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Commentary

## Year of Zoom in a Year of Doom: Lessons Learned Delivering ERP Remotely During the COVID-19 Pandemic

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*In response to the COVID-19 pandemic and consequential shutdown measures, many mental health professionals started providing therapy to patients exclusively via telehealth. Our research center, which specializes in studying and treating obsessive-compulsive disorder (OCD), historically has provided in-person exposure and response prevention (ERP) to adults with OCD, but shifted to telehealth during the pandemic. Unlike in other modes of talk therapy, ERP's emphasis on therapist-supervised exposures presented unique opportunities and challenges to delivering treatment entirely via a virtual platform. This paper provides case examples to illustrate lessons we learned delivering ERP exclusively via telehealth in New York from March 2020 through June 2021 and offers recommendations for future study and practice. Though we observed a number of drawbacks to fully remote ERP, we also discovered advantages to delivering ERP this way, meriting additional research attention.*

**T**HE COVID-19 pandemic and consequential shutdown measures caused upheaval to people's lives in countless ways and resulted in widespread disruption to health, education, and the economy. In an attempt to adapt to physical distancing guidelines, many mental health professionals started providing therapy to patients exclusively via telehealth—a shift made possible by states' emergency orders allowing clinicians to practice across state lines and mandating that insurance companies reimburse patients for remotely delivered treatment (U.S. Department of Health and Human Services, 2021). The ability to offer continuity of care to existing patients and support for new patients was especially crucial during this time of inordinate stress. Professionals predicted that people would be vulnerable to worsening mental health over the course of the pandemic, and that those with obsessive-compulsive disorder (OCD) were especially

at risk given symptoms (e.g., concern about germs, repetitive washing behaviors) commonly present in the disorder (Abbott, 2021; Fineberg et al., 2020; Fontenelle & Miguel, 2020; Pfefferbaum & North, 2020). In fact, data from studies on OCD patients during the early stages of the pandemic were mixed, with some showing that many people with the disorder did not experience worsening symptoms (Carmi, Ben-Arush, Fostick, Cohen, & Zohar, 2021; Hezel et al., 2022), whereas others showed the opposite (Jelinek et al., 2021; Khosravani et al., 2021). Whether COVID did or did not worsen OCD did not change the important fact that patients with the disorder sought treatment for their symptoms, and the key question was how best to provide it during a pandemic. Our research center, which specializes in studying and treating OCD, historically has provided in-person exposure and response prevention (ERP) to adults with OCD both as part of research studies funded by the National Institutes of Mental Health and as part of clinical care. In this paper, we share our observations of delivering fully remote ERP for over a year because of the COVID pandemic and offer recommendations for future study and practice.

*Keywords:* obsessive-compulsive disorder (OCD); remotely delivered therapy; telehealth; exposure and response prevention (ERP)

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Considered the first-line psychotherapeutic treatment for OCD, ERP consists of intentionally confronting feared stimuli and resisting the urge to engage in compulsions (Foa et al., 2012; see Hezel & Simpson, 2019 for a review of ERP for OCD). The therapist and patient work collaboratively to develop a fear hierarchy—essentially a road map for exposures—that ranks different situations according to level of anticipated difficulty. The clinician then coaches the patient through exposures on the hierarchy and conducts post-exposure processing, which involves discussing the patient's experience and what he or she observed and learned. Unlike in other modes of talk therapy, ERP's emphasis on therapist-supervised exposures presents unique opportunities and challenges to delivering treatment entirely via a virtual platform. Prior studies have demonstrated the effectiveness of remotely delivered treatment for OCD (Wootton, 2016), and Kayser et al. (2021) outlined general strategies for integrating videoconferencing into different models of pharmacotherapy/psychotherapy for OCD and clinical supervision, noting both potential benefits and limitations. The current paper provides case examples to illustrate lessons we learned delivering ERP exclusively via telehealth in New York from March 2020 through June 2021.

