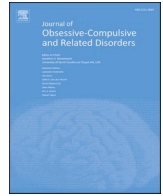




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# Obsessive compulsive disorder during the COVID-19 pandemic: A brief review of course, psychological assessment and treatment considerations

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## ABSTRACT

Obsessive-compulsive disorder (OCD) is an impairing mental health condition defined by intense distress in the presence of unwanted, recurrent thoughts, images, or impulses which are accompanied by compulsions and avoidance performed to reduce distress. During the COVID-19 pandemic, OCD has continued to be an impairing mental health condition regardless of symptom dimensionality (e.g., contamination, harm, etc.) with varying reports of the overall clinical course. However, changes in the assessment, treatment, and diagnosis of OCD have occurred to personalize care and be aligned with public health guidelines. Exposure and response prevention and pharmacotherapy remain the treatment of choice, even though the setting in which treatment is conducted may have shifted. Telehealth in particular has been a ‘game-changer’ for clinicians and patients alike. Given the continued health risk posed by the pandemic, treatment personalization should still be made to ensure safety for both patients and providers while balancing efficacy and patient preferences.

Obsessive-compulsive disorder (OCD) is a debilitating psychiatric disorder, affecting about 2–3% of adults and children alike (Kesslet et al., 2005; Ruscio et al., 2010). Symptoms of OCD can generally be categorized into the following dimensions: symmetry and order, contamination/mental contamination, checking, taboo obsessions, and hoarding (Hasler et al., 2007). Symptoms of OCD can cause impairment and reduced quality of life (Kugler et al., 2013) and tend to persist and even worsen without treatment (Stewart et al., 2005). Gold standard treatment for OCD includes a specific form of psychotherapy – cognitive behavioral therapy with exposure and response prevention (ERP) – and serotonin reuptake inhibitors (McGuire et al., 2015). Treatment follows a comprehensive assessment process involving interviews, clinical-administered measures, and self-report questionnaires. This paper details how COVID-19 impacted the clinical presentation of OCD, psychotherapeutic treatment and assessment, with guidance on adapting and personalizing care to maximize outcomes.

## 1. Treatment of OCD

A review of treatment and assessment components is briefly provided; more comprehensive coverage can be found in multiple texts. Briefly, ERP is an evidence-based, effective cognitive-behavioral treatment for OCD (Storch & Merlo, 2006). ERP involves exposure to distress

provoking triggers, together with the patient refraining from ritual engagement and avoidance. Treatment is provided in multiple settings including outpatient (typically over 12–24 sessions) and higher levels of care (i.e., intensive outpatient, partial hospitalization, and residential programs). Regardless of setting, treatment progresses in roughly the same fashion. Initially, patients are provided with psychoeducation about OCD and treatment while the clinician gathers information about the individual’s presenting symptoms (Stines et al., 2009). The patient and clinician then develop a hierarchy of internal and external stimuli that trigger the patient’s obsessions. Patients typically move from less to most distressing situations and repeatedly confront situations in vivo and imaginably while refraining from engaging in compulsions/avoidance (Stines et al., 2009). Through ERP, the patient learns that they can tolerate distress, that the feared outcomes do not occur, to inhibit anxious responses, and to cope with uncertainty.

## 2. Assessment of OCD

Assessment of OCD include self-report measures, clinician-administered measures, interviews, and other-report measures (for a detailed review, see Grabill et al., 2008). Complementing the standard clinical interview, the Yale-Brown Obsessive-Compulsive Scale First and Second Editions (Y-BOCS/Y-BOCS-II) are gold-standard assessments to

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determine symptom severity in individuals with OCD (Storch et al., 2010). The Y-BOCS/Y-BOCS-II is clinician-administered by means of a semi-structured interview. This measure contains a symptom checklist, which is utilized to determine presence of past and current obsessions, compulsions, and avoidance. Once the symptom checklist is completed, the clinician will have the patient identify the most prevalent and distressing obsessions and compulsions, which will be the primary focus for assessing obsessive-compulsive symptom severity. In addition to the Y-BOCS/Y-BOCS-II, numerous self-report measures exist (Benito & Storch, 2011). Assessments typically occurred in person prior to the pandemic although some data supported phone-based assessment delivery (Vogel et al., 2012).

