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Review article

Efficacy of cognitive-behavioral therapy for obsessive–compulsive disorder

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ABSTRACT

Cognitive-behavioral therapy (CBT), which encompasses exposure with response prevention (ERP) and cognitive therapy (CT), has demonstrated efficacy in the treatment of obsessive–compulsive disorder (OCD). However, the samples studied (reflecting the heterogeneity of OCD), the interventions examined (reflecting the heterogeneity of CBT), and the definitions of treatment response vary considerably across studies. This review examined the meta-analyses conducted on ERP and cognitive therapy (CT) for OCD. Also examined was the available research on long-term outcome associated with ERP and CT. The available research indicates that ERP is the first line evidence based psychotherapeutic treatment for OCD and that concurrent administration of cognitive therapy that targets specific symptom-related difficulties characteristic of OCD may improve tolerance of distress, symptom-related dysfunctional beliefs, adherence to treatment, and reduce drop out. Recommendations are provided for treatment delivery for OCD in general practice and other service delivery settings. The literature suggests that ERP and CT may be delivered in a wide range of clinical settings. Although the data are not extensive, the available research suggests that treatment gains following ERP are durable. Suggestions for future research to refine therapeutic outcome are also considered.

Contents

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1. Introduction

Obsessive–compulsive disorder (OCD) is widely recognized as a serious and debilitating psychiatric condition (e.g., Markarian et al., 2010). The disorder is marked by three distinct components. One component, obsessions, has been defined as intrusive and unwanted thoughts, images or ideas, as well as doubts about actions. Obsessions are typically in specific areas such as horrific images (such as blasphemy, sexual ideas, or violent images), thoughts of contamination, or doubts relating to whether some action was not completed. The second component, compulsions, has been defined as specific behavioral actions, including covert mental rituals, intended to neutralize the obsessions, or to verify behaviors that are the subject of doubts. In addition to these two primary components, individuals with the disorder engage in extensive avoidance to prevent the provocation of obsessions and their associated compulsions. A diagnosis of OCD has serious implications for the sufferer as the disorder is associated with extensive disability covering virtually all aspects of functioning, increased healthcare utilization, and reduced quality of life (Markarian et al., 2010).

Since Meyer (1966) first described treatment employing exposure with response prevention (ERP), cognitive behavioral therapy (CBT)[1] has been refined for OCD to the point that this approach is considered the most efficacious psychotherapeutic method of treating the disorder. In Meyer's original report, he described two cases of OCD, one with checking symptoms to ensure that clothing and other objects used by her baby were not dirty. The other case was marked by intrusive and unwanted sexual and blasphemous thoughts, with accompanying ritualistic behavior to annul these obsessions. These two case studies illustrate the heterogeneity of OCD. First, as demonstrated by extensive research, OCD is marked by different symptom dimensions (McKay et al., 2004; Abramowitz et al., 2005a). Factor and cluster analytic research has shown that OCD is comprised of the following broad dimensions: obsessions (aggressive, sexual, religious, somatic) and checking compulsions; symmetry obsessions and ordering, counting, and repeating compulsions; contamination obsessions and cleaning compulsions; and hoarding.[2] In addition to these dimensions, there is a wide range of common complicating symptoms associated with the disorder, such as comorbid depression, comorbid anxiety disorders, and overvalued ideas (Abramowitz et al., 2008a, 2008b). As a result, the treatment literature on OCD, while emphasizing the efficacy of CBT broadly defined, does not necessarily provide a straightforward summary of treatment decisions for practitioners. Further, in light of the heterogeneity of OCD symptoms (McKay et al., 2004), there is little data examining specific symptom presentations, further complicating any treatment guideline endeavor. For example, it has been suggested that primarily mental obsessions have a more chronic course (Sibrava et al., 2011) necessitating a longer course of therapy. Some post-hoc analyses have suggested differential treatment outcome based on symptom dimension (i.e., Abramowitz et al., 2003), which would also suggest some specific guidelines. Further still, recent research has suggested that significant heterogeneity exists within dimensions. For example, contamination fear is considered one of the more readily treated symptoms of OCD (Abramowitz et al., 2003). Yet, it has also been shown that contamination fear is often marked by significant disgust, rather than fear, and the response to exposure for disgust is lower than for anxiety (McKay, 2006). As a more general indicator, it has been shown that disgust may be associated with higher levels of intrusive images that are, in turn, more difficult to treat using existing CBT methods.

Given the heterogeneity of the condition, clinicians would benefit from a systematic set of guidelines derived from the existing CBT literature. There are two major aims of this paper. The first is to summarize the efficacy of CBT for OCD based on existing meta-analyses. This includes a refinement over previous guidelines by highlighting specific predictors of treatment response in order that clinicians may better anticipate factors that require additional clinical intervention to improve outcome. Mechanisms hypothesized to underlie ERP, and its efficacy, as well as mechanisms thought to underlie cognitive therapy (CT) and its efficacy are presented. The second aim is to articulate a research agenda for further refining the guidelines offered here, in light of the complexity of the disorder. These aims were undertaken with the objective of clearly illustrating the range of outcomes that could be expected when employing CBT for OCD, providing recommendations for standards of care, and describing areas of future investigation.

2. Exposure with response prevention

As noted above, the first cognitive-behavioral intervention for OCD was ERP. Treatment using this approach involves developing a hierarchy of presenting symptoms, from least fear producing to most, and then guiding the client through exposure to items on the hierarchy until the highest level items are readily tolerated. In parallel, response prevention is included, whereby the client is asked to refrain from completing the compulsions that would otherwise eliminate the anxiety or distressing emotional reaction, or by re-applying the exposure to the fear stimulus immediately following the completion of compulsions (Rowa et al., 2007). To illustrate, in the treatment of contamination fears, exposure would

[1] We rely on the broad term CBT to reflect treatment protocols that integrate exposure based treatment with cognitive therapy approaches. Throughout the paper, exposure-based treatment will be referred to as exposure with response prevention (ERP) and cognitive therapy (CT) will be used to refer to protocols that emphasize cognitive-restructuring and that may include behavioral experiments but do not utilize exposure as central to treatment.

[2] With the development of the fifth edition of the Diagnostic and Statistical Manual (DSM-5; American Psychiatric Association, 2013) hoarding is now a separate disorder within a broader new category, the obsessive–compulsive related disorders. This change is the result of extensive research showing that hoarding has substantially different pathophysiological, cognitive, behavioral, and neuropsychological symptom profiles from other OCD symptoms (Pertusa et al., 2008, 2010; Mataix-Cols et al., 2010), is associated with specific symptom profiles (Mogan et al., 2012) and poorer treatment response when therapy is similar to that employed for OCD (Abramowitz et al., 2003), and is best explained by a different conceptual model of etiology and maintenance (Frost and Hartl, 1996). However, hoarding behaviors that are in response to obsessions will still be part of OCD.