### Setting and Treatment

Located in the New York State Psychiatric Institute and affiliated with Columbia University, an academic medical center in New York City, the Center for OCD and Related Disorders conducts research to advance our understanding of and treatments for OCD. Prior to the onset of the COVID-19 pandemic, we conducted most studies onsite, requiring participants to complete clinical evaluations and study tasks in person. Likewise, most treatment was conducted in person. In March of 2020, after the governor of New York mandated that all nonessential workers stay at home due to the threat of COVID-19 ("New York State on PAUSE"), we adapted some studies to be completed fully remotely, whereas other studies were temporarily paused. We also started offering all treatment remotely using Health Insurance Portability and Accountability Act (HIPAA)-compliant videoconferencing platforms, such as Zoom. The clinical team consisted of a supervising licensed clinical psychologist and a postdoctoral fellow (who got licensed during the pandemic), both of whom are highly trained in treating OCD, and two trainees with no prior experience conducting ERP. One trainee is a student in a clinical psychology Ph.D. program, and the other a psychiatrist trained in the United Kingdom and with expertise in treating eating disorders before coming to

the United States, where she was completing a master's degree in mental health counseling.

Between March 2020 and June 2021, this team provided fully remote ERP to 33 people. Patients received a minimum of 10 (and up to 20, depending on their needs) sessions of manualized ERP (Foa et al., 2012), typically delivered over 8–12 weeks. Sessions were 60 minutes, and therefore shorter than the session length in some clinical trials of ERP (e.g., Pagliaccio et al., 2019; Simpson et al., 2021), but consistent with clinics and private practices that typically offer 45–50-minute appointments. Generally speaking, treatment included two sessions of psychoeducation and treatment planning, at least seven sessions of supervised exposures and post-exposure processing, and one session of relapse prevention planning. Patients were also asked to complete homework in between appointments, including self-monitoring of symptoms and self-directed exposures.

While adhering as closely as possible to the content of ERP delivered in person, we did take some additional precautions when conducting this treatment completely remotely. First, we asked patients to provide their home address, the name and contact information of an emergency contact, and the location of the closest hospital/emergency room. Second, though this did not occur, if a patient had reported suicidal ideation, the plan was for any unlicensed clinician to immediately contact the supervising psychologist to further assess the situation by joining the Zoom call (all appointments were conducted during working hours when a licensed clinician was available, in case of an emergency). Third, in the event that patients did become highly distressed during exposures, we used many of the same techniques that we would in person, such as taking a break from the exposure before resuming, or practicing breathing exercises or grounding techniques. When anticipating an especially challenging exposure, we found it helpful for patients to have a plan for how they would manage their distress after the end of the appointment, such as connecting with loved ones, engaging in a pleasurable or relaxing activity, or refocusing their attention on work. Fourth, similar to in-person ERP, when possible, and when the patients agreed, we spoke with loved ones to coach them on how to support the patient without reinforcing compulsions. Finally, when necessary, we made a plan with some patients to check in via e-mail or phone in between sessions to troubleshoot exposures with which they were struggling or to offer words of encouragement.

Symptom severity was measured with the Yale–Brown Obsessive Compulsive Scale (Y-BOCS), which was administered by the clinician via Zoom, at baseline

and posttreatment (Goodman et al., 1989); patients' answers were recorded on a digital version of the scale and stored in a HIPAA-compliant online database. At intake, patients reported a mean Y-BOCS score of 22.7 ( $SD = 5.1$ ), indicating moderate symptom severity. On average, end-of-treatment Y-BOCS score was 12.2 ( $SD = 5.5$ ), indicating mild severity and resulting in a statistically and clinically meaningful decrease of 10 points ( $SD = 5.3$ ) or 45%,  $t(27) = 10.3$ ,  $p < .001$ . These end-of-treatment Y-BOCS scores are comparable to those we have observed with a 17-session course of ERP delivered in an office setting (mean = 12.5,  $SD = 8.0$ ; Pagliaccio et al., 2019). Of the 33 individuals who started a course of treatment, 16 (48%) achieved a significantly meaningful change in severity, defined as a decrease of at least 35% of the Y-BOCS (Farris et al., 2013), and an additional four were near this threshold with a 30–33% decrease in severity (post-treatment data are missing for four people). Moreover, 15 (45%) patients achieved a Y-BOCS score of 12 or less, indicating remission (Mataix-Cols et al., 2016). Notably, only two people (6% of the sample) terminated treatment prematurely, which is lower than the 10% attrition rate we observed in a previous study in our lab, which included 17 sessions of in-person ERP (Simpson et al., 2021). Below we describe a subset of the patients we treated to illustrate some of the challenges and benefits we observed over the past year of Zoom.

