Obsessive-compulsive disorder in adults: Psychotherapy

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INTRODUCTION

Obsessive-compulsive disorder (OCD) is characterized by recurrent, intrusive, and distressing thoughts, images, or impulses (ie, obsessions) and repetitive mental or behavioral acts that the individual feels driven to perform (ie, compulsions) to prevent or reduce distress.

Treatment with selective serotonin reuptake inhibitors (SSRIs), clomipramine, neuroleptic augmentation of SSRIs or clomipramine [1], and cognitive-behavioral therapy (CBT) have been shown to be efficacious in the treatment of OCD. CBT is a set of techniques that are used to help people with psychological disorders modify maladaptive patterns of thinking and acting to alleviate emotional symptoms. Components of CBT for OCD include [2]:

- Education
- Cognitive therapy techniques
- Exposure therapy
- Response prevention

Psychosocial treatment for OCD is discussed here. The epidemiology, clinical manifestations, and diagnosis of OCD are discussed separately. Pharmacotherapy for OCD, deep brain stimulation for OCD, and OCD in pregnant and postpartum women are also discussed separately. (See "Obsessive-compulsive disorder in adults: Epidemiology, clinical features, and diagnosis" and "Management of obsessive-compulsive disorder in adults" and "Obsessive-compulsive disorder in pregnant and postpartum patients" and "Deep brain stimulation for treatment of obsessive-compulsive disorder".)

COGNITIVE-BEHAVIORAL THERAPY

Indications — Cognitive-behavioral therapy (CBT) is effective and indicated for obsessive-compulsive disorder (OCD) at all levels of symptom severity. Considerations when evaluating a patient for CBT include:

- **Cognition** – CBT requires that the patient grasp a conceptual model of OCD and rationale for treatment. Patients must also be able to implement treatment procedures on their own and consolidate information they learn using the techniques. This may be difficult for individuals who are very concrete in their thinking, developmentally disabled, or cognitively impaired.

- **Insight** – Patients with poor insight into the senselessness of their OCD symptoms show an attenuated response to CBT due to reluctance to engage in exposure and response prevention and difficulty consolidating information learned in CBT [3]. While CBT is worth attempting, increased use of cognitive therapy techniques might be necessary to help patients recognize the senselessness of their symptoms and engage in (and benefit from) exposure tasks. This approach, however, is not always successful, especially with patients with extremely poor insight.

- **OCD subtypes** – CBT is less beneficial when hoarding symptoms predominate [4]. CBT can be adapted to patients with obsessions without overt rituals (ie, mental rituals or "pure obsessions").

- **Comorbidity** – OCD patients with comorbid depression or generalized anxiety disorder show reduced response to CBT [5]. Seriously depressed patients may become demoralized and have trouble complying with treatment instructions. Their strong negative affect may also exacerbate OCD symptoms. In generalized anxiety disorder, pervasive worry detracts from patients' mental resources available for learning skills in CBT.

    - Other axis I conditions that may impede the process and effectiveness of CBT are those that involve alterations in perception, cognition, and judgment, such as psychotic and manic symptoms. Active abuse of psychoactive substances impedes the ability to benefit from CBT exercises and can also reduce adherence.

    - Severe axis II psychopathology may also impede the progress of CBT. Anxious (eg, obsessive-compulsive personality disorder) and dramatic (eg, histrionic personality disorder) traits interfere with rapport development; yet, effective treatment is possible if a therapeutic relationship can be established. Patients with personality traits in the

odd cluster (eg, schizotypy) present a challenge to CBT due to patients' reduced ability to consolidate corrective information from exposure or cognitive interventions.

- **Patient preference** – Patient preference for CBT or medication treatment for OCD should be considered [6]. Reviewing the advantages and disadvantages of each approach with the patient allows him or her to make an informed decision about which therapy they would prefer to receive or whether they would like to receive both treatments concurrently. Greater adherence to CBT can be expected from patients who agree willingly to a particular plan.

- **Availability** – Providing CBT for OCD requires specialized training and experience. The availability of clinicians trained to provide CBT for OCD varies widely. The International Obsessive-Compulsive Disorder Foundation maintains a database of clinicians trained in the treatment of OCD.

