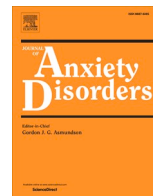




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Review

COVID-19 and OCD: Potential impact of exposure and response prevention therapy

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ABSTRACT

This brief clinical review critically assesses the use of exposure and response prevention therapy (ERP) for patients with obsessive-compulsive disorder (OCD) in light of the COVID-19 pandemic. We discuss the ethical and practical considerations that clinicians employed in past infectious disease outbreaks, as well as general safety measures routinely practiced in the conduct of exposure therapy. During this time, concerns regarding the feasibility of ERP have emerged, especially with strict guidelines on social distancing and on following other preventative behaviors. While ERP may have to be modified to follow public health guidelines, this review outlines a) how ERP has been adapted in the context of other infectious triggers; b) the potential impacts on OCD patients of attenuated ERP, and c) minimizing concerns related to litigation. A case report is provided detailing ERP personalized given COVID-19 related considerations. In all, we advise against modifying therapies in ways that may jeopardize the efficacy of patient care or progress.

1. Introduction

The SARS-CoV-2 coronavirus disease-2019 (COVID-19) pandemic is the greatest international health crisis in our modern era (CDC, 2020). This novel virus gained global attention in late December 2019 as cases of atypical pneumonia emerged in Wuhan, China (CDC, 2020). At the time of this article, COVID-19 has infected over 6.3 million and caused over 190,000 deaths (as of September 10, 2020) in the United States alone, and the virus continues to spread around the world (CDC, 2020). COVID-19 is highly infectious, and people have been trying to protect themselves by engaging in social distancing measures and other preventative behaviors (CDC, 2020).

Research is emerging regarding the impact of the COVID-19 on individuals with pre-existing mental health diagnoses. Particularly with respect to concerns involving danger and contamination, socioeconomic factors, xenophobia, and symptoms of traumatic stress, patients with underlying anxiety-related disorders have been found to be more negatively affected by stressors related to the pandemic compared to those with underlying mood disorders or no mental health disorders (Asmundson et al., 2020). Further, there is considerable systemic mental health consequences associated with COVID (Gruber et al. (in press)). A

COVID Stress Syndrome has been identified (Taylor et al., 2020a, 2020b) that is centrally marked by anxiety, specifically danger and contamination fears. Finally, research conducted during the pandemic has shown that contamination concerns are critical components of maladaptive fears of contracting COVID (McKay, Yang, Elhai, & Asmundson, 2020). These findings illustrate the potential of heightened psychological effects that this pandemic may have on patients with anxiety-related disorders, including obsessive-compulsive disorder (OCD), and thus the need for evidence-based psychological interventions for fear-based problems will continue during and after the COVID-19 pandemic.

Among patients with OCD, there has been limited attention to the effects of the pandemic on their care, particularly regarding exposure and response prevention (ERP) therapy. In the United States, OCD affects ~1–4 % of adults, and is debilitating and costly (Pittenger, 2017), and associated with significant loss of quality of life (Koran, 2000). Currently, treatment of OCD includes exposure with response prevention (ERP), serotonergic medications, and combined ERP-medication (Pittenger, 2017). Complicating treatment during the COVID-19 pandemic is that epidemiological research shows that approximately 50 % of OCD sufferers, across cultures, report at least some

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contamination fear (Williams, Chapman, Simms, & Tellawi, 2017). Practitioners providing evidence-based psychosocial treatment therefore have a challenge to manage in how to deliver care while simultaneously ensuring the safety of their clients. This brief review and clinical update covers the ethical and practical considerations clinicians have employed in past infectious disease outbreaks and pandemics. Further, there are some settings when providing exposure requires special consideration due to local conditions that increase risk (i.e., the presence of harmful animals or insects, such as spider phobia treatment in Australia).