### Challenges

As clinicians who had never before conducted a full course of remotely delivered ERP, we were admittedly skeptical that it would be as effective as in-person therapy. We were also unsure how the transition to fully remote therapy would be for the two trainees who had no prior experience delivering ERP and received all of their training virtually. Indeed, we did experience a number of drawbacks to conducting fully remote ERP.

First, it was particularly challenging to conduct ERP remotely with patients who were ambivalent about treatment or were treatment nonadherent. One patient described in Case 1 (see Table 1) became upset when his therapist was not able to model exposures. The therapist was living with other people and, due to confidentiality concerns, conducted all patient appointments from a private office in her home. This prohibited the clinician from having access to certain stimuli used in exposures with the patient (e.g., a faucet). Though some clinicians limit the use of modeling so as not to provide reassurance to patients, the technique can be helpful when patients are just beginning treatment and are unfamiliar with exposure therapy.

Moreover, because the patient was working remotely, it was much easier for him to avoid triggering stimuli outside of his home. Despite encouragement from his therapist, the lack of an opportunity to accompany him to different locations (e.g., public transportation) to supervise exposures further contributed to a lack of progress and ultimately termination of treatment.

Second, social distancing mandates and strict lockdown measures specific to the COVID-19 pandemic made it especially challenging to structure exposures that require the presence of other people, such as those that address the fear of harming others. For example, in the past, we have had patients hold sharp objects to the therapist's back or stand closely to people on the subway platform while triggering thoughts of harming them. It was not possible to conduct these exposures remotely unless the patients were able to recruit help from a friend or family member, which was not always possible. Case 2 describes a man who lived alone and thus did not have the opportunity to practice exposures that required others' presence, thus limiting his progress toward addressing these particular symptoms.

Third, another drawback of remotely delivered ERP is that the therapist has less control over the environment and the exposure, and is unable to intervene physically if the patient gets "stuck" in a ritual (e.g., turning the faucet off if a person is having difficulty disengaging from washing compulsions) and/or has limited insight. The individual described in Case 3 saw the benefit to treatment, but was only willing to engage in very "low-risk" exposures and was reluctant to undertake anything that triggered significant discomfort. Consequently, when the therapist suggested exposures that they had previously agreed to add to the patient's fear hierarchy, the patient often hesitated and came up with reasons that he could not do so (e.g., "There is no soap in the bathroom right now," for an exposure to soap residue). When met with resistance during in-person ERP, the therapist is able to more easily prompt the patient into trying exposures (e.g., "Well, let's just head to the bathroom together and see what we can find") or have different props on hand.

Fourth, there were some privacy issues with telehealth. Some patients who did not have sufficient room in their apartments (a challenge not uncommon in a large metropolis such as New York City) attended appointments from their bathrooms or cars. Others were reluctant to discuss intrusive sexual thoughts or thoughts of harm to others because they were worried that their families would overhear them. Though presumably an issue with conducting many modes of therapy, given that OCD is characterized by thoughts about which people often feel shame (Hezel et al., 2012), it

