An Educational Program to Enhance the Identification of Obsessive-Compulsive Disorder (OCD) and the Utilization of Exposure and Response Prevention Among Outpatient Mental Health Providers: A Quality Improvement Project

Jena Lerch
jlerc001@fiu.edu
Deborah Witt Sherman
desharma@fiu.edu

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An Educational Program to Enhance the Identification of Obsessive-Compulsive Disorder (OCD) and the Utilization of Exposure and Response Prevention Among Outpatient Mental Health Providers: A Quality Improvement Project

A Doctor of Nursing Practice Project Presented to the Faculty of the Nicole Wertheim College of Nursing and Health Sciences

Florida International University

In partial fulfillment of the requirements
For the Degree of Doctor of Nursing Practice

By

Jena Lerch, MSN, APRN, PMHNP-BC

Supervised By

Deborah Witt Sherman, PhD, APRN, ANP-BC, ACHPN, FAAN

ApprovalAcknowledged:_________________________Date:______________

Michael Sanchez, DNP, APRN, FNP-BC, FAANP
Chair, Graduate Nursing Department
Director, Doctor of Nursing Practice Program
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To my mom, in loving memory, who has always encouraged me to pursue this goal, but who didn’t have the chance to see this adventure through.
# Table of Contents

Abstract .......................................................................................................................... 5  
I. Introduction ................................................................................................................. 6  
   Background/Problem ..................................................................................................... 6  
      Evidence in Support of ERP ....................................................................................... 6  
      Common Clinician Errors in ERP ............................................................................. 8  
   Scope of Problem ........................................................................................................ 9  
   Consequences of the Problem/Significance to Nursing ............................................. 13  
   Proposal Solution ....................................................................................................... 16  
   Knowledge Gaps ......................................................................................................... 16  
II. Summary of the Literature ....................................................................................... 17  
   Search Parameters ..................................................................................................... 17  
   Onset of OCD ........................................................................................................... 18  
   Possible Etiological Factors ....................................................................................... 18  
   Pathophysiology of OCD and Common Comorbidities .......................................... 19  
   Clinical Presentation of OCD .................................................................................... 20  
   Theoretical Background of OCD .............................................................................. 23  
   Treatment Guidelines ............................................................................................... 25  
   Psychotherapy for OCD ........................................................................................... 26  
   Theoretical Background and Process of ERP .......................................................... 28  
III. Purpose, PICOT Clinical Question, and SMART Goals ......................................... 31  
   Purpose/PICO Clinical Question ................................................................................. 31  
   SMART Goals .......................................................................................................... 32  
IV. Organizational Assessment and SWOT Analysis .................................................... 32  
V. Definition of Terms ................................................................................................... 35  
VI. Conceptual Underpinning and Theoretical Framework of the Project .................. 36  
VII. Methodology .......................................................................................................... 37  
   QI Methodology and Study Design ............................................................................ 37  
   Setting and Sample.................................................................................................... 39  
   Instruments .............................................................................................................. 39  
   Intervention .............................................................................................................. 40  
   Data Collection, Management, Recruitment, and Protection of Human Subjects 41  
   Data Analysis .......................................................................................................... 42  
VIII. Results .................................................................................................................... 43  
   Sample Demographic and Professional Data ............................................................. 43  
   OCD and ERP Knowledge Pre-test to Post-test ......................................................... 44  
   OCD and ERP Attitudes Pre-test to Post-test ............................................................. 46  
   The OCD and ERP Behaviors Post-test Questionnaire .......................................... 47  
IX. Discussion ................................................................................................................. 48
X. Limitations...........................................................................................................49
XI. Implications for Advanced Nursing Practice and Directions for Future
    Research.............................................................................................................50
XII. Conclusion.........................................................................................................50
XIII. Dissemination Plan..........................................................................................51
XIV. References........................................................................................................53
XV. Appendices.........................................................................................................68