Theoretical foundation — CBT for OCD is based on an empirically derived conceptualization of OCD that begins with the well-established finding that intrusions (ie, thoughts, images, and impulses that intrude into consciousness) are normal experiences that most people have from time to time (ie, normal obsessions) [7]. Sometimes triggered by external stimuli (eg, thoughts of a house fire that are triggered by the sight of a fire truck), such intrusions usually reflect the person's current concerns. Research also shows that people with no history of OCD have intrusive thoughts about "taboo" topics such as sex, violence, and blasphemy [7]. The cognitive-behavioral conceptual model proposes that these normal intrusions develop into distressing and time consuming clinical obsessions when the intrusions are appraised as posing a threat for which the individual is personally responsible [8].

As an example, consider the unwanted impulse to yell loudly in a quiet place such as a church or a library. Most people would consider such an intrusive impulse as meaningless and harmless (eg, "mental noise"). Yet such an intrusion might develop into a clinical obsession if the person attaches to it a high degree of importance, leading to an escalation in negative emotion; for example, "Thinking about yelling in church means I'm an immoral person," or "I must be extra careful to make sure I don't lose control." Such appraisals evoke distress and motivate the person to try to suppress or neutralize the unwanted thought (eg, by praying or replacing it with a "safe" thought), and to attempt to prevent any harmful events associated with the intrusion (eg, by avoiding churches).

Compulsive rituals and other safety-seeking behaviors are conceptualized as maladaptive efforts to remove intrusions and to prevent feared consequences. There are several ways in which rituals are counterproductive:

- They temporarily provide reduction in obsessional distress, and therefore are negatively reinforced, evolving into behavioral patterns that consume substantial time and effort and impair functioning.

- Because they reduce anxiety in the short term, rituals prevent the abatement of fear that would naturally occur over time.

- Rituals lead to an increase in the frequency of obsessions by serving as reminders of obsessional intrusions, thereby triggering their reoccurrence. As an example, compulsively checking the stove can trigger intrusions about house fires.

- Performing rituals preserves dysfunctional beliefs and misinterpretations of obsessional thoughts. That is, when feared consequences do not occur after performance of a ritual, the person attributes this to the ritual that was performed.

Proposed mechanisms of CBT — CBT is thought to work for OCD via three mechanisms.

- CBT corrects dysfunctional beliefs that underlie OCD symptoms by presenting the patient with information that disconfirms these beliefs [9].

- CBT helps patients gain self-efficacy by helping them to master their fears without having to rely on avoidance or ritualistic behaviors.

- Repeated and prolonged exposure to feared stimuli, in the absence of avoidance or compulsive behavior, produces new learning ("safety learning") that competes with older fear-based associations. Successful exposure needs to:

    - Optimize the safety learning
    - Enhance the retrieval of this new learning to enhance long-term outcome

Habituation of anxiety, a natural decrease in conditioned fear, may or may not be observed during and between exposure sessions, but is not a consistent predictor of long-term safety learning.

Therapy — The cognitive-behavioral model of OCD leads to specific targets for reducing OCD symptoms: Effective treatment must help patients correct maladaptive beliefs and appraisals that lead to obsessional fear, and decrease avoidance and safety-seeking behaviors (eg, rituals) that prevent the self-correction of maladaptive beliefs.

Goals — The task of CBT is thus to foster an evaluation of obsessional stimuli as nonthreatening and not demanding of further action (compulsions such as avoidance or

rituals). Patients must come to understand their problem not in terms of the risk of feared consequences, but in terms of how they are thinking and behaving in response to stimuli that objectively pose a low risk of harm. Those with aggressive obsessions must view their problem as lending too much significance to meaningless intrusive thoughts, instead of how they are going to achieve the ultimate guarantee that feared consequences will not occur.

As an example, a patient with washing rituals would come to see his or her problem not as needing a sure-fire way to prevent contamination and infectious illness, but as the need to change how he or she evaluates and responds to a situation that realistically poses a low risk of illness.