Table 1  
Challenges of Fully Remote ERP: Case Examples

Challenges	Patient background and OCD presentation	Description
<b>Exposures</b>		
Inability to model exposures or “be in the barracks” with the patient	Case 1: 29-year-old male with no prior treatment. Primary obsessions: fear of causing burglary/flood, fear of environmental contaminants. Primary compulsions: checking faucet/door locks, mental reviewing, holding breath. Pt. was ambivalent about treatment and demonstrated low treatment adherence.	Shared living space prevented clinician from being able to model exposures, which pt. found difficult to complete on his own. Moreover, due to lockdown restrictions, it was not possible to meet in neutral locations, such as the subway, to practice exposures. Ultimately, the lack of progress led to termination of treatment.
Inability to engage confederates in exposures	Case 2: 40-year-old male with no prior treatment. Primary obsessions: fear of harming others/self (stabbing, jumping/pushing others into an oncoming train). Primary compulsions: counting, ritualized praying. Significant avoidance present.	To address his fear of harming others, pt.’s fear hierarchy included exposures such as holding sharp objects around others/standing close to others on the subway platform. Due to COVID restrictions and the fact that pt. lived alone, these exposures were not possible. If ERP had been done in person, pt. could have practiced these exposures on the clinician.
Less control over the environment/exposures	Case 3: 20-year-old male with no prior treatment. Primary obsessions: need for symmetry, fear of contamination because it “feels gross,” fear of causing accidental harm to self. Primary compulsions: excessive ritualized washing, counting, repeating behaviors, checking surroundings for danger.	Pt. was reluctant to engage in exposures that triggered more than minimal discomfort and consistently said certain, previously agreed-upon exposures were not possible during appts. (e.g., he said did not have access to the stimuli). Resulted in significantly halted progress. If ERP were done in person, the clinician could have ensured the necessary stimuli were on hand for exposures/made avoidance less possible.
<b>Missing important details</b>		
Missing subtle compulsions or behaviors not visible during a videoconference	Case 4: 27-year-old male with a prior course of ERP. Primary obsessions: fear of being responsible for harm to others, fear of making a mistake, fear of “not being healthy enough.” Primary compulsions: touching, tapping, mentally repeating phrases, mental reviewing, checking, reassurance-seeking.  Case 5: 18-year-old female with no prior treatment. Primary obsessions: disgust with bodily fluids, fear of contracting sexually transmitted infections. Primary compulsions: excessive/ritualized hand washing/ showering/cleaning.	Pt.’s ritualistic touching and tapping of his body/objects were difficult to observe since only his face was visible on Zoom. Although the pt. tried to report when he engaged in rituals during session, some behaviors were so automatic that he could not always catch himself. It would have been beneficial for the clinician to observe these compulsions in person and reflect her observations back to the pt. in real time.  Despite a thorough assessment of symptoms, the clinician had difficulty ascertaining some of the pt.’s rituals remotely. Only after speaking with the pt.’s father did the clinician learn of rituals that would have otherwise been observable in person (e.g., pt.’s hands were raw from excessive washing, she opened the door using her shirt).

*Note.* ERP = exposure and response prevention; OCD = obsessive-compulsive disorder; pt. = patient; appt. = appointment. Case details have been changed to protect patient confidentiality.



seems that this issue would be especially pertinent when conducting ERP.

Finally, though remote treatment may increase the therapist's ability to observe a patient's environment, it may also increase the difficulty of picking up on subtle compulsions the patient may be performing (e.g., tapping a body part), avoidance behaviors (e.g., reluctance to touch a doorknob when leaving the office), or symptom severity (e.g., raw hands from excessive hand-washing), as shown in Cases 4 and 5.

### Benefits

We also experienced a number of benefits to conducting fully remote ERP. Just as it made it more challenging to observe certain behaviors, so too it allowed us to obtain an "insider view" into patients' environments. Though some treatment manuals recommend home visits as a component of the treatment (Foa et al., 2012) and some clinicians may request virtual tours of patients' living space, it is not always feasible or considered standard practice for providers in the community to do so. By providing a direct window into patients' environments, telehealth allows the clinician to integrate people and stimuli into exposures that would be more difficult if the patient was coming by him- or herself to an office visit. During assessment, the ability to see the patients' homes firsthand can provide information about the patients' symptoms that might not otherwise be disclosed. For example, prior to the pandemic, one of our clinicians treated a patient on site who had completed multiple sessions of in-person ERP in our clinic. During a home visit more than halfway through a 17-session course of treatment, the clinician noticed a number of homemade barriers placed around the patient's living room. When asked about them, the patient reported that the barriers were to prevent her dog from walking beneath a light fixture in case it fell and injured the animal. Despite a thorough assessment of OCD symptoms and consistent self-monitoring, the patient had not divulged this previously, as she did not recognize it as a symptom of OCD. With fully remote ERP, this home situation would have been evident from the start.

As conducting therapy via telehealth became standard practice during the pandemic, seeing our patients' home environments (regardless of their symptoms) right from the start of treatment also became more acceptable for both our patients and our clinicians. This was a significant benefit for ERP. For example, as illustrated in Case 6 (see Table 2), when the clinician is able to complete the initial assessment via videoconference, it is possible to more quickly identify potential treatment targets by asking to see parts of the patient's living space. In this example,

the clinician was able to observe that the patient had no furniture in her apartment, which she acknowledged was due to fear of contamination. Though the patient had reported fear of contracting illnesses, the therapist's ability to observe the patient's living space highlighted the severity of her symptoms and the extent to which avoidance was affecting her life. Case 7 provides another example of how ongoing assessment via videoconference was useful in adapting treatment over time when the clinician observed that the patient was avoiding his room after beginning exposures.

