

Current Issues in Behavior and Cognitive Therapy for Obsessive-Compulsive Disorder

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ABSTRACT

Exposure and response prevention (ERP), a form of behavior therapy, is widely recognized as the most effective psychological treatment for obsessive-compulsive disorder (OCD).¹ Cognitive therapy (meaning rational emotive behavior therapy [REBT], or the Salkovskis model for this article) has received increased attention as an effective method for OCD treatment. These methods have renewed hope for patients suffering with what had long been thought to be a treatment refractory condition.² Yet many important issues require further discussion and investigation. At the Second International Conference on OCD, which was held in Guadeloupe, February 14–16, 1996, the following issues were highlighted:

1. Which psychotherapies are effective in the treatment of OCD?
2. What psychological strategies may be used to increase patient motivation during treatment?
3. Are relapse prevention strategies necessary after improvement?
4. How do economic factors affect the use of behavior therapy? How is OCD treatment uniform or varying from specialty providers to mental health generalists to primary care physicians? How do self-administered and therapist-administered ERP compare?
5. How does the efficacy of ERP or cognitive therapy and pharmacotherapy (either alone or in combination) compare?
6. Is ERP effective for complex forms of OCD?
7. In OCD treatment, is medication compliance improved if ERP or cognitive therapy is also used, and vice versa? How does this affect relapse rates? In addition, can doses of medications be lowered with the addition of ERP or cognitive therapy?
8. What is known about the brain function and biological changes associated with ERP and cognitive therapy?

Some of these issues, which are explored below, have been researched, but much remains to be uncovered.

Which psychotherapies are effective in the treatment of OCD?

ERP is the most widely accepted and researched psychological treatment for OCD.^{3–6} ERP consists of helping patients to expose themselves to those feared activities or situations that they avoid and to resist their compulsions. It is believed the ERP works, at least in part, by the process of habituation that occurs via the extinction of anxiety and fatigue associated with the continual excitation of sensory neurons.

Controlled studies of ERP have yielded improvement rates from 60% to 85%.^{7–11} Follow-up studies indicate that patients who have undergone ERP maintain their gains from 2 to 6 years.^{7–11} These rates of improvement may be high, compared with those experienced in clinical practice, where there are many treatment refusers and dropouts. Additionally, many of these controlled studies focus primarily on patients with symptoms of checking and washing and therefore may not be generalizable to patients with other symptom subtypes, such as exactness, counting, hoarding, and slowness rituals.¹²

Although far less researched than ERP, cognitive therapy for OCD has also been studied. Two forms of cognitive therapy have been used: REBT developed by Ellis¹⁹ and Salkovskis' method. With REBT, OCD patients learn to challenge their irrational/faulty belief systems, particularly their demands for certainty and perfection.²⁰ REBT has also been used to challenge overvalued ideas.²¹ The cognitive therapy for OCD described by Salkovskis²² and further explained by van Oppen and Arntz²³ emphasizes challenging OCD patients' overinflated sense of responsibility and the fusion of thoughts and actions. In both of these cognitive therapies it is essential to challenge the OCD patients' underlying beliefs rather than their obsessional thoughts per se.

It has been theorized that cognitive appraisal of intrusive or obsessional thoughts is a factor in the development and persistence of OCD.²⁴ Some research does indicate that REBT is effective for OCD.^{25–27} A controlled study directly comparing cognitive therapy with ERP found

EDUCATIONAL OBJECTIVES

- Review the available psychotherapies for OCD
- Enhance understanding of the issues and research relating to these therapies

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that cognitive therapy following Salkovskis' model equaled and in some respects even exceeded the efficacy of ERP.²⁸ On the other hand, a recent review of cognitive therapy research by James and Blackburn²⁹ highlighted that there are still very few controlled studies of the cognitive psychotherapies and OCD. Much more research is needed before conclusive evidence is available. Establishing the effectiveness of combined ERP and cognitive therapy also requires controlled studies. Research that examines the effectiveness of ERP, REBT, and Salkovskis' cognitive therapy model for OCD patients who are initially treatment resistant is similarly needed.