CBT for OCD includes:

- Psychoeducation
- Exposure and response prevention
- Cognitive therapy

CBT is a skills-based approach. Each treatment session has a fairly specific agenda, and patients are expected to complete "homework" practice assignments to reinforce the skills learned in the sessions. The therapist functions as a coach, teaching the patient how to understand his or her OCD symptoms, as well as how to use the treatment techniques to reduce obsessional fears and compulsive rituals. An important principle for clinicians and patients is that unwanted (obsessional) thoughts are normal and universal. Therefore, it is not the aim of therapy to make these thoughts go away; rather the aim is to change how the person understands and responds to these intrusions.

Treatment planning and psychoeducation — Before active treatment commences, the therapist educates the patient about the conceptual model of OCD. The patient is also given a clear explanation for how CBT is expected to be helpful in reducing OCD. Such education is an important step in therapy because it helps to motivate the patient to tolerate the distress that typically accompanies exposure practice. A helpful rationale includes information about how CBT involves the provocation and reduction of distress during prolonged exposure. Information gathered during the assessment sessions is then used to plan, collaboratively with the patient, the specific exposure exercises that will be pursued. (See 'Theoretical foundation' above.)

In addition to explaining and planning a hierarchy of exposure exercises, the educational stage of CBT must also acquaint the patient with response prevention procedures. Importantly, the term "response prevention" does not imply that the therapist actively prevents the patient from performing rituals. Rather, the therapist helps the patient resist his or her ritualistic urges. Self-monitoring of rituals is often used in support of this goal.

Exposure and response prevention — The most essential component of CBT for OCD is therapist-guided repeated and prolonged exposure to situations that provoke obsessional fear along with abstinence from compulsive behaviors (response prevention). This might occur in the form of repeated actual confrontation with feared low-risk situations (ie, in vivo exposure), or in the form of imaginal confrontation with the feared disastrous consequences of confronting the low-risk situations (imaginal exposure).

As examples, an individual who fears accidentally hitting pedestrians while driving her car would practice driving on streets with pedestrians without getting out of the car to check the roadside for victims. A person with repeated checking that the door is locked would practice leaving home after rapidly closing and locking the front door.

Response prevention is a critical component of treatment because the performance of rituals to reduce obsessional anxiety would prematurely curtail exposure and rob the patient of learning that the obsessional situation is not truly dangerous, and that the anxiety would naturally subside on its own. Effective exposure and response prevention requires that the patient remain in the exposure situation until the obsessional distress decreases spontaneously, without attempting to reduce the distress by withdrawing from the situation or by performing compulsive rituals or neutralizing strategies.

The exposure exercises typically follow a hierarchy beginning with moderately distressing situations, stimuli, and images, and gradually working up to the most distressing situations. Starting exercises that are less evocative of anxiety increases the likelihood that the patient will learn to manage their distress and complete the exposure exercise successfully. Success with initial exposures increases confidence in the treatment and helps motivate the patient to persevere during later, more difficult, exercises. At the end of each treatment session, the therapist instructs the patient to continue exposure without the therapist for several hours and in different environments between sessions. Exposure to the most anxiety-evoking situations is not left to the end of the treatment, but rather, is practiced about mid-way through the schedule of exposure tasks. This allows the patient opportunity to repeat exposure to the most difficult situations in different contexts to allow generalization of treatment effects. During the later treatment sessions, the therapist emphasizes the importance of continuing to apply the CBT procedures learned during treatment.

Cognitive therapy — Cognitive therapy techniques are best used to augment exposure and response prevention [10]. Specifically, they can help address strongly held, mistaken beliefs about obsessional thoughts so that the patient can engage in and better profit from exposure. Various techniques are used to help patients correct their erroneous beliefs and appraisals in cognitive therapy, such as didactic presentation of educational material and Socratic dialogue

aimed at helping patients recognize and correct dysfunctional thinking patterns. “Behavioral experiments,” in which the patient enters and observes situations that exemplify their fears, are often used to facilitate the collection of information that will allow patients to revise their judgments about the degree of risk associated with obsessions.