IRB Approval Letter...................................................................................................69
Letter of Support from Facility..................................................................................70
Recruitment Flyer.......................................................................................................71
Online Consent Form................................................................................................72
Demographics and Professional Data Form..............................................................76
OCD and ERP Knowledge and Attitudes Pre-Test......................................................78
OCD and ERP Knowledge, Attitudes, and Behaviors Post-Test.................................82
DNP Project PowerPoints..........................................................................................87
Abstract

Background: Obsessive-compulsive disorder (OCD) is a psychiatric disorder that is frequently misdiagnosed. Further, despite a breadth of evidence in support of Exposure and Response Prevention (ERP) in the treatment of OCD, it is often underutilized or used incorrectly. Both misdiagnosis and errors in the treatment of OCD can negatively impact patient outcomes.

Methods: This quality improvement project was conducted utilizing the Plan Do Study Act Cycle and was guided by the principles of Lewin’s change model. A pre-test post-test design was utilized to assess whether a 1-hour educational program focusing on the diagnosis of OCD and the use of ERP would result in an improvement in knowledge, attitudes, and behaviors of mental health providers surrounding the diagnosis of OCD and the use ERP.

Results: Participants demonstrated a statistically significant enhancement in knowledge surrounding ERP. Mental health providers’ attitudes surrounding perceived comfort in their ability to diagnose OCD, to use ERP, to identify taboo obsessional content, and to utilize exposures in patients with covert compulsions showed statistically significant improvement from pre to post test. After the intervention, a majority of participants indicated that they would likely change how they assess for OCD, how often they use ERP, and how they conduct ERP.

Conclusions: While this study has limitations including a small sample with limited diversity and lack of longitudinal follow up, the educational program shows promise as a relatively simple, cost-effective intervention to enhance the diagnosis and treatment of OCD among outpatient mental health providers.

Keywords: Obsessive-compulsive disorder, exposure and response prevention, quality improvement, education
I. Introduction

Background/Problem

Obsessive-compulsive disorder (OCD) is a psychiatric disorder characterized by distressing obsessions, compulsions, or a combination of these symptoms (American Psychiatric Association, 2013). It is well established that OCD is often incorrectly diagnosed (Stahnke, 2021). Subsequent delays in treatment negatively impact patient outcomes (Fineberg et al., 2019; Perris et al., 2021).

In addition to misdiagnosis, there is a significant problem with underutilization of Exposure and Response Prevention (ERP), the gold standard psychotherapeutic treatment for OCD (Mancebo et al., 2021; Hipol & Deacon, 2013; Koran & Simpson, 2013). ERP involves gradual confrontation of the feared stimulus that normally precipitates the obsession (International OCD Foundation, n.d.). Response prevention indicates that the individual will not engage in the compulsions that normally accompany the obsession (International OCD Foundation, n.d.). The underutilization of ERP is prevalent in many settings, such as community mental health centers (Mancebo et al., 2021) and among community mental health providers in rural areas (Hipol & Deacon, 2013). When ERP is used, there are several common errors made by mental health professionals that can negatively impact patient outcomes (Gillihan et al., 2012).

Evidence in Support of ERP

Underutilization of ERP is a significant problem, given that current clinical practice guidelines recommend the utilization of ERP and selective serotonin reuptake inhibitors (SSRIs) or clomipramine (a tricyclic antidepressant) as treatment for OCD (Koran & Simpson, 2013).
The clinical assessment will indicate whether medication, ERP, or both are appropriate in the
treatment plan, but the clinical guidelines stress that ERP is the first-line psychotherapeutic
modality for OCD, due to its breadth of empiric support (Koran & Simpson, 2013; Rosa-Alcazar
et al., 2008).