Cognitive behavioral therapy (CBT), in the form of ERP, is the gold standard psychotherapy for OCD patients with varying degrees of severity (McKay et al., 2015; Pittenger, 2017). ERP consists of: (1) gradual and systematic exposure to triggers that provoke obsessional distress; (2) refraining from ritualizing or avoidance; and (3) cognitive therapy to reinforce learning that takes place from exposures. Patients are directly and/or imaginatively exposed to situations that produce distress without ritualizing or avoiding the stimuli. Notably in ERP, the patient is not exposed to greater than usual risk through exposure tasks; rather, therapeutic tasks place the individual at 'usual' risk without engaging in rituals in order for the patient to learn that – without ritualizing - the feared outcome does not happen, they can cope effectively if it does, and that they can tolerate distress and uncertainty.

The current COVID-19 pandemic has prompted discussion about how to safely provide ERP for contamination fear (Fineberg et al., 2020). Before discussing the recent recommendations, the approach adopted during prior infectious outbreaks shows that ERP can be provided safely even when infectious risks are comparably high.

2. Prior public and personal infection risk conditions

There is precedent for clinical researchers highlighting potential adjustments for ERP for contamination fear during infectious disease risk. Notably, during the early days of the HIV+/AIDS crisis, clinicians treating OCD grappled with a context-bound presentation of contamination fear over contracting the virus (Bruce & Stevens, 1992). At the time, there was emerging information on how the virus spread, with numerous false beliefs about contact with surfaces or individuals at risk for the disease (Bishop, Alva, Cantu, & Rittiman, 1991, p. 1991). In the case analysis provided by Bruce and Stevens (1992), the client treated was a medical professional, and thus the approach to providing ERP was complicated by a preexisting high level of information regarding infectious risk. This led to an analysis of procedures to balance the safety of the client with delivering care that alleviates contamination fear. In short, an evidence-based approach to treating contamination fear demands balancing the ethical requirements of providing symptom relief while also recognizing the exigent processes of the context of the client. In a large series of cases presenting with fear of contracting AIDS, where seven cases were treated with ERP, all with special attention to risks of infection (Logsdail, Lovell, Warwick, & Marks, 1991). A similar analysis was provided in the case of an adolescent with a comparable fear of contracting AIDS that prompted severe contamination fear and washing rituals (Harris & Wiebe, 1992). From this, it can be concluded that ERP intervention for AIDS-related contamination fear was conducted with careful attention to infectious disease risk. For example, hand washing was supported based on an estimated average level practiced to mitigate infection risk.

Clinicians who regularly treat contamination-based OCD have also been attentive to client-specific infection risks. For example, Mac Neil, Prost, Leung, and Gates (2017) report on a case of a 42-year-old man with severe contamination fear complicated by health risks due to his cystic fibrosis. In this case, the clinicians provided ERP along with cognitive therapy where special care was taken into consideration, allowing the client to reduce acute symptoms while retaining health related safety measures (Mac Neil et al., 2017). This included client-centered hygienic practices that mitigate unique infection risk due

to cystic fibrosis, while also guiding the client to engage in washing practices that conformed to recommendations associated with his medical condition.

More generally, some have suggested that clinicians treating contamination fear consult infectious disease experts before initiating ERP (Hambridge & Loewenthal, 2003). Medical experts have endorsed ERP methods for situations that might at first glance appear to run counter to responsible exposure (such as contact with toilet seats or garbage bins) (Hambridge & Loewenthal, 2003). This would allow clinicians to receive expert guidance that they can reference for clients when approaching stimuli that might be ambiguous in their risk but have had the approval of medical professionals for physical contact.

3. Local risk conditions

Aside from contamination fear associated with OCD, exposure procedures are used for anxiety disorders in general. Clinicians provide this intervention in specific local contexts. This means that in some local contexts, the safety of exposure is constrained by specific conditions. For example, fear of spiders is a common specific phobia (Merckelbach, de Jong, Muris, & van den Hout, 1996). However, conducting exposure treatment for spider phobia in Australia, home to eight of the most venomous spiders in the world, would require special safety precautions regarding the types of spiders encountered. That is, clinicians would simply need to be aware of the hazards, and then proceed to provide exposure treatment. This illustration can be extended to numerous situations globally (i.e., snake fear in geographic regions with deadly snakes).