For individuals with concerns specifically related to aspects of their home environment, remote ERP provided excellent opportunities to create powerful exposures that directly addressed their daily functioning. Indeed, in the past, we have had numerous patients who have reported that exposures performed in the clinic are not as distressing to them as when they are confronting stimuli at home or in other areas of their lives. However, because people were completing remote appointments from their own or loved ones' homes, the stakes of certain exposures felt higher and provided powerful opportunities to practice challenging exposures. For example, Cases 8 and 9 demonstrate how using the patients' home surroundings allowed the therapists to provide accountability and support to them as they confronted fears of poisoning their loved ones and contaminating their "safe" spaces (e.g., bed), respectively. In some instances, such as in Case 10, patients would react to something in their environment while on the call (e.g., accidental exposure to a contaminant) and the clinician could conduct a "spontaneous" exposure, immediately guiding the patient through approaching the stimulus, such as taking sips from a water bottle that had just been "contaminated." Case 11 likewise describes how one patient who had severe contamination concerns (and would have been unlikely to attend in-person treatment due to these fears) was able to practice reducing showering rituals with prompting from the clinician via speakerphone. Additionally, over the course of the pandemic, many of our patients spent time at both their own and family members' homes, which created opportunities to perform exposures of varying difficulty across several environments (Cases 12 and 13). This variability has been demonstrated to promote generalization and enhance the effectiveness of exposure therapy by making it less likely that fear is reactivated in settings that are different from the one in which the exposure was initially practiced (Craske et al., 2014).

Finally, up to 45% of people with OCD report aggressive thoughts (e.g., fear of harming others) and up to 21% report intrusive sexual obsessions, such as

Table 2  
Benefits of Fully Remote ERP: Case Examples

Benefits	Patient background and OCD presentation	Description
<b>Assessment and measuring progress</b>		
Ability to see the living environment and identify potential symptoms and/or severity of symptoms that would have otherwise been missed	Case 6: 32-year-old female with prior history of ERP. Primary obsessions: fear of contracting an illness, fear of being responsible for accidental damage to apt. Primary compulsions: excessive cleaning, staring at damaged objects. Extensive avoidance of people/objects.	Pt. had reported significant contamination concerns, but only after the clinician saw the apt. via videoconference and observed a lack of furniture did she understand the severity of the pt.'s symptoms. This observation enabled the clinician to add additional exposures to the pt.'s fear hierarchy (e.g., furnishing her apt.).
	Case 7: 19-year-old nonbinary person with no prior treatment. Primary obsessions: fear of contamination from dirt/germs, fear of harming others by spreading contamination, need for perfectionism. Primary compulsions: excessive and ritualized cleaning, ordering/arranging items in the home.	Pt. reported increased success resisting ordering and cleaning rituals, but clinician observed significant distress when pt. was in their room for an appt.; pt. admitted it was because they had been avoiding the room since beginning exposures. Consequently, the clinician was able to coach them through increasingly challenging symmetry and cleaning exposures and review psychoeducation re. decreasing avoidance.
<b>Exposures</b>		
Providing accountability and support when confronting "higher-stakes" exposures by using "safe spaces" at home or less controlled environments at work	Case 8: 40-year-old female with no prior treatment. Primary obsessions: fear of causing accidental harm to self/others (e.g., poisoning others), fear of committing incest. Primary compulsions: mental reviewing, reassurance-seeking, counting to prevent bad things from happening, excessively cleaning food.	Pt. did not find it challenging to practice certain exposures in most environments, including her own apt., but found it very difficult when visiting her sister. She stayed with her sister temporarily during the pandemic, which provided the clinician an opportunity to guide her through "higher-stakes" exposures, such as putting detergent on the kitchen counter and cooking foods with contaminated hands.
	Case 9: 22-year-old male with no prior treatment. Primary obsession: fear of contaminating his bed. Primary compulsions: excessive hand washing, repeatedly changing clothes, excessive cleaning. Avoidance of any objects touching his bed.	The pt.'s bed was the focus of treatment, and videoconferencing made it easier to monitor progress. The clinician was able to coach the pt. through increasingly difficult exposures more rapidly than if treatment had been in the clinic, where it would not have been possible to supervise exposures with the pt.'s bed.