Does cognitive therapy treat aspects of OCD that are different from areas successfully treated by ERP? Does cognitive therapy improve the refusal and dropout rates of ERP? A major question is, do pharmacotherapy and cognitive therapy successfully treat the same patients who respond to ERP? Is there a core of patients who do not respond to any treatment? How do ERP and these cognitive therapies compare with a completely different kind of psychotherapy, such as interpersonal psychotherapy,³⁰ which has been useful in the treatment of conditions such as bulimia nervosa? To answer these questions, we need controlled trials of (1) OCD patients who have had an adequate trial of ERP but who are classified as treatment resistant randomized to either further ERP, cognitive therapy, or pharmacotherapy; (2) OCD patients who have dropped out of or refused ERP randomized to either cognitive therapy or pharmacotherapy; (3) OCD patients who have not made sufficient gains with a selective serotonin reuptake inhibitor (SSRI) and who are randomized to either continuing pharmacotherapy, ERP, or cognitive therapy; and (4) OCD patients who refuse or drop out of taking an SSRI randomized to either ERP or cognitive therapy. Further research is required in regard to these questions.

What psychological strategies may be used to increase patient motivation?

Although empirical research is lacking, it seems likely that poor motivation accounts for a portion of the approximately 25% of OCD patients who do not comply with or drop out of ERP treatment.³¹ Why would patients who complain of the enormous suffering associated with this disorder not be, in effect, willing to do anything to get well? Of course, many factors contribute to “motivation.” Some possibilities

include a sense of hopelessness that any kind of treatment will help, comorbid depression, short-term fear of challenging their OCD via ERP outweighing long-term fear of not getting better, underestimation of how much effort recovery takes, overvalued ideas, and low tolerance for frustration.

Some have suggested that OCD treatment should not be initiated until motivational level is sufficient.³² However, it is also possible that by engineering some immediate success in challenging OCD for patients with low motivation, motivational level can be increased. Motivational interviewing, which has been shown effective in increasing the motivation of chronic schizophrenic patients, could also be utilized. Some additional means of increasing motivation include:

- Doing a functional analysis regarding possible reasons for poor motivation and addressing these issues as a component of the treatment plan.
- Using cognitive therapy to restructure faulty beliefs about treatment (eg, “I’m beyond help,” “ERP is too frightening”), increase long-term thinking (“How do I want to function a year from now?”), and improve frustration tolerance (“ERP will be uncomfortable but I can stand it”). As noted above, cognitive therapy may also be used to address highly overvalued ideas that might be contributory to low motivation.
- Before initiating treatment, having poorly motivated patients read stories about others who have improved, attend support group meetings, or visit informally with other patients who have improved.
- Utilizing cotherapists or “coaches” from among patients’ significant others to address motivational issues.
- Finding motivational metaphors that are relevant to individual patients based on such factors as their personal histories or cultures. For example, patients who have an interest in sports could learn to think of their OCD as a sporting competitor to be defeated. John March’s “How I ran OCD off my land” metaphor in his manual for children’s treatment is another example.³³

Are relapse prevention strategies necessary after improvement?

Relapse rates following the discontinuation of medication can be as high as 99%.³⁴ Although ERP treatment is effective in the treatment of OCD, patients may also experience lapses or may relapse entirely.³⁵ Relapse rates after ERP

have been found to be about 25% from 3 months to 6 years after treatment.³⁶ In the study by Hiss et al,³⁶ ERP treatment was followed by either four relapse-prevention sessions or an attention-control procedure. Patients in the relapse-prevention group remained improved at 6-month follow-up, whereas patients in the attention-control group experienced some symptom return. However, both groups remained significantly improved.

