Exposure and Response Prevention for Obsessive-Compulsive Disorder

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Q: What is exposure and response prevention?

A: Exposure and response prevention (ERP), also known as exposure and ritual prevention (EX/RP), was the first cognitive behavioral therapy (CBT) developed for the treatment of obsessive-compulsive disorder (OCD; Meyer, 1966). The initial phases of treatment involve assessment, psychoeducation, and treatment planning. The provider works with the client to identify and characterize triggers for obsessive thoughts, compulsive behaviors, and avoidance (Foa et al., 2012). ERP involves guiding the client through a hierarchy of exposure exercises (may include both in vivo and imaginal exposure), beginning with items that produce the least fear and gradually working up to items that produce the most fear (McKay et al., 2015). At the same time, ERP includes response prevention, where the client is instructed not to engage in the compulsions that they would typically use to manage the distress associated with the exposure. If the client cannot refrain from the compulsion, exposure to the feared stimulus is immediately reapplied.

Q: What is the theoretical model underlying ERP for OCD?

A: OCD is characterized by three components: obsessions, compulsions, and marked anxiety or distress (American Psychiatric Association, 2022). Consistent with Mowrer's two-factor theory of fear and avoidance (Mowrer, 1939; Mowrer, 1960), OCD was conceptualized by Dollard and Miller (1950) as a disorder acquired through classically conditioned fear responses and maintained via negatively reinforced avoidance responses. In 1966, Meyer reported on cases in which his patients' OCD symptoms improved after they were exposed to feared stimuli and refrained from engaging in compulsions (Meyer, 1966). Meyer considered two aspects of this treatment to be important: (1) the patients' realization that refraining from compulsions did not result in immediate, overwhelming anxiety, and (2) the patients' expectations of "disastrous consequences" were not fulfilled. By teaching clients to tolerate distress and by targeting the fear response, ERP aims to eliminate rituals and avoidance (Foa et al., 2012).

Q: Is ERP recommended as a treatment for OCD in the Military Health System (MHS)?

A: There is no VA/DoD clinical practice guideline (CPG) on the treatment of OCD.

The MHS relies on the VA/DoD CPGs to inform best clinical practices. In the absence of an official VA/DoD recommendation, clinicians should look to CPGs and authoritative reviews published by other recognized organizations and may rely on knowledge of the literature and clinical judgement.

Q: Do other authoritative reviews recommend ERP as a treatment for OCD?

A: Yes. CPGs and authoritative reviews published by other organizations recommend the use of ERP for OCD.

Other recognized organizations publish CPGs or conduct systematic reviews and evidence syntheses on psychological health topics using grading systems similar to the VA/DoD CPGs. These include the American Psychiatric Association, American Psychological Association, and the United Kingdom's National

Institute for Health and Care Excellence. Additionally, Cochrane is an international network that conducts high-quality reviews of healthcare interventions.

- The American Psychiatric Association's Practice Guideline for the Treatment of Patients with Obsessive-Compulsive Disorder states that CBT which relies primarily on behavioral techniques such as ERP is recommended, with a Level I ("recommended with substantial clinical confidence") rating (American Psychiatric Association, 2007).
- The United Kingdom's National Institute for Health and Care Excellence (NICE) recommends ERP as both an initial, low intensity treatment, and for adults who require more intensive CBT (NICE, 2005).

Q: Is there any recent research on ERP as a treatment for OCD?

A: Randomized controlled trials supporting the efficacy of ERP as a treatment for OCD span several decades. Four recent systematic reviews and/or meta-analyses examined different facets of ERP for OCD. Song et al. (2022) aimed to update previous meta-analyses that had shown ERP to be efficacious for OCD. They included 30 studies and found that ERP had a significant effect on OCD compared to placebo or pharmacological treatment, though ERP was not statistically different from other psychotherapies. The meta-analysis by Fisher et al. (2020) compared different manualized therapies in the treatment of OCD. They included 43 RCTs that represented three types of treatment (ERP, cognitive therapy [CT] plus ERP, and CT) and three formats (group, individual, self-help). Treated patients had significantly higher recovery rates than patients in the control conditions, which included both waitlist control and placebo control. Group CT plus ERP and individual ERP had the second- and third-highest recovery rates (42% and 41% respectively). Yan et al. (2022) meta-analysis included 18 studies representing 1057 patients with OCD. They found a small-to-moderate effect size for ERP-based treatments in the experimental groups which was comparable to the effect sizes of certain medications (e.g., clomipramine, sertraline) and other behavior therapies. Finally, Bijanki et al. (2021) examined neuroimaging studies in their systematic review. They found 64 studies that compared pre-treatment and post-treatment imaging for patients with OCD. In adults, neuroimaging changes associated with symptom relief after CBT (primarily ERP) included decreased metabolism in the caudate, increased metabolism in the dorsal anterior cingulate cortex (ACC), decreased perfusion in the orbitofrontal cortex (OFC), and increased fractional anisotropy of the middle frontal gyrus, OFC, cerebellum, and middle temporal gyrus. These results were consistent with changes noted after other treatments, including pharmacotherapy and deep brain stimulation.

Q: What conclusions can be drawn about the use of ERP as a treatment for OCD in the MHS?

A: The efficacy of ERP as a treatment for OCD is well-established in the literature. More recent reviews have confirmed ERP's efficacy while indicating that other behavioral treatments and adequate pharmacotherapy perform similarly in terms of efficacy, effect sizes, and neurological changes post-

treatment. The choice of treatment should take into account numerous factors, including provider competency and patient preference.

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