Table 2 (continued)

Benefits	Patient background and OCD presentation	Description
Spontaneous exposures	Case 10: 38-year-old female with no prior treatment. Primary obsessions: fear of getting sick from household cleaners, superstitious fears. Primary compulsions: Googling information, excessive praying, reassurance-seeking, repeating lucky phrases.	During one appt., pt. stated she was frustrated because her cat accidentally knocked her water bottle into the sink, which had soap in it. Pt. stated she was planning to replace it. Instead, the clinician asked the pt. to get the contaminated bottle and coached her through an exposure with it (holding it to her lips, taking sips of water from it) on the spot.
Exposures not possible in the clinic	Case 11: 27-year-old female with no prior treatment. Primary obsessions: fear of contracting communicable diseases, fear of being morally “unclean,” superstitious fears. Primary compulsions: excessive hand-washing/ showering, knocking on wood, confessing.	Pt. reported her showers were taking more than 2 hours. Pt. set up exposures with the clinician on speakerphone (without video) so she could prompt pt. through her shower, which is typically not possible outside of residential treatment. Pt. was able to significantly reduce showers as a result.
Supervising exposures across different environments	Case 12: 45-year-old female with a prior course of ERP, had an increase in contamination obsessions due to the pandemic. Primary obsessions: fear of spreading COVID-19 to or contracting it from relatives. Primary compulsions: excessive cleaning of objects/spaces that relatives might touch. Significant avoidance present.	Pt. lived alone, but visited her family frequently. Remote ERP made it possible to conduct exposures in locations pt. was avoiding (e.g., mom’s bedroom) and integrate relatives’ objects that the pt. was avoiding (e.g., dirty laundry). The clinician coached the pt. through similar exposures first in her own apt. and then at her family’s home, helping her to generalize what she learned.
	Case 13: 22-year-old male with no prior treatment. Primary obsessions: fear of contamination from bathrooms, the office kitchen, and his work laptop. Primary compulsions: excessive hand-washing/cleaning.	Pt.’s symptoms were most difficult for him to manage in his home and work environments. Consequently, the pt. alternated teleconference appts. from work and home so the clinician could coach him through exposures in both locations.
Involving others		
Psychoeducation and exposures	Case 14: 36-year-old male with no prior treatment; recent first-time father. Primary obsessions: fear of being sexually attracted to/molesting infant daughter. Primary compulsions: reassurance-seeking, reading about pedophilia-related OCD. Significant avoidance of physical contact with child.	Conducting ERP in the pt.’s home via teleconference enabled the clinician to integrate the pt.’s daughter into in vivo exposures. For example, the pt. practiced holding his child on his lap, changing the baby’s diapers, and holding her while they were sleeping. Pt. stated he would not have been able to bring his infant to appts. if they had been completed in person.

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Table 2 (continued)

Benefits	Patient background and OCD presentation	Description
	Case 15: 29-year-old homosexual male with no prior treatment. Primary obsessions: doubt about his sexual orientation, fear he is attracted to women. Primary compulsions: “testing” his attraction to his partner, comparing his partner to others, monitoring his arousal.	Remote appts. made it easier to meet with the pt. and his partner to provide them with psychoeducation and answer their questions, including how the partner could support the pt. without reinforcing his compulsions. Remote appts. were especially convenient because the pt.’s partner did not have to take time off from work to travel to our clinic.

*Note.* ERP = exposure and response prevention; OCD = obsessive-compulsive disorder; apt. = apartment; pt. = patient; appt. = appointment. Case details have been changed to protect patient confidentiality.

thoughts about molesting children (Pinto et al., 2007, 2008). These and other “taboo” thoughts are often associated with higher levels of shame than are non-taboo obsessions, such as worries about contamination and symmetry (Hezel et al., 2012). Case 14 describes a new father who was experiencing disturbing thoughts of molesting his newborn daughter. His therapist involved the patient’s family in treatment, first by providing psychoeducation to his wife about OCD and its treatment, and second by leading the patient through exposures involving his infant (e.g., changing her diaper, holding her on his lap, bathing her). We have found it exceedingly rare for patients to bring their young children to their appointments, and it would presumably be even less likely during a pandemic, even as restrictions have relaxed. However, the ability to consistently practice such exposures under the supervision of a clinician resulted in noticeable progress in symptoms. Case 15 likewise demonstrates how remote sessions facilitated the delivery of psychoeducation to patients’ loved ones.