In another recent study, a relapse-prevention program of 6 months' duration was implemented after intensive ERP treatment.³⁷ Six-month follow-up indicated that patients maintained their improvement on the behavioral avoidance test, the Yale-Brown Obsessive-Compulsive Scale, and Beck Anxiety Scale; however, their Beck Depression scores had increased. The authors suggested that more direct interventions for depression might be necessary.

Research in the area of relapse prevention is scarce, and little is really known empirically about the reasons patients relapse. In one of the few existing studies on this topic, Steketee³⁸ found that poor familial functioning, particularly invalidation of symptoms by family members, was associated with poorer outcome.

Relapse-prevention techniques have become an essential aspect of the treatment of many kinds of conditions (eg, alcoholism, smoking, compulsive eating, etc) that have commonalities with OCD.³⁹ Attending support groups, engaging in stress-reducing activities such as yoga or meditation, and improving social skills may also be important aspects of relapse prevention. Controlled research in these areas is lacking. It is also advisable to inform patients about relapse rates associated with the various forms of treatment and the necessary steps to decrease the likelihood of relapse.

How do economic factors affect the use of ERP either alone or combined with pharmacotherapy? How does OCD treatment differ from specialty providers to mental health generalists and primary care physicians?

In the United States alone, the direct and indirect costs of OCD have been estimated at over 8 billion dollars.⁴⁰ In addition, much money is unwisely spent—mainly on crises stemming from OCD (suicidality, secondary depressive episodes, etc) that might have been prevented if more resources had been allocated to prevention, early identification, or

necessary and demonstrably effective interventions, such as ERP.

In part because of worldwide efforts to contain the growth of medical costs, ERP of sufficient intensity and duration will likely remain unavailable to many patients for whom it would be beneficial. Lelliot and Montero⁴¹ found that only 12% of their 145 patients referred to psychiatrists for OCD treatment were then referred for ERP, although the extent to which this represented patient or doctor attitudes is unclear. Although an adequate trial of ERP or the kinds of cognitive therapies that have shown some efficacy in OCD treatment may be relatively expensive and time-consuming in the short term, over the long-term they might prove to be cost-effective.⁴² For example, the cumulative cost of anti-OCD medications might be reduced. Furthermore, the number of OCD patients who are able to return to the workforce may be increased.

The emphasis on cost containment has engendered much interest in whether ERP or appropriate cognitive psychotherapies can effectively be self-administered or provided in groups, by laypersons or paraprofessionals, or via telemedicine. It might be anticipated that ERP could be more readily administered by laypersons and paraprofessionals than could cognitive therapy. Because of the emphasis of ERP on between-session assignments and strategies to promote maintenance of gains after treatment cessation, some degree of self-administration is inherently involved in behavior therapy for OCD. In fact, developing the skills to self-administer ERP and cognitive therapy on an ongoing basis is probably essential in order for patients to maintain a true recovery stage. But can OCD patients be expected to use ERP and OCD-specific cognitive therapy without professional help? The answer to this is complex. It probably depends on factors related to the nature of the condition, such as level of severity, presence of complicating conditions (eg, comorbid depression, another anxiety disorder, substance abuse), and the type of compulsion (eg, checking, washing, mental rituals). Individual variations in motivation, ability to remain objective, time availability, intelligence, and educational level would also be likely to have an impact. The degree of support a patient has from significant others would no doubt also be a relevant variable. The helpfulness of spouses or family members as treatment providers depends on the nature of their relationship with the patient.⁴³ The OCD patient's

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ability to control the pace of self-treatment would also be a consideration. Going either too fast or too slow could lead to poor results and discouragement. Krone et al⁴⁴ found that ERP could be administered effectively in groups, but their study lacked a control group. The few controlled studies that exist suggest that ERP may be effectively self-administered.^{9,45}

Lee Baer and colleagues have recently begun studying the efficacy of telemedicine in the treatment of OCD (personal communication, February 1996). Controlled research regarding the effectiveness of paraprofessionals or laypersons in providing OCD treatment remains to be accomplished. What may evolve is a hierarchy of psychological treatments whereby patients may be initially offered a lay, paraprofessional, or self-treatment program. If this does not work, then a trained professional may be enlisted. If this too proves unsuccessful, a more intensive outpatient or inpatient program could then be tried. As these developments progress, it will be essential to communicate to OCD patients and their advocates the pros and cons of each treatment approach, including medications, and their relative efficacies as well as their relative costs.