Specific cognitive techniques used in the treatment of OCD include the following:

- The “pie technique” involves the patient giving an initial estimate of the percent responsibility that would be attributable to them if a feared consequence were to occur [11]. The patient then generates a list of the parties that would have some responsibility for the feared consequence, in addition to the patient himself or herself. The patient and therapist then draw a pie chart, each slice representing one of the responsible parties identified. Next, patient labels all parties’ slices according to their percent responsibility and labels the slice representing himself/herself last. By the exercise’s end, it is typically clear to patients that the majority of the responsibility for the feared event would not be their own.

- The “cognitive continuum technique” involves the patient rating how immoral he or she perceives him or herself to be for having unacceptable intrusive obsessional thoughts (eg, of blasphemy or sexual or violent themes). Next, patient rates the morality level of other individuals who have committed acts of varying degrees of immorality (eg, a serial rapist, abusive parents). Then, patients re-rate themselves and reevaluate how immoral they are for simply experiencing intrusive thoughts.

Cognitive therapy should not be used to challenge the validity of the content of the patient’s obsessional thoughts, but rather to challenge the patient’s appraisal of the obsession’s meaning. As an example, a patient with obsessional intrusions of molesting children would not use cognitive therapy to evaluate whether he or she is likely to act on this thought, but rather to evaluate the proper way to appraise the obsession (eg, as a normally occurring intrusive thought that is likely meaningless).

Frequency and duration — CBT can be delivered on an outpatient basis (eg, weekly or twice weekly), on an intensive basis (daily outpatient treatment sessions), or in residential or inpatient settings depending on the severity of the problem and scheduling constraints. Clinical experience suggests that more frequent sessions are necessary when patients have difficult adhering to exposure and response prevention instructions between sessions. Because of the extreme heterogeneity of OCD symptoms, individual therapy is preferable to group treatment.

The format we have found most useful is a few hours of assessment, treatment planning, and psychoeducation, followed by 16 twice-weekly treatment sessions, lasting approximately 90 to

120 minutes each, over approximately eight weeks [12]. Depending on the patient's symptom presentation and the practicality of confronting actual feared situations, treatment sessions might involve varying amounts of actual and imaginal exposure practice. Cognitive therapy techniques are used to challenge strongly held, mistaken beliefs about obsessional thoughts and "set the table" for exposure exercises.

Assessing treatment outcome — We use structured assessment tools such as the Yale-Brown Obsessive-Compulsive Scale (Y-BOCS) or the Dimensional Obsessive-Compulsive Scale (DOCS) to inform us of symptom measures and effectiveness of treatment.

- **Y-BOCS** – The Y-BOCS is a semistructured, clinician-administered interview, includes a symptom checklist and a 10-item severity scale (figure 1). It is the gold standard interview for assessing the breadth and severity of OCD symptoms [13,14]. The symptom checklist is first used to identify the patient's particular obsessions and compulsions. The severity scale then assesses the patient's main obsessions (items 1 through 5) and compulsions (items 6 through 10) on the following five parameters:

  - Time occupied by obsessive thoughts and compulsive behaviors
  - Interference from obsessions and compulsions
  - Distress from obsessions and compulsions
  - Resistance to obsessions and compulsions
  - Degree of control over obsessions and compulsions

  The clinician rates each item from 0 (no symptoms or impairment) to 4 (most severe symptoms or impairment) based on the past week. Two subscales (obsessions and compulsions; range 0 to 20) can be added to produce a total severity score that ranges from 0 to 40. The severity scale is ideal for measuring treatment progress across time.

- **DOCS** – One of the newest and most carefully developed measures is the DOCS [15]. The DOCS is a 20-item self-report measure that assesses the severity of the four most consistently replicated dimensions of OCD symptoms (which correspond to four subscales):

  - Contamination
  - Responsibility for harm and mistakes
  - Symmetry/ordering
  - Unacceptable thoughts

  The DOCS subscales are reliable and valid, and the measure is being translated into several languages.

Most patients will report some residual symptoms following even a successful course of CBT. Emphasize that "normal" obsessions and rituals are a part of everyday life for most people, so such experiences will never completely be absent. However, the goal of treatment is to help the patient respond to obsessional stimuli in new and healthy ways. Distress and functional impairment can be minimized with continued practice of the skills learned in treatment.