### Future Directions

Though we have observed both challenges and benefits of fully remote ERP, a number of questions remain about its delivery and effectiveness. A meta-analysis reported that mean effect sizes of remote treatment for OCD were comparable to those typically seen in in-person treatment (Wootton, 2016). However, only three of the studies specifically examined treatment delivered via videoconferencing, whereas other studies included phone-delivered and Internet-based therapy. Thus, more research is merited to better understand how the effectiveness of videoconference-delivered ERP compares to that of in-person therapy or a hybrid (combination of in-person and telehealth) approach. Moreover, future studies are needed to elu-

cidate whether certain symptom domains are more conducive to a course of fully remote treatment. For example, for patients with fears of doing something embarrassing in public or harming strangers, there may be an added benefit to being required to come into an office for treatment if doing so increases the likelihood of more naturalistic interactions with avoided stimuli. However, other symptoms might benefit more from a remote format, such as those that require exposures to one’s children. It is likewise possible that other individual factors, such as level of insight, motivation for treatment, symptom severity, and presence of comorbid illnesses, which have been previously linked to treatment outcomes (Middleton et al., 2019), could influence whether an in-person, remote, or a hybrid model would be indicated for a given patient. For example, individuals who have significant avoidance behaviors might be more likely to attend remotely delivered therapy sessions, but may have more difficulty practicing exposures outside of their home without the physical presence of a therapist.

Finally, a deeper understanding of what influences peoples’ preferences for remote versus in-person therapy is needed. Anecdotally, the majority of the patients we treated over the course of the pandemic seemed satisfied with remotely delivered therapy and enjoyed the convenience and flexibility it afforded (e.g., not having to commute or take large chunks of time off from work). Conversely, a few patients reported they preferred in-person therapy because of concerns about privacy and because they felt more comfortable practicing exposures with the therapist present. Fortunately, we did not experience many technological difficulties, but there were a few limited instances in which the signal was poor, which could be frustrating for both the clinicians and the patients. We found that these

glitches did not interfere with treatment or planned exposures, and we were able to troubleshoot when they did occur. For example, due to disrupted Internet connectivity during a session, the therapist and the patient completed part of their appointment via phone. In another instance, the video was working but the audio went out, so the clinician and patient kept their cameras on and spoke by phone and were able to continue the appointment as planned. However, such issues with connectivity could potentially influence people's preferences for in-person treatment versus teletherapy.

In a year marked by tremendous stress and upheaval, despite our initial reservations, we were fortunate to be able to provide a vulnerable population with treatment and support. Though we observed a number of drawbacks to fully remote ERP, we ultimately discovered some unique advantages to delivering treatment this way. Not only did it ensure people's access to evidence-based care, but it also enabled us to conduct powerful exposures not possible in the clinic and that potentially led to faster treatment gains for some patients. Our experiences showed that both clinicians—including seasoned psychologists and trainees without prior experience conducting ERP—and patients who might have been otherwise reluctant to utilize a fully remote platform were capable of adapting to a new format relatively easily. Moreover, there are possible solutions to some of the challenges we did observe. For example, planning further in advance for certain exposures might decrease the likelihood that patients are not able to access certain stimuli or be around other people (e.g., making sure they have soap on hand or joining the appointment from a public space where there are others around who they can “bump into”). This could be accomplished by having a set time at the end of each appointment for the clinician and patient to discuss and agree upon a specific plan for the next session. Similarly, to address privacy concerns, patients could request that others who share their living space leave the home or plan to be in a different room with headphones so they can more comfortably discuss taboo thoughts.

Therefore, we encourage future research on its effectiveness and urge insurance companies to continue providing reimbursement for telehealth even after COVID-19 emergency orders cease. Even in cases where fully remote treatment is not necessary, allowing for more flexibility in treatment delivery is advantageous, as it permits for greater continuity of care (e.g., if a patient is on vacation or sick and cannot attend an in-person appointment) and greater generalizability of skills across environments. Fully remote ERP is also a potentially powerful way to deliver treatment to individuals who live in communities without access to OCD special-

ists, thereby addressing the significant gap in OCD care that exists due to underdetection and undertreatment (Senter et al., 2021). This past year of fully remote ERP suggests that such technology-facilitated treatments like this may be easier to implement—and more effective—than once thought.

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