Because initial research provided excellent evidence in support of Exposure and
Response Prevention, many researchers did not conduct randomized controlled trials to assess
the difference in outcomes between patients who received ERP and those who did not. They
instead chose to study variances in the utilization of ERP (National Collaborating Centre for
Mental Health, 2006). However, in the 1990s, randomized controlled trials comparing ERP to
other treatments began to emerge (National Collaborating Centre for Mental Health, 2006).
Lindsay et al. (1997) found that not only was ERP more effective than anxiety management
skills, but that anxiety management skills were ineffective for reducing symptoms of OCD.
These anxiety management skills, which are commonly used by many clinicians today, included
deep breathing, progressive muscle relaxation, and cognitive therapy, such as problem solving
(Lindsay et al., 1997). Greist et al. (2002) reported that ERP was more effective for OCD than
relaxation techniques. As supported in prior studies, relaxation techniques did not improve
symptoms of OCD (Greist et al., 2002). Compared to a waitlist control group, ERP resulted in at
least a 35% decrease in Y-BOCS score for almost 70% of patients (Volpato Cordioli et al.,
2003). Volpato Cordioli et al. (2003) also observed an increase in quality of life after treatment
with ERP. Freeston et al. (1997) found that ERP resulted in less severe obsessions. Abramowitz
(1996) analyzed 38 clinical trials and indicated that ERP resulted in significant improvements in
symptoms of OCD. Rosa-Alcazar et al. (2008) conducted a meta-analysis of 19 trials and
concluded that ERP should be the first line psychotherapeutic treatment for OCD, due to its
efficacy and straightforwardness. Foa et al. (2005) demonstrated that ERP was more effective than the use of clomipramine; 86 percent of those who participated in the study responded to ERP. For children and adolescents, ERP with SSRI was better than either modality alone (Pediatric OCD Treatment Study (POTS) Team, 2004). ERP was shown to be just as effective as SSRI alone (POTS Team, 2004). Therefore, there is a strong evidence base in support of ERP, which highlights the importance of addressing the problem of underutilization.

**Common Clinician Errors in ERP**

Even when ERP is used, different clinician errors during ERP can affect the efficacy of the treatment (Gillihan et al., 2012). For example, if the therapist does not support the patient in completing an exposure of sufficient difficulty, the patient may not improve (Gillihan et al., 2012). If the therapist has negative beliefs about ERP, they are less likely to sufficiently challenge the patient with higher level exposures by adopting an approach that is “unnecessarily cautious” (Farrell et al., 2013, p. 770), which may negatively impact treatment outcomes. Other common errors in ERP involve utilizing the wrong type of exposure, distracting the patient, reassuring the patient, not addressing accommodation by family members, and not targeting the patient’s core fear (Gillihan et al., 2012). The core fear is the primary obsession and the reason why the client is engaging in rituals. The reason will be different depending on the client, and each client may have multiple core fears. For example, some clients complete cleaning rituals because they worry about the potential contamination of others, while others complete rituals because they are concerned that they will become ill themselves. Some clients are concerned about both potential outcomes. It is the client’s core fear that must be targeted during exposure.
Another common error includes not appropriately addressing mental rituals (Gillihan et al., 2012). The therapist must be able to recognize when the client is engaging in compulsions during exposure practice. For example, the therapist may assign an exposure task for a client to touch laundry that the client perceives as contaminated. The client completes the exposure task but repeatedly reassures themselves that they will not become ill, because the laundry probably does not contain any biohazards. Unfortunately, because reassurance is a compulsion, it weakens the exposure (Gillihan et al., 2012). Psychoeducation regarding these nuances of exposure therapy should be done with the client before exposures are initiated. Psychoeducation is a key part of treatment for OCD (March & Mulle, 1998). For example, prior to beginning exposures, the therapist should identify the patient’s anticipated compulsions, including covert compulsions, in order to assist the client in resisting the urges to perform compulsions, and to assist the client in recognizing when they are performing a compulsion.