### 3. Association between COVID-19 and patient presentation

For clinicians early in the pandemic, it was unclear what effect COVID-19 would have on both patients and treatment for OCD. Some studies showed that following the onset of the COVID-19 pandemic, individuals with OCD showed significant increases in concerns related to germs and contamination (Alaeq et al., 2021; Benatti et al., 2020; Davide et al., 2020). In one study of adults with self-diagnosed or previously diagnosed OCD, 72% of the sample reported increases in OCD symptoms since the start of the COVID-19 pandemic (Jelinek et al., 2021). In a longitudinal study of adolescents with OCD started in 2019, symptoms of OCD were also found to worsen during the pandemic (Tanir et al., 2020). Clinicians also reported some changes in OCD symptoms in their patients with some reporting that approximately 38% of their patients saw increases in OCD during the early months of the COVID-19 pandemic (Storch et al., 2020).

As the pandemic progressed, additional research showed that in some populations COVID-19 did not appear to have a direct effect on symptoms of OCD, highlighting the resiliency of affected individuals (Pinciotti et al., 2021). In a sample of 447 adults in India, there was no significant difference between individuals who presented with OCD prior to COVID-19 and those who presented after the onset (Sharma et al., 2021). Additional longitudinal research from the Netherlands showed that individuals with more severe mental health concerns, including OCD, reported improvements in mental health during the pandemic (Pan et al., 2021). Furthermore, in a small Israeli sample of children and adolescents with OCD, functioning improved during the initial months of the COVID-19 pandemic and that OCD scores were reported in the low to medium range (Schwartz-Lifshitz et al., 2021). Broadly, it appears that the overall stress of the pandemic has impacted people with OCD similar to others both with and without mental illness. Yet, individual differences are common and require nuanced assessment in order to fully individualize treatment planning.

### 4. Treatment considerations during COVID-19

Prior to the start of the COVID-19 pandemic, treatment for OCD (e.g., ERP) was conducted primarily in-person at outpatient, partial hospitalization, and residential treatment settings. However, COVID-19 drastically shifted treatment administration to mitigate spread and ensure safety of patients and providers alike. The largest shift was the move from in-person treatment to video and phone sessions. Although telehealth treatment for OCD had been researched prior to the COVID-19 pandemic (Aboujaoude, 2017; Storch et al., 2011), studies were small in scope and generally preliminary. That said, results suggest that when gold-standard treatments are used, treatment is similarly effective when delivered in person versus virtually (e.g., video, phone; Wooten, 2016).

Clinicians who shifted to telehealth during the COVID-19 pandemic found that there was minimal difference in treatment engagement for patients who switched from in person to virtual (Silver et al., 2020). Furthermore, clinicians have noted some positive changes due to the switch including increased ability to provide services to populations

previously underserved (e.g., rural), reduced barriers, improved efficiency, ability to support exposures done in the home, and decreased rates of no shows (Sequeira et al., 2020). Additionally, various organizations supporting mental health providers provided support to clinicians in making this shift including additional training to professionals at low or no cost (Perrin et al., 2020).

### 5. Assessment considerations during COVID-19

Assessment of OCD symptoms involves gold standard assessment measures such as the Y-BOCS/Y-BOCS-II (Storch et al., 2010). In the presence of telehealth, administration of such measures transitioned relatively easily, and administration remains generally the same. Specific OCD thoughts around being contaminated and harmed by COVID-19 exposure or harming others unintentionally by spreading COVID-19 may be a consideration for clinicians assessing for OCD in the presence of the COVID-19 pandemic. In particular, differentiating cleaning behaviors consistent with public health guidelines from OCD symptoms requires careful assessment. Specifically, clinicians should take into consideration characteristics to help determine the motivation, intensity, and frequency of handwashing. Recent research suggests that individuals with contamination and checking concerns related to OCD reported a greater impact of handwashing (e.g., frequency of handwashing and an increase in duration) on their daily life (Hassoulas et al., 2021). This research suggests the increased impairment that handwashing and contamination has on individuals with OCD during COVID-19. However, clinicians will need to continue to utilize best clinical judgement to determine if a patients' handwashing is considered within reason or if it surpasses the threshold for excessive handwashing. Due to new variants of COVID-19, government guidelines changing, projected ending of the pandemic, these factors may provide it challenging for clinicians to parse out normative responses to COVID-19-related changes comparatively to clinical symptomology. Future research is warranted to determine what specific assessment questions are necessary to separate out clinical severity of handwashing for patients. The authors (Hassoulas et al., 2021) suggest a few clinical characteristics to best determine pathological OCD contamination features, such as the actual contact with COVID-19 potential related threat, the motivation of handwashing, and continuing handwashing after there is an external COVID-19 threat is gone. Similar to previous public health emergencies (e.g., Miller et al., 1988), clinicians should assess distress motivating such behaviors, as well as the excessiveness and ability to incorporate new information. Although assessment overall has remained similar whether conducted virtually or in-person, certain clinical presentations pose challenges for remote assessment, including patients with certain clinical characteristics (e.g., poor insight, high acuity) and comorbidities (i.e., substance use, eating disorders, psychotic spectrum disorders).