The local conditions risk can be applied to contamination fear as well. For example, hantavirus is a deadly air-borne virus that infects the lungs (Muranyi, Bahr, Zeier, & van der Woude, 2005). One way individuals can be infected is from cleaning enclosed places where dried mouse droppings are present, such as in the Southwest of the United States. Residents of this region are generally aware of this risk, and clinicians working in this area would likewise exercise the necessary caution in conducting ERP for contamination fear due to OCD. Roughly translated, this means a clinician would not recommend a client with contamination fear enter and vigorously disrupt the dust in poorly ventilated areas (i.e., storage sheds) if treatment were conducted in the Southwest, whereas this may be safely practiced in other regions where humidity is higher (such as the Northeast of the United States). Similarly, placing one's hand in a dark area where spiders might reside, when treating spider fear in the northeast region of the United States, would not be practiced in Australia.

4. The COVID-19 pandemic and exposure with response prevention recommendations

Psychologists providing treatment during the COVID-19 pandemic continue to be guided by the ethical standards of the profession. In this specific case, this means ensuring science-informed treatment while engaged in proscribed safety precautions (i.e., online therapy delivery to ensure social distancing). As noted here, ERP remains the most efficacious intervention for OCD, whether there is a pandemic or not. As a result, in line with the ethical mandate of the profession, providers are obligated to identify the best way to deliver this intervention while navigating the safety protocols to contain the spread of COVID-19 (Chenneville & Schwartz-Mette, 2020).

There have been mindful discussions among providers regarding the feasibility of ERP therapies in light of safety guidelines (Fineberg et al., 2020). While there have not yet been academic literature reflecting current changes in ERP, there have been recommendations to significantly modify in-person therapy for patients whose OCD are contamination related to Center for Disease Control (CDC) guidelines or even pause current therapies (Fineberg et al., 2020). As suggested by Fineberg et al., pharmacotherapy should be the first option for patients with OCD

symptoms during this time and therapies should focus on maintaining, rather than improving, a patient's current OCD symptoms.

“For OCD patients with contamination fears and cleaning or washing compulsions, active and in vivo CBT with exposure and response prevention (ERP) will need to be sensibly adapted and may need to be paused. This specifically relates to active, in vivo exposure aimed at tackling contamination. Instead we suggest using therapist time to support patients and trying to prevent them from deteriorating, e.g. by encouraging them to restrain their compulsions as far as possible, rather than directed at actively treating contamination fears.”

While these proposed adjustments attempt to be mindful of current pandemic and CDC guidelines, it is important to note that there are potential negative consequences of moving away from an established model, even temporarily. There are a number of concerns related to this position.

First, for patients with contamination OCD, involvement in ERP includes facing triggers that reflect an ‘ordinary’ level of risk; since this level of risk has increased in the current pandemic state, the level of exposure to these triggers must be adjusted accordingly. Adept clinicians have recognized this and adjusted in real time. While this had required adaptations to ERP to follow public health guidelines, it does not require pausing active treatment. Indeed, ERP is associated with treatment response in approximately 75–80 % of patients (Collins & Coles, 2017). CBT has also been shown to be significantly better than pharmacotherapy for OCD treatment, illustrating the suggestion to have medications serve as first-line options may not prove to have benefits (Öst, Havnen, Hansen, & Kvale, 2015). Adjusting a patient's treatment may cause more harm than good by denying treatment when most needed.

Second, the majority of OCD patients do not experience contamination symptoms. Thus, exposures would remain similar in content and scope, and in accordance with CDC or WHO guidelines. While this may limit the extent of exposures, we have found that we can adapt exposures quite easily, especially with the use of telemedicine providing access to natural living settings.