**Scope of the Problem**

OCD is estimated to have a prevalence of about 1 percent in the adult population (International OCD Foundation, n.d.). Glazier et al. (2015) demonstrated that about 50 percent of patients with OCD were not diagnosed correctly by primary care providers. OCD is often misdiagnosed not only by primary care providers, but also by mental health professionals (Stahnke, 2021). Ziegler et al. (2021) found that patients with OCD wait an average of 12.78 years to receive a diagnosis after symptoms begin. Others estimate this time interval to be between 14 and 17 years (IOCDF, n.d.). While many factors likely interact to create this delay in care, such as lack of service access (Law & Boisseau, 2019), misdiagnosis likely plays a significant role. Of note, while taboo obsessions frequently occur among those with OCD and are
found to be prevalent in 67.1% of OCD patients, they are less often recognized as symptoms of the disorder (Jaisoorya et al., 2017; Levy, n.d.).

According to the OCD Center of Los Angeles (2019), several mental health providers are not aware of each potential presentation of OCD. Misdiagnosis was especially high when the patient’s obsessions involved themes of homosexuality, violence, stating specific words or phrases, or pedophilia (Glazier et al., 2015). Stahnke (2021) found that misdiagnosis was more common among primary care providers than mental health providers, but Glazier et al. (2013) discovered that even among mental health providers, 38.9% of cases of OCD were also diagnosed incorrectly. Again, taboo obsessions were more commonly misdiagnosed (Glazier et al., 2013). For example, while only 3.7% of symmetry related obsessions resulted in inaccurate diagnostic impressions, 80% of aggressive obsessions and 70.8% of pedophilia related obsessions were misidentified by primary care providers (Glazier et al., 2013). Senter et al. (2021) echoed these findings and highlighted that a deficiency in comprehension of OCD among providers significantly contributes to its frequent misdiagnosis. Rather than OCD, case reports indicate that some patients are incorrectly diagnosed with psychotic disorders (Stahnke, 2021). Glazier et al. (2013) also found that individuals with aggressive obsessions were often misdiagnosed with schizophrenia. In the case of pedophilia related OCD, providers frequently did not assign any mental health diagnosis (Glazier et al., 2013). In 54.5% of cases of homosexuality related obsessions, providers inaccurately assigned the diagnosis of sexual identity confusion (Glazier et al., 2013). Further, OCD is often mistakenly diagnosed as generalized anxiety disorder, which has a differing treatment modality (OCD Center of Los Angeles, 2019).
In addition to the importance of correct diagnosis among primary care providers and mental health providers, a deficiency in knowledge of OCD among women’s health providers has the potential to increase misdiagnosis of OCD in peripartum women (Sharma & Mazmanian, 2021). This deficiency in knowledge is especially important, given that the incidence of peripartum OCD has recently been estimated to be approximately 9 percent (Fairbrother et al., 2021). According to Sharma and Mazmanian (2021), patients with postpartum OCD frequently do not report OCD obsessional content, as they experience great shame due to obsessional content, which may include thoughts or images of harming their child (Abramowitz, 2023). Patients might also be concerned about the potential for their obsessional content to be reported to authorities (Sharma & Mazmanian, 2021).

Misidentification seems to be consistent across many different cultures. Perez et al. (2022) identified similar themes in Latin America, wherein mental health providers were also more likely to misdiagnose OCD when patients exhibited taboo obsessions. Gouniai et al. (2022) found that almost 60 percent of medical providers in Guam were unable to correctly diagnose OCD and again, especially struggled to correctly identify taboo obsessions or compulsions. In Germany, misdiagnosis rates have been documented at higher than 70% by some researchers (Wahl et al., 2010).

The underutilization of exposure is also a widespread problem (Deacon & Farrell, 2013). Reddy et al. (2017) estimate that fewer than 33% of patients with OCD will undergo ERP. The frequency of ERP utilization also varies across mental health disciplines. For example, Keleher et al. (2020) found that 57.1% of mental health nurses and 66.7% of psychiatrists infrequently utilize ERP. Further, 93.2% of clinical psychologists frequently use ERP, while 40% of licensed clinical social workers do not (Keleher et al., 2020). The frequency of ERP utilization also
varies depending on the patient’s OCD symptom profile. For example, only 64% of clinicians reported utilizing ERP for taboo obsessions (Keleher et al., 2020).