### 6. Efficacy of ERP delivered via telehealth

Telehealth has long been a topic of conversation and OCD clinicians were among the first to empirically examine the efficacy of telehealth intervention on clinical care (Aboujaoude, 2017). Since the start of the COVID-19 pandemic, telehealth has received unprecedented attention for its ability to provide safe clinical services at a distance; however, the convenience and accessibility benefits of ERP delivered via videoconferencing were highlighted in the literature for several decades before the current pandemic. In the early 2000s, reports on use of telehealth services for ERP were primarily anecdotal (Frueh et al., 2000), or case studies. For instance, Himle et al. (2006) conducted a case study examining three OCD patients in rural settings, who did not have access to traditional ERP. Himle et al. (2006) found Y-BOCS symptom reduction outcomes comparable to those in traditional ERP. In their review of the literature, Brand and McKay (2012) found that telehealth-based treatments for OCD and related disorders had similar efficacy to

face-to-face treatments and with comparable effect sizes. In 2015, Dettore and colleagues conducted a meta-analysis of eight tele-therapy and OCD studies and found that tele-therapy was superior to control conditions on OCD symptom outcomes at post-treatment. This work found no significant difference in efficacy between traditional one-on-one, in-person therapy, and therapy delivered via telehealth. Prior to the COVID-19 pandemic, multiple clinical trials and meta-analyses demonstrated that OCD treatments (e.g., ERP) are equally as effective when delivered in person or facilitated with technology (e.g., telephone, virtual video; Wooten, 2016; Goetter et al., 2014).

One of the questions that arose early on was if transitioning to entirely virtual in some cases would lead to patient attrition. Silver et al. (2020) indicated that patients continued to attend therapy sessions regularly even when transitioned to virtual modalities. Research coming out of this change has indicated that with telehealth clinicians are seeing decreased rates of no-shows, together with fewer logistical barriers for patients and improved ability to provide services to underserved populations (e.g., rural; Sequeira et al., 2020). Furthermore, OCD clinicians have found that exposures done in patient's homes are often easily accessible with telehealth.

While there are clear benefits to telehealth ERP and assessment, there are some drawbacks. Unpublished data by the last author indicates that clinicians perceive telehealth ERP treatment to be less effective than in-person ERP for patients with certain clinical characteristics (e.g., high severity, poor insight) and comorbidities (i.e., substance use, eating disorders, attention deficit hyperactivity disorder). In addition, those who are less technologically sophisticated as well as younger children may struggle with telehealth ERP. The efficacy of higher levels of care (e.g., intensive outpatient, partial hospitalization programs) delivered via telehealth remains unclear and warrants empirical attention as this could be an opportunity to improve access to those that require more intensive services. Both assessment and treatment can be disrupted by poor connectivity, and the difficulty in appreciating the full presentation of the patient is often more limited during telehealth sessions (e.g., appearance, physique), which can be particularly relevant in patients with comorbid eating disorders and psychotic-spectrum disorders.

In addition to the drawbacks to telehealth ERP described previously, telehealth may have several other challenges worthy of consideration. First, it may create greater reliance on clinicians working with individuals with OCD. For example, previous in-person treatment often required patients' motivation to enact new exposure plans (e.g., exposures surrounding rituals in their homes), but telehealth may minimize this aspect and require the clinician to initiate certain exposures. Second, client's sense of urgency to improve their symptoms may be impacted by the modality of telehealth due to convenience. While the convenience of telehealth has reduced barriers for treatment access, in-person treatment may have increased a patient's sense of engagement, urgency and motivation to complete treatment quickly and efficiently. Empirical knowledge is warranted to understand how telehealth may be impacting number of sessions for patients, and if there is an increase in number of sessions beyond the recommended duration given the convenience of telehealth.