Third, the evidence, based on effect sizes, does not support a medication-only approach to OCD. Using Cohen's criteria for effect size classifications, reviews of the literature show that the effect size for symptom response to medication is generally medium (Skapinakis et al., 2016), whereas the effect size for ERP is generally large (McKay et al., 2015). Based on numerous considerations for client safety that are routinely considered in the conduct of exposure, including during emergent risk periods, it is clear that clinicians are quite capable of navigating these issues, and are in fact ethically mandated to do so.

5. Exposure therapy for non-OCD anxiety including COVID stress syndrome

Exposure therapy remains the mainstay psychological treatment for non-OCD anxiety disorders (Bandelow et al., 2018) and should be adapted considering the above points. Across individuals with OCD and anxiety disorders, it would be well advised to monitor COVID-19 related stress with scales such as the COVID-19 Stress Scales (CSS) (Taylor et al., 2020a). This tool, which demonstrates good reliability and validity, assesses danger/contamination fears, fears of economic consequences, xenophobia, compulsive safety behaviors, and traumatic stress symptoms linked to COVID-19 (Taylor et al., 2020a). Indeed, as noted earlier, there is a COVID Stress Syndrome that has been conceptualized based on these factors (Taylor et al., 2020a, 2020b). Given that the core element in this syndrome reflects anxiogenic thought processes driving anxiety/distress and, thereafter, subsequent safety behaviors, exposure-based cognitive-behavioral therapy which targets distorted cognitions and excessive safety behaviors is likely to be of utility for those struggling with heightened COVID-19 related distress.

6. Litigation

Even prior to the COVID-19 pandemic, ERP has not been without controversy and hesitation, even among mental health professionals. A 2013 study by Deacon et al. showed that there was a moderate degree of negative opinions regarding ERP among over 600 surveyed psychotherapists (Deacon et al., 2013). Aside from any ethical concerns surrounding the core goal of the therapy, there may be concerns regarding litigation surrounding the practice of ERP, especially in light of the pandemic.

Regarding any past legal cases or ethical grievances, a 2006 study by Richard and Gloster did not find any litigation involving ERP providers. For patients to file a civil suit against their psychotherapists, the patients must have felt that they endured “undue harm” from ERP; therefore, this lack of evidence regarding any past litigation illustrates that, despite any perceived level of discomfort during their ERP treatment, patients do not truly view the practices as harmful (Richard & Gloster, 2007). Any discussions or potential concerns surrounding possible legal consequences of conducting ERP should involve the informed consent given to and received by patients prior to starting therapy. Providing a thorough informed consent can not only create a strong foundation of trust and alliance before engaging in therapy but also fulfills a professional and legal duty to respect patient autonomy and right to their own decision-making (Trachsel, Holtforth, Biller-Andorno, & Appelbaum, 2015). However, many psychotherapies still do not have a routine informed consent (Trachsel et al., 2015). Oftentimes, patients express understanding of their therapy through an informal agreement with their psychotherapist without having a clear, formal discussion about proceedings and goals of the therapy. The alternatives to the treatment and possible outcomes were also not routinely reviewed when providing informed consent as well (Dsubanko-Obermayr & Baumann, 1998).

Therefore, clinicians can improve patient understanding by explicitly discussing treatment procedures, goals, and potential risks of ERP in a more thorough and formal informed consent process and by staying mindful of the pandemic restrictions and guidelines. While patients are still engaging in other essential therapies (e.g. dialysis, chemotherapy) in-person that may also carry a risk of COVID-19 exposure, the benefits of receiving these treatments greatly outweigh that risk. Similarly, ERP is an essential and empirically supported therapy that can be a patient's best chance at treating OCD symptoms. As part of this clinical analysis, it is assumed that clinicians practice good hygiene to mitigate their own risk of contracting COVID-19, or if not, that they are at least cognizant of the recommended standards. With this knowledge, they can then deliver ERP to contamination fearful clients in a manner aimed at ensuring a balance between risk and alleviating anxiety due to OCD. This is no different than delivering exposure for specific fears and phobias in regions where the risk of harm may be higher (i.e., the Southwest and hantavirus infection). In light of the consistent finding that exposure-based treatment provides significant benefit for anxiety and OCD sufferers, the remedy for addressing contamination fear in the era of COVID may not be suspending the intervention, but instead more careful training of clinicians about the physical and litigation risks. Indeed, inflated litigation risk is a significant predictor of disuse of exposure treatment (Becker-Haimes et al., 2017).