Some researchers have explored potential reasons for its underutilization. In many clinical training programs, there is a paucity of training in CBT and a focus on therapies that are not evidence-based (Deacon & Farrell, 2013). The OCD Center of Los Angeles (2019) also asserts that in several training programs for therapists, the training regarding therapy for OCD may be inadequate. Further, Deacon and Farrell (2013) assert that “the majority of social work and professional clinical psychology (Psy.D.) graduate programs do not require a didactic and clinical supervision in any evidence-based treatment” (p.365). The authors also note deficits in other training programs, such as in psychiatry (Deacon & Farrell, 2013). Some clinicians feel that exposure is unethical because it results in temporary anxiety (Deacon & Farrell, 2013). However, Deacon and Farrell (2013) assert that clinicians who do not use exposure or who conduct exposure in an excessively cautious manner are “paradoxically depriving their clients of the optimally effective treatment they deserve” (p. 367). An additional misconception about exposure therapy is that it introduces an undesirable level of risk (Deacon & Farrell, 2013). For example, therapists might think that the client’s anxiety will increase to such high levels during exposure that they will have a heart attack or lose control (Deacon & Farrell, 2013). However, the anxiety that the client feels due to exposure is not significantly different than the anxiety the patient experiences outside of therapy, due to their disorder (Deacon & Farrell, 2013). Olatunji et al. (2009) note the safety of exposure therapy and further expand that it is unethical to not use exposure therapy and could even lead to legal ramifications for the provider if they use a treatment that is less beneficial than this evidence-based treatment. The main risk of exposure is transitory discomfort (Olatonji et al., 2009).
In addition to misconceptions about the safety or ethics of ERP, Keleher et al. (2020) found that providers might also have misconceptions about when ERP can be used. They identified the frequency of common perceived difficulties in ERP and found that negative opinions regarding ERP were related to decreased use of ERP. For example, about 45% of clinicians reported that ERP does not seem suitable for taboo obsessions, and 64% reported that they would be less apt to utilize ERP for these OC symptoms (Keleher et al., 2020). They hypothesize that this could be due to the erroneous belief that taboo symptoms might not improve with ERP (Keleher et al., 2020). Puccinelli et al. (2023) found this misconception to be especially prevalent for aggressive and pedophilia related obsessional content. According to current practice guidelines for OCD, ERP should be used for all patients with OCD who are able to participate in the treatment (Koran & Simpson, 2013). This includes those with taboo obsessions. In addition to misconceptions surrounding when ERP can be used, almost 60% of clinicians reported that covert compulsions are a barrier to ERP (Keleher et al., 2020), illustrating the importance of further education for mental health professionals in treating patients with covert compulsions.