Careful assessment and case conceptualization is critical to the effectiveness of CBT. In the context of conducting a comprehensive psychiatric assessment, the clinician should conduct an evaluation of:

- Obsessional thoughts, ideas, impulses
- Stimuli that trigger the obsessions
- Rituals and avoidance behavior
- Anticipated harmful consequences of confronting feared situations without performing rituals (ie, the cognitive links between obsessions and compulsions)

It is important to ascertain the functional relationships between obsessions and rituals (eg, unwanted sexual thoughts lead to praying rituals) as well as the onset and historical course of the problem. Prior treatment history (particularly of the effectiveness of therapy and medications for OCD) may inform current recommendations.

Efficacy — A meta-analysis of 29 randomized trials of OCD found that cognitive, behavioral, and cognitive-behavioral psychotherapies led to greater reduction in OCD symptoms than did waiting list or credible psychological control treatments [16]. The therapies led to average symptom reduction between 50 and 70 percent [17]. Several of these trials studied a combination of exposure and response prevention along with cognitive restructuring, but others studied a cognitive or behavioral therapy alone. Results did not vary by type of cognitive or behavioral psychotherapy, nor by delivery in individual versus group formats.

A review of 12 trials of 330 patients with OCD found that 83 percent of patients responded to exposure-based CBT; response was defined as at least a 30 percent improvement from baseline. A review of 16 studies reporting on longer-term results (an average of 29 months from the start of treatment) found that 76 percent of patients continued to show reduced symptoms [18]. Meta-analyses of clinical trials have also shown reductions in comorbid anxiety and depression [19-21]. Open trials suggest that exposure therapy results in comparable improvement in OCD outside the mental health specialty sector in samples lacking the exclusion criteria often used in clinical trials [22].

A meta-analytic review of over 20 studies found additional relationships between CBT and treatment outcome:

- Better short and long-term outcomes are achieved when treatment involves in-session exposure practice supervised by a therapist, compared to when all exposure is performed by patient as homework assignments. The number of hours of therapist-directed exposure is positively correlated with outcome [19].

- Combining situational (in vivo) and imaginal exposure has led to greater symptom reduction than situational exposure alone.

- Programs in which patients completely refrain from rituals during the treatment period (ie, complete response prevention) produce superior immediate and long-term effects compared to those that involve only partial response prevention [19]. Although complete response prevention is recommended as a goal, partial response prevention might be required at first.

Predictors of improvement — While CBT is effective for most OCD patients, approximately 25 to 30 percent of patients drop out of therapy prematurely, and among those who remain in treatment, approximately 25 percent do not show satisfactory improvement.

Clinical trials have identified factors associated with a lesser response to CBT:

- During exposure exercises, patients with poor insight into the senselessness and excessiveness of their OCD symptoms appear to have difficulty learning information that is inconsistent with their OCD beliefs. Their fears may lead them to adhere less to instructions during exposure and response prevention compared to patients with better insight, leading to an attenuated response [3].

- Several studies have found that severely depressed OCD patients, but not mildly or moderately depressed patients, have poorer CBT outcomes [23]. It is believed that because of their high emotional reactivity, severely depressed individuals fail to undergo the decrease in anxiety/distress that typically occurs following extended exposure to feared stimuli [24]. Thus, they do not have the therapeutic experience of feeling comfortable in the presence of feared stimuli, and therefore fail to learn that obsessive doubts are unrealistic. Motivational difficulties, which often accompany depression, may also account for poor treatment outcome.

- Patients with family members who are emotionally overinvolved, express hostility, or who are overly critical of the patient have a lesser response to CBT [25]. When a family member

is hostile, the most consistent predictor of negative treatment outcome, the odds of premature termination are approximately six times greater than when relatives are not hostile. Hostility is also associated with poorer response in patients who completed treatment. These findings underscore the importance of educating family members about OCD and its treatment.