7. Case study¹

Approximately one month prior to the onset of the pandemic, one of the authors (DM) initiated treatment with a woman (pseudonym Janet), age 34, who presented with severe contamination fear. At the initiation of treatment, she was married for nine years and had two children (ages 7 and 5). She reported a 14-year history of contamination fear and had

¹ Key demographic information, and some specific symptom presentation details, have been altered to protect the identity of the client.

been in general psychotherapy for much of that time. She briefly suspended her general psychotherapy course of treatment to pursue cognitive-behavior therapy, but rather than receive ERP, the clinician administered stress management and relaxation training. Janet reported no benefit from this course of treatment, and had returned to her general psychotherapist.

When Janet initiated treatment, she had severe symptoms (Abramovitch, Abramowitz, Riemann, & McKay, 2020) according to the Obsessive-Compulsive Inventory-Revised (OCI-R; Foa et al., 2002), with a score of 36. During the first four sessions (pre-pandemic), background information and hierarchy development was the primary focus of treatment. In the session immediately prior to the shutdown due to the pandemic, exposure was initiated. This involved asking Janet to touch a tissue to the clinician's office floor and carry it with her every day until the next session.

At session 5, most businesses in the area shut down to mitigate the spread of COVID-19. Janet reported significant distress and fear of contracting the illness. She was readministered the OCI-R, and her score increased from the initial administration pre-pandemic to 42. This session was the first conducted with Janet via web camera. In discussing her concerns with the therapist during this session, she considered suspending treatment. As hygienic recommendations were rapidly changing, the therapist and Janet decided to take a short hiatus from treatment, but with weekly email correspondence. After one month, Janet reinitiated treatment via telehealth. The hierarchy was revised to include COVID-19 fears such as: walking outside on the street with no other pedestrians without a mask; washing only prior to meals while in the house, assuming that she had no ventured out in public; and walking in a park while wearing a mask and with other pedestrians visible at a distance (more than 15 feet). Given that restrictions on telehealth platforms had been relaxed, Janet conducted these exposure exercises with the therapist while using a smartphone app (FaceTime).

Janet attended seven more sessions of telehealth treatment where the focus was on COVID-19 contamination fear. At this point, her level of contamination concerns mirrored those of her husband. To verify that her husband was relatively unaffected by obsessive-compulsive symptoms, the OCI-R was administered to him (following client consent), and he had a score of 3, which is technically in the mild range, but would be considered negligible (Abramovitch et al., 2020).

Once Janet's COVID-19 fears were alleviated, her other contamination concerns were targeted as intended at the outset of treatment. This was practiced for another seven sessions, focusing on pre-pandemic contamination-based stimuli in her home (i.e., areas of her basement boiler room; some food related concerns; and bodily waste). At this point, after a total of 19 sessions (four pre-pandemic; one immediately post pandemic; seven COVID-19 contamination focused; seven pre-pandemic contamination fear focused) the OCI-R was readministered. Janet had a score of twelve, corresponding to a mild severity level. As of this writing, Janet is still receiving telehealth treatment with DM, with intervention focused on non-OCD related anxiety symptoms.

8. Conclusion

This clinical review outlines potential current and long-term effects of modifying care for OCD patients in light of a pandemic. While ERP must be modified accordingly to accepted public health guidelines, we caution against modifying therapies in a way that may jeopardize the efficacy of patient care or progress.

Declaration of Competing Interest

The authors report no declarations of interest.

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