How the effectiveness of cognitive behavior therapy varies depending on whether it is provided by an OCD specialty center, mental health generalist, or primary care physician is another issue with a paucity of research. In the past, many patients would self-diagnose and self-refer to OCD specialty centers. The degree to which gatekeeper models of medicine—in which patients are required to see their designated primary care physician before seeking specialized care—will affect this process is unknown.

OCD is well recognized as a condition that is frequently masked by other disorders, such as depression. Additionally, many patients are too ashamed or embarrassed to bring their OCD symptoms to the attention of their medical doctor. Often, OCD patients will admit to their symptoms if asked specific questions but will not volunteer information. Because of these factors and patients' control issues, repetitive questioning, extensive variability of reporting, and co-occurring problems, OCD may be difficult and time-consuming to manage in a general medical office. Thus, with the exception of highly motivated individuals with moderate levels of severity and adequate interpersonal skills, the effectiveness of the primary care physician in managing OCD cases would probably be limited. This of course is not to say that

OCD patients would not benefit from diagnosis, psychoeducation, and learning about proper treatment modalities and appropriate referral sources from these practitioners. Certainly, education for primary care doctors, increasing their awareness of diagnostic and treatment issues of OCD, is of increasing importance.

Because specialty centers for OCD treatment may have more and more difficulty finding support in the current economic climate, the extent to which mental health generalists become well versed in OCD management is of great concern. Issues such as the availability of training in ERP, appropriate cognitive psychotherapies, specific information about OCD through readings, workshops, and lectures, will affect the efficacy of mental health generalists in treating OCD patients. Many therapists are currently trained to be reassuring and to ask patients to delve deeply into their thought processes, which would work against successful OCD treatment.

How do the results of different OCD treatments—alone or in combination—compare?

Because neither medication, ERP, nor cognitive therapy alone helps all patients with OCD, combining these treatments has been of interest. Beginning in 1980 and proceeding through a number of studies, Marks and his group⁴⁶ found that the combination of ERP plus clomipramine was as efficacious as clomipramine alone. Findings were basically similar when fluvoxamine was used.⁴⁷ In examining singular versus combined treatment, Foa et al³¹ found that imipramine plus ERP was superior to nonspecific treatment components, such as support finances, etc. None of these studies directly compared behavior therapy with medication.

Van Balkom⁴⁸ meta-analyzed 86 studies in order to compare the effectiveness of ERP and medications for OCD treatment. Overall, they found that adding SSRIs to ERP did not result in greater effectiveness than ERP alone but that the combination of ERP plus SSRIs exceeded the effectiveness of SSRIs alone. The authors noted problems in generalizing from the results of this meta-analysis, such as the lack of standardization of methodologies across studies and the frequent reliance upon subjects' self-report as the measure of outcome. As in the above-mentioned controlled research, most of the studies examined in the meta-analysis were relatively short-term, between 3 and 6 months.

Somewhat longer-term research suggested a slight advantage to combining SSRIs with ERP versus either modality alone.⁴⁷ Currently, Foa's group⁴⁹ is engaged in a long-term controlled study that should help further understanding of the effectiveness of combining ERP and anti-OCD medications. As of yet, there has not been controlled research examining the combination of cognitive therapy (either REBT or Salkovskis' method) and medications used for OCD.²⁹ Whether combined treatment would assist one OCD subgroup more than others (eg, checkers versus hoarders) is not yet known.