In terms of patient preferences, studies in the last two decades have indicated similar levels of patient satisfaction and therapeutic alliance with videoconferencing compared to face-to-face treatment (e.g., Bouchard et al., 2004). Questions on patient preferences have also been examined during COVID-19. Patients appear to prefer videoconferencing over telephone-only telehealth services (Ebbert et al., 2021). However, many patients continue to prefer in-person sessions. Fortunately, having an array of options will both improve access and treatment personalization. Yet, clinicians will have to provide direct guidance to the patient on what option is clinically indicated even if not the most preferred.

## 7. Vaccine rollout

At the present time, the COVID-19 pandemic is continuing to significantly alter the way individuals across the globe lead their lives. However, starting in December of 2019 hope for a return to normal presented in the form of vaccines from Pfizer, Moderna, Johnson & Johnson, and others. At the time of writing, in the United States vaccines are available for adults, adolescents, and children as young as 5. Although they are widely available, there have been inequities surfacing in vaccine distribution for rural communities and individuals with low income (Burgos et al., 2021; Press et al., 2021). These inequities apply on a global scale and the availability of these vaccines varies greatly between countries (Wouters et al., 2021).

Another factor at play both in the United States and globally is the rise in vaccine hesitancy despite the efforts of organizations such as the WHO and CDC to provide factual evidence regarding the efficacy and safety of vaccines (Sallam, 2021). Reasons for vaccine hesitancy vary widely and is the result of a variety of factors including the current media climate where misinformation is widely discussed and debated (Bertin et al., 2020; Machingaidze & Wiysonge, 2021). Furthermore, studies have also found that racial minority status has been associated with vaccine hesitancy due to chronic racial injustices in the medical system (Willis et al., 2021).

In the context of OCD treatment, vaccines have unique considerations for clinical care. As of writing, there have not been any studies published that empirically examined beliefs of those with OCD about the COVID-19 vaccine and the impact it may have on symptoms. In our OCD clinic we have seen varying responses to the availability of vaccines to the public including relief and reduction of COVID-19 specific OCD symptoms (Wiese et al., in press). However, there have also been anecdotal reports of patients with anxiety disorders including OCD who have reported vaccine hesitancy (Shafraan et al., 2021). It is likely that there will be a wide-range in responses to the COVID-19 vaccine from patients with OCD including symptom relief, no change in symptoms, and overall hesitancy or refusal to receive the vaccine. Future studies should seek to better understand the connections between OCD symptoms and vaccine administration for COVID-19.

## 8. Future directions of telehealth

Prior to COVID-19, OCD clinicians and research examined the efficacy of ERP treatments delivered via telehealth and found that ERP is comparable when delivered via telehealth, in person, or over the telephone (Aboujaoude, 2017; Goetter et al., 2014; Storch et al., 2011; Wooten, 2016). These results suggest that delivering the gold-standard treatment for individuals with OCD may not be dependent on the delivery modality (i.e., in-person, telehealth, telephone). Yet, these studies were modest in scope and it is likely that certain patient characteristics moderate effects and make in-person or telehealth treatment more appropriate. As new variants of COVID-19 continue to arise, telehealth may continue to be necessary and at the forefront of treatment for patients. In addition to benefits of comparable effective results utilizing telehealth, individuals from rural areas and underserved communities may benefit from telehealth due to mitigating logistical barriers to in-person treatment (e.g., cost effectiveness, lack of transportation, childcare arrangements) (Sequeira et al., 2020).

## 9. Conclusions

This article reviews the gold-standard psychological treatment and assessment for individuals with OCD, and how COVID-19 impacted delivering these services to patients. We highlight that when clinicians utilized gold-standard treatment (i.e., ERP) and assessment, individuals with OCD show similar effects, despite method of modality delivery. Utilizing telehealth will likely continue to develop into a typical method to assess and treat individuals with OCD. Clinicians should continue to

stay current with telehealth modalities to deliver services to individuals with OCD, while continuing to use clinical judgement in assessing and treating clinical symptoms, severity, and impairment.

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