Consequences of the Problem/Significance to Nursing

Misdiagnosis of OCD can have devastating consequences. If OCD is not correctly identified, evidence-based treatments, such as selective serotonin reuptake inhibitors and Exposure and Response Prevention, are less likely to be recommended (Senter et al., 2021). In a statement compiled by international experts in OCD, it is said that early intervention with these evidence-based treatments is essential to enhance outcomes in OCD (Fineberg et al., 2019). Throughout the world, there is a lack of early intervention for OCD, which has vastly negative
clinical, occupational, and economic consequences (Fineberg et al., 2019). Fineberg et al. (2019) assert that a deferral in treatment for OCD leads to less satisfactory patient outcomes. For example, increased duration of symptoms is related to decreased remission (Fineberg et al., 2013). Further, patients with OCD who have gone untreated for at least two years had a less favorable response to medication management (Dell’Osso et al., 2010). Hence, the longer that someone suffers with obsessions and compulsions, the less likely they are to ever experience relief from their symptoms. Stahnke (2021) expands on the negative clinical sequelae of misdiagnosis, citing the possibility of severe symptom exacerbation, depression, and suicide. When OCD symptoms become severe and the patient experiences high levels of distress, patients are more likely to experience psychotic-like experiences, such as hallucinations or symptoms similar to delusions (Bortolon & Raffard, 2015). One in ten patients with OCD have attempted suicide, therefore, it is apparent that delays in treatment must be minimized (Pellegrini et al., 2020). Leung and Palmer (2016) describe the case of a patient with OCD who was incorrectly diagnosed with a psychotic disorder and prescribed clozapine. Antipsychotics which are not serotonergic, such as clozapine, are known to exacerbate symptoms related to OCD (Leung & Palmer, 2016). In this case, the patient required hospitalization for a severe symptom exacerbation, as he became suicidal due to the incorrect treatment regimen (Leung & Palmer, 2016). A variety of other negative consequences of misdiagnosis may exist depending on the patient’s unique situation. For example, patients with misdiagnosed peripartum OCD may have difficulty managing infant care or may be inappropriately reported to child protective services (Sharma & Mazmanian, 2021). Children who experience OCD may have delayed completion of social and educational milestones due to the temporal burden of obsessions and compulsions (Fineberg et al., 2019).
Over time, patients with OCD develop problematic brain changes which may explain less favorable treatment responses, such as reduced hippocampal volume (Boedhoe et al., 2017). Decreased hippocampal volume is related to difficulties with memory (Hickie et al., 2005). Timely treatment of OCD could minimize brain related changes that occur with progression of the illness (Fineberg et al., 2019).

When a patient receives a diagnosis of OCD but does not receive ERP, the client is not receiving the psychotherapeutic modality supported by the best available evidence (Koran & Simpson, 2013). They will likely receive other forms of therapy that will exacerbate symptomatology. For example, thought stopping and certain types of cognitive therapy are likely to assist the patient to perform compulsive behaviors, leading to symptom worsening (McKay et al., 2019). Psychodynamic or psychoanalytic therapy and interpersonal psychotherapy can also result in more severe OCD symptoms (McKay et al., 2019). Psychodynamic, psychoanalytic, and interpersonal therapies do not address the client’s core fears as they relate to OCD and there is no element of psychoeducation regarding obsessions or compulsions. Further, psychodynamic and psychoanalytic therapies can worsen OCD by assisting clients to assign meaning to their thoughts (McKay et al., 2019). The foundation of treatment for OCD revolves around the ability to label obsessions as related to OCD in order to resist compulsions. Rather than labeling thoughts as OCD, the psychodynamic therapist may try to delve into potential subconscious explanations for these thoughts and behaviors (Center for Substance Abuse Treatment, 1999), when in reality, the thoughts are not due to a subconscious cause but are due to the pathophysiology of OCD. Lastly, when a patient does receive ERP but does not receive appropriately delivered ERP, they are subject to undertreatment of their condition, and therefore, worsening outcomes.
Proposal Solution

According to Senter et al. (2021), provider education is a key target of enhancing OCD diagnosis. Education regarding taboo themes will be especially important, as patients with these obsessive themes are most commonly misdiagnosed. Providers should also receive training regarding appropriate OCD screening (Senter et al., 2021).

The proposal of ERP training is supported by Mancebo et al. (2021), who demonstrated that therapists within community mental health centers could learn to successfully administer ERP after the completion of a two-day workshop about ERP, along with access to modules and other resources (Mancebo et al., 2021). It is also supported by Keleher et al. (2020), who discuss the necessity of increasing utilization of ERP among outpatient providers and the importance of addressing common misconceptions about ERP that have the potential to negatively impact outcomes. Education should also include ERP for taboo content and mental rituals, as these are areas in which clinicians commonly endorse difficulty (Keleher et al., 2020).