Overall, it may be said that OCD medications should always be combined with ERP or cognitive therapy but that the opposite case is not necessarily true. However, within this rubric there is information that is necessary to consider in guiding OCD treatment. It is important to bear in mind that controlled studies of ERP tend to focus on the OCD subgroups of ritualizers and tend to exclude those with predominantly obsessive thought content without rituals as well as those who primarily do mental rituals.

In her review of ERP and SRIs for OCD, Abel⁴² noted that each of these treatments varies in efficacy for different kinds of OCD symptoms and differing characteristics of patients. Although it has traditionally been thought that pure obsessives respond to medications, ERP is known to be potentially effective with mental compulsions or obsessions where disastrous consequences are involved.^{5,21} Factors such as tolerances and risks for the various anti-OCD medications and clinician and patient attitudes toward each form of treatment also play a role in guiding the treatment of any particular OCD patient.⁴² Just how to optimally combine cognitive therapy, behavior therapy, and medications requires much further investigation. For now it seems that ERP and pharmacotherapy are equally effective in the short term, but discontinuation of treatment leads to higher relapses with medication.

Is ERP effective for complex forms of OCD?

Treatment of OCD is frequently complicated by other anxiety disorders, depression, or personality disorders. Is it possible that OCD patients with complex cases are more likely to be among treatment resisters, refusers, or dropouts? Among compliant patients, the presence of these kinds of complications may explain the variability of treatment outcome.

A large proportion of OCD patients exhibit evidence of at least one personality disorder before treatment.^{50,51} Moreover, McKay et al⁵¹ did not find that behavior therapy significantly modified personality disorders. Although the extent to which personality disorders are predisposing to OCD, secondary to OCD (eg, developing an obsessive-compulsive personality in order to make life with OCD more manageable), or largely reflective of the severity of the illness remains unclear.⁵² Research has shown that the more personality disorders a patient has, the poorer the treatment outcome.⁵³ Steketee⁵⁴ noted that those with coexisting personality disorders tended to be less responsive to OCD treatment. Studies have further demonstrated that among these conditions, schizotypal personality disorder has been the one most consistently found to be predictive of treatment failure.⁵⁵ This could in part be due to the genetic overlap between this personality type and schizophrenia. Baer et al⁵⁰ found that having a cluster A personality (paranoid, schizoid, schizotypal) was associated with negative outcome, whereas no such relationship seemed to hold for cluster B (histrionic, narcissistic, borderline) or cluster C (avoidant, dependent, obsessive-compulsive). If a patient has a cluster personality disorder, then adding treatment that is specific to the personality disorder, in addition to ERP, may be helpful.

Neurological conditions such as Tourette's syndrome and other disorders have also been recognized as affecting OCD treatment outcome.⁵⁶ Substance abuse would, of course, reduce treatment compliance and reduce the effectiveness of any medications, ERP, and cognitive psychotherapy. Unfortunately, in the OCD population, substance abuse often goes unreported by patients or unrecognized by practitioners. In the case of Tourette's syndrome, the use of ERP is affected because the compulsions associated with this condition are usually less structured and contain fewer catastrophic fears.

A subgroup of patients whose computed tomography scans and magnetic resonance images indicate organicity are reported to be treatment resistant to both ERP and pharmacotherapy.⁵⁷ These patients are characterized by low motivation, indifference to their symptoms, and lack of anxiety, yet they engage in compulsive behaviors.

Depression is the most frequent complicating condition for OCD.⁵⁸ Depression can be secondary to OCD or a separate condition.

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Although it was first widely thought that depression would interfere with the effectiveness of ERP, the research seems equivocal.³

Crino and Andrews⁵⁹ found that OCD patients have a relatively high lifetime incidence of other anxiety disorders. Yaryura-Tobias et al (unpublished manuscript, June 1996) reported that 42% of OCD patients have at least one comorbid condition and that 28% and 29% of those with a comorbid condition have either an anxiety disorder or depression, respectively. They reported that OCD's clinical courses include the onset of other psychiatric disorders following a sequential time of onset. There is a notable lack of research examining treatment outcome for comorbid OCD and anxiety conditions.

