size. Given that all of the analyses were planned comparisons, we did not use any statistical
corrections to account for the number of analyses. There were no missing data. Means and standard deviations for all measures at pre-treatment, post-treatment, and follow-up are presented in Table 5.

3. Results

3.1. Changes from pre-treatment to post-treatment

In regard to OCD-related beliefs, there were significant reductions on all three subscales of the OBQ-44 (Responsibility/Threat Estimation, Perfectionism/Tolerance of Uncertainty, and Importance/Control of Thoughts). There was also a significant reduction on the OVIS. In regard to OCD symptoms, there were significant reductions on four out of the five subscales of the PI-R (Compulsive Obsessions and Washing Compulsions, Dressing/Grooming Compulsions, Checking Compulsions, and Obsessional Thoughts of Harm to Self/Others). Finally, there was also a significant reduction in experiential avoidance on the acceptance and action questionnaire. The therapists emphasized that these messages are not to be delivered by rote, but should congruentlly re
3.2. Changes from post-treatment to follow-up

In regard to OCD-related beliefs, gains were maintained on all three subscales of the OBQ-44 and the OVIS. In regard to OCD symptoms, scores continued to significantly decrease on three out of the five subscales of the PI-R (Checking Compulsions, Obsessional Thoughts of Harm to Self/Others, and Obsessional Impulses to Harm Self/Others). Gains were maintained on the other two subscales (Contamination Obsessions and Washing Compulsions as well as Dressing/Grooming Compulsions). Gains were also maintained in experiential avoidance on the AAQ. Thus, gains were maintained from post-treatment to follow-up on seven out of the 10 possible subscales/scales, and further significant gains were made on three subscales/scales.

3.3. Changes from pre-treatment to follow-up

In regard to OCD-related beliefs, there were significant reductions on all three subscales of the OBQ-44 and the OVIS. In regard to OCD symptoms, there were significant reductions on all five subscales of the PI-R. In addition, there was a significant reduction in experiential avoidance on the AAQ. Finally, for the measures that were only administered at pre-treatment and follow-up (DOCS, BDI-II, and BAI), there were significant reductions in OCD symptoms on all four subscales of the DOCS (Contamination, Responsibility for Harm and Mistakes, Unacceptable Thoughts, and Symmetry/Ordering) as well as significant reductions in depressive symptoms on the BDI-II and anxiety symptoms on the BAI. In sum, there were significant reductions from pre-treatment to follow-up on all 16 subscales/scales.

4. Discussion

The purpose of the current study was to test the efficacy of a new model for initiating treatment of OCD. The primary goal of the intervention was to reduce obsessions and compulsions, anxiety symptoms, and experiential avoidance. The results were consistent with the hypothesis, and added the benefit of reducing depressive symptoms. Significant reductions were found from pre-treatment to post-treatment on nine out of 10 outcome measures. Further gains were made from post-treatment to follow-up on three out of 10 outcome measures, and gains were maintained on the remaining seven outcome measures. Further, there were significant reductions from pre-treatment to follow-up on all 16 outcome measures. Thus, this intervention was brief and effective, and there was no attrition during the treatment.

The results are consistent with meta-analytic findings that CBT is an efficacious treatment for OCD (Abramowitz et al., 2002; Abramowitz et al., 2005) as well as those that suggest that shorter interventions may be as efficacious as longer ones (Abramowitz, 1996; Rosa-Alcázar et al., 2008). If further research supports the results of this exploratory study, then this model may increase utilization and engagement and could enhance the successful outcomes already validated for current briefer treatments of OCD.

The central function of this model is to train participants in a simple, active paradoxical strategy that they can integrate into a new belief system about therapeutic change and then implement that strategy moment-by-moment to respond to obsessions and the urge to ritualize. One of the greatest obstacles in treatment of anxiety disorders is that patients want to get rid of anxiety. The therapeutic stance of “seeking out” in this model hits squarely at that resistance. In addition, the intervention becomes arousal congruent (Brooks, 2013) as opposed to patients seeking out the arousal incongruent comfort of certainty, an onerous task. Once persuaded, participants realize that, in this mental game, to seek out certainty is to play into OCD’s hand. Unlike Acceptance and Commitment Therapy, which encourages individuals to experience the distress when it occurs and not to fight against it, this model encourages the individual to seek out and want to experience anxiety and uncertainty. It is a more aggressive move towards uncertainty. Much as they dislike feeling distressingly uncertain, participants appreciate that it is their best chance to win over the disorder. When the valence of distressing uncertainty moves from negative to positive—when anxiety and doubt become egosyntonic instead of ego-dystonic—it becomes easier to seek out those states. As resistance diminishes, the disorder begins to lose its power.

In their review of the current state of CBT for OCD, Huppert and Franklin (2005) suggested that the ultimate goal of treatment is for patients to conduct their own exposures in everyday life. In this model, as participants comprehend the potential benefits, and when they help design and then engage in behavioral experiments within treatment, they may be better capable of carrying the simple protocol home with them. They can purposely and voluntarily choose to generate an emotional stance that competes with “I want to get rid of my distress and uncertainty.” A suggestion of this possibility is the fact that there were significant reductions from pre-treatment to follow-up on all 16 outcome measures without any further therapeutic contact regarding this intervention. Thus this protocol may offer an additional resource in the stepped care approach to treatment.

Since this was an exploratory study designed to evaluate whether this new model merits further testing through controlled studies, numerous limitations warrant consideration. These include the lack of experimental manipulation or between-group comparison to address whether this intervention offers enhancements to a more traditional CBT model. This intervention model, delivered within a brief, intensive group setting in the current study, has not been compared to a waitlist or to a comparison model, including an individual treatment setting. Only the primary author, who designed the intervention, served as therapist. It will be important for future research to examine potential moderators of treatment effects, such as age, baseline symptom severity, attention from the therapist, insight, level of depression, motivation, and treatment expectations, as well as the influences of any other therapeutic interventions initiated or augmented between pre-treatment measure and follow-up. Four untested interventions are built into this model: eliminating all discussion of specific OCD content or subtypes, anthropomorphizing OCD, perceiving the problem as a mental game that requires an ongoing strategy, and operationalizing an aggressive stance toward the symptoms by seeking them out. Dismantling designs will help to better understand the specific treatment components that are most efficacious.

References