INTERNET-DELIVERED COGNITIVE-BEHAVIORAL THERAPY AND OTHER PSYCHOTHERAPIES

Internet-delivered cognitive-behavioral therapy (iCBT) — While cognitive-behavioral therapy (CBT) is an effective treatment for obsessive-compulsive disorder (OCD), many individuals have difficulty accessing treatment. iCBT increases access to CBT for individuals with OCD and shows promise as an effective treatment when delivered as part of routine care.

In a prospective study, 225 individuals with OCD were enrolled in a six-lesson course delivered over eight weeks; 145 completed outcome measures at post treatment and 80 patients were evaluated at three-month follow-up [26]. Among the entire sample, the average decline on the Yale-Brown Obsessive Compulsive Scale – Self-Report from pretreatment to posttreatment was 18 percent and from pretreatment to three-month follow-up was 28 percent. Declines in the Patient Health Questionnaire-9 and the Generalized Anxiety Disorder-7 Scale were 27 and 30 percent respectively at three-month follow-up.

Other interventions — There have been no randomized trials testing psychodynamic or eclectic psychotherapy for OCD [27].

Other psychosocial interventions, including progressive muscle relaxation and anxiety management training, are less effective than CBT using exposure and response prevention in the treatment of OCD [20].

SOCIETY GUIDELINE LINKS

Links to society and government-sponsored guidelines from selected countries and regions around the world are provided separately. (See "Society guideline links: Obsessive-compulsive disorder and related disorders".)

SUMMARY AND RECOMMENDATIONS

- **Obsessive-compulsive disorder (OCD)** – OCD is characterized by recurrent, intrusive, and distressing thoughts, images, or impulses (ie, obsessions) and repetitive mental or behavioral acts that the individual feels driven to perform (ie, compulsions) to prevent or reduce distress. (See 'Introduction' above.)

- **Theoretical foundation** – The cognitive-behavioral model for OCD proposes that intrusive thoughts, images, or impulses develop into distressing and time-consuming clinical obsessions when the intrusions are appraised as posing a threat for which the individual is personally responsible. Compulsions and related behaviors are conceptualized as maladaptive efforts to remove intrusions and to prevent feared consequences. (See 'Theoretical foundation' above.)

- **Indication for cognitive-behavioral therapy (CBT)** – CBT is indicated for OCD at all levels of symptom severity. CBT may be less useful for OCD patients with impaired cognition, poor insight, or severe comorbid psychiatric disorders, including severe depression, generalized anxiety, substance use disorders, and personality disorders. (See 'Indications' above.)

- **Patient preference** – We consider patient preference for CBT, medication, or the combination for each patient. We review the advantages and disadvantages of each approach with the patient. We work with the patient to make an informed decision about preferable treatment. Greater adherence to CBT can be expected from patients who agree willingly to a particular plan. (See 'Indications' above.)

- **CBT** – Effective treatment must help patients correct maladaptive beliefs and appraisals that lead to obsessional fear, and decrease avoidance and safety-seeking behaviors (eg, rituals) that prevent the self-correction of maladaptive beliefs. (See 'Cognitive-behavioral therapy' above.)

    - **Exposure and response prevention** – The most essential component of CBT for OCD is therapist-guided repeated and prolonged exposure to situations that provoke obsessional fear along with abstinence from compulsive behaviors (response prevention). Exposure exercises typically follow a hierarchy beginning with moderately distressing situations, stimuli or images and working up to more distressing ones. (See 'Exposure and response prevention' above.)

    - **Cognitive therapy** – Cognitive therapy techniques are best used to augment exposure and response prevention. These techniques can help address strongly held, mistaken beliefs about obsessional thoughts so that the patient can engage in and better profit from exposure. (See 'Cognitive therapy' above.)

- **Frequency and duration** – CBT can be delivered on an outpatient basis (eg, weekly or twice weekly), on an intensive basis (daily outpatient treatment sessions), or in residential or inpatient settings. The format we have found most useful is a few hours of assessment, treatment planning, and psychoeducation, followed by 16 twice-weekly treatment sessions, lasting approximately 90 to 120 minutes each, over approximately eight weeks. (See 'Frequency and duration' above.)

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