Knowledge Gaps

There is a paucity of data surrounding the frequency of errors that occur during ERP and how those errors vary based on the background and education of the provider. In terms of future research, it would be helpful to understand exactly which errors are most prevalent and how frequently they occur. While Gillihan et al. (2012) discussed common errors in ERP, the errors were based on clinical observations and not a rigorous study design. Therefore, no quantitative data in this area were identified during this literature review. Further research could also be done to identify the mechanism by which ERP results in symptom improvement (Benito & Walther, 2015).
Stahnke (2021) notes that there were only seven studies that address the misdiagnosis of OCD. Although it was clear that taboo obsessions are more frequently misdiagnosed, it is unclear exactly how misdiagnosis varies among mental healthcare professionals and what other factors may contribute to misdiagnosis. It is also important to further investigate the reasons why OCD is frequently misdiagnosed (Stahnke, 2021).

II. Summary of the Literature

Search Parameters

Databases searched included: PubMed, Cumulative Index to Nursing and Allied Health Literature (CINAHL), PubMed, Google Scholar, and Up-to-Date. The following search words and phrases included: OCD, obsessive-compulsive disorder, exposure, Exposure and Response Prevention, CBT, cognitive behavioral therapy, cognitive therapy, history of ERP, triggers, cycle of OCD, obsessions, compulsions, treatment, in vivo, imaginal, habituation, inhibitory learning, etiology, genetics of OCD, pathophysiology, comorbidities, symptoms, treatment guidelines. After locating relevant articles, an ancestry approach was used to locate additional articles. Inclusion criteria included: English language, full text articles. Publication year was not used to exclude articles; all years of articles were included to incorporate information about the foundational principles of treatment for OCD. Types of works in this literature review included research and conceptual articles. Grey literature was also included in the search, including recorded scholarly discussions by experts in OCD and publications by the International OCD Foundation. Exclusion criteria included articles not written in English.
Onset of OCD

Initial symptoms of OCD may appear during early childhood (International OCD Foundation, n.d.). The distribution of age of onset appears bimodal, with high occurrence of new symptoms from ages 8 to 12 and then later in the teens and young adult years (International OCD Foundation, n.d.). In the group of patients whose symptoms begin at a younger age, OCD has been found to be a disorder with especially strong genetic etiological factors (Pauls et al., 2014). Patients with a first-degree relative with OCD have a risk of developing OCD that lies between 6 and 55%, although many studies characterize the risk between 10 to 20% (Browne et al., 2014). OCD diagnosis has been found to be correlated with different genetic polymorphisms that are linked with neurotransmitter regulation (Taylor, 2013).

Possible Etiological Factors

In addition to genetic causes, there are several other potential etiologies of OCD. For example, individuals with a history of trauma seem to have an increased risk for the development of OCD, but a causal relationship has not been identified (Coetzer, 2004). In some cases, symptoms of OCD can occur as sequelae of a neurological illness, such as cerebrovascular accident, traumatic brain injury, or cerebral tumor (Coetzer, 2004). However, these patients should be diagnosed with a different subtype of OCD, as directly correlated with their physical condition (American Psychiatric Association, 2013). Patients with OCD due to a medical cause might not experience normative outcomes in response to medication or ERP (Brander et al., 2016). For example, if someone experiences a brain injury and later experiences symptoms of OCD due to their injury, it is not known if they respond to treatment with SSRI and ERP (Brander et al., 2016). In addition to neurological causes, bacterial illnesses, such as Streptococcal infections, can result in a form of OCD termed Pediatric Autoimmune
Neuropsychiatric Disorder Associated with Streptococcal Infections (PANDAS) (Swedo et al., 1989). In addition to streptococcal infections, other infections, including viral infections, seem to trigger an auto-immune reaction in the basal ganglia which has the potential to result in the acute, severe OCD symptoms seen in PANDAS (Jenike & Boaz, n.d.). However, according to some researchers, there is currently insufficient evidence to determine whether infections have a causal relationship with the development of OCD (Brander et al., 2016). In addition to these possible etiological factors, Guglielmi et al. (2014) found that women have an increased frequency of development of OCD after menarche, during or after pregnancy, or at menopause, suggesting a potentially hormonal etiology.