OCD can also be complicated by the co-occurrence of one of the OCD spectrum conditions (body dysmorphic disorder, hypochondriasis, etc), but there is a paucity of comparative outcome research. A review of treatment in reference to the spectrum disorders is provided by Hollander⁶⁰ and Yaryura-Tobias and Neziroglu.⁵

[In OCD treatment, is medication compliance improved if ERP or cognitive therapy is also used, and vice versa? How does this affect relapse rates? Can medication dosages be lowered more quickly with the addition of ERP or cognitive therapy?

Little seems to be known about how ERP or cognitive therapy affects medication compliance for OCD patients. In a noncontrolled study, use of clomipramine was reported to increase compliance with ERP.⁶¹ This may have been the result of reductions in depressive symptoms and/or overvalued ideas. Similarly, SSRIs may help patients to endure the anxiety associated with ERP more easily. In a study by Marks et al⁶⁶, one experimental condition involved limiting patients on clomipramine from exposing themselves to anxiety-provoking situations. Interestingly, this seemed to reduce clomipramine's efficacy, suggesting the possibility that, at least in part, this medication may work by making exposure to anxiety easier. If this is the case, addition of cognitive therapy could enhance this effect and also assist in medication compliance by boosting patients' confidence.

Cessation of clomipramine or SSRIs has been associated with rapid OCD relapse.^{34,62}

There has also been concern that even if patients' medications are not discontinued, they may relapse due to a possible waning of therapeutic effect over time.^{46,63} In contrast, patients who are receiving combined ERP and clomipramine maintain treatment gains when clomipramine is discontinued.^{14,15} Although studies are lacking in this area, research suggests that medication dosages can be lowered with more confidence if the patient is receiving ERP or OCD-specific cognitive therapy as well.

What is known about the brain function and biological changes associated with cognitive behavior therapy?

Recent advances in the study of neurobiological structure and functioning have led to increased understanding of OCD.⁶⁴ Although research in this area is beset by many methodological problems, and variations in technology make it hard to compare different studies, there is increasing evidence to state in general terms that the condition is “caused by or associated with a disturbance in the cortico-striatal-thalamic circuit with inputs from the limbic system.”⁶⁵

Questions about how OCD treatment may affect neurobiological functioning are receiving more interest.⁶⁶ More attention has been given to the effect of medications in this regard, but the relationship between neurobiology and ERP has been of interest as well. In a study measuring imipramine binding, affinity (k_D) and platelet serotonin (all assessments of serotonergic activity), within 3 weeks intensive behavior therapy altered serotonin levels.⁶⁷ Schwartz et al⁶⁸ found that six out of nine OCD patients who had improved with cognitive behavioral therapy showed changes on positron emission tomography scans of their brains. Specifically, they found decrements in activity in the orbital frontal cortex as well as in the caudate nucleus. These structures are thought to be associated with OCD patients' hyperalertness and anxiety about “things being wrong” as well as to their difficulty “filtering” worrisome cognitions. Whereas the efficacy of ERP rests upon OCD patients remaining in anxiety-provoking situations until they habituate, the cognitive behavioral therapy used by Schwartz et al⁶⁸ involved instructing patients to resist their compulsions and then shift to another task. This was thought to be helpful in “unlocking” (as they termed it) the iterative OCD neurobiological circuitry.

CONCLUSIONS

In conclusion, behavior and cognitive therapy are effective forms of treatment for OCD. Controlled studies comparing behavioral to cognitive therapy to pharmacotherapy are necessary. Relapse-prevention strategies are important in maintaining gains, but more studies are necessary in this area. Complex forms of OCD may be more resistant to current forms of treatment, and this needs further exploration. Some biochemical and biological parameters have demonstrated the efficacy of behavior therapy. **CS**

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