**Pathophysiology of OCD and Common Comorbidities**

In terms of pathophysiology, investigators believe that overactivation in cortico-striato-thalamo-cortical loops create obsessions and worries (Stahl, 2013). This neurological pathway is controlled by different neurotransmitters, including serotonin, GABA (Gamma-aminobutyric acid), dopamine, norepinephrine, and glutamate (Stahl, 2013). OCD frequently occurs in the presence of other psychiatric conditions, including depression (Ruscio et al., 2010), tics (Gomes de Alvarenga et al., 2012), body dysmorphia, trichotillomania (Bienvenu et al., 2012), other anxiety disorders (Pallanti et al., 2011), and Obsessive-compulsive personality disorder (Pinto & Eisen, 2012). Obsessive-compulsive personality disorder (OCPD) involves rigid, perfectionistic personality traits (American Psychiatric Association, 2013).
Clinical Presentation of OCD

The presentation of OCD can be vastly different in each patient, with indefinite variations in obsessions and compulsions (International OCD Foundation, n.d.). Severity of symptoms is also highly variable and can be measured using the Yale-Brown Obsessive-Compulsive Scale (Y-BOCS) (Goodman et al., 1989). OCD is diagnosed with criteria outlined in the Diagnostic and Statistical Manual of Mental Disorders, 5th edition, as described by American Psychiatric Publishing (APA, 2013). To meet criteria for the disorder, patients must have either obsessions or compulsions, and they may occur together (APA, 2013). Obsessions entail repeated psychological images, impulses, or cognitions (APA, 2013; National Institute of Mental Health, n.d.). Obsessions are perceived as “intrusive and unwanted, and…in most individuals cause marked anxiety or distress” (APA, 2013, p. 237). Further, the patient tries to “ignore or suppress such thoughts, urges, or images, or to neutralize them with some thought or action” (APA, 2013, p. 237). Compulsions are defined as “repetitive behaviors… or mental acts” that are performed to decrease anxiety or avoid a strongly feared outcome (APA, 2013, p. 237). To meet full criteria for the disorder, these symptoms must occupy greater than one hour per day or otherwise result in “clinically significant distress or impairment” (APA, 2013, p. 237). To be diagnosed with OCD, the symptoms cannot be caused by a different mental health disorder, a substance, or a medical disorder (APA, 2013, p. 237).

Common obsessions include the following content areas: contamination, harm/aggression, perfectionism, morality, sex, identity, and relationships (International OCD Foundation, n.d.). Intrusive thoughts or images that relate to religion, harm, or sex are labeled as taboo obsessions (National Institute of Mental Health, n.d.). Contamination-related obsessional content includes excessive worries about environmental toxins, chemicals, or germs (Goodman
et al., 1989). For example, an obsession related to contamination may involve worries about contracting a disease, such as HIV or hepatitis (IOCDF, n.d.). Patients with aggressive obsessions may worry that they will cause harm to themselves or someone else, either accidentally or on purpose (Goodman et al., 1989). For example, a patient with OCD may have an obsession that they will cause their home to burn down. The obsession can be the repeated worry that the home will burn or the repeated image of a fire. A patient with harm-related obsessions may also worry that if they do not clean up a spill on the ground, someone may fall, and it will be their fault if the person is injured (IOCDF, n.d.). The patient might also worry that they might stab someone. The obsession could present as a mental image of the patient stabbing someone with a knife (Goodman et al., 1989). Patients with perfectionism-related obsessions may experience distress if they have “sensations of things not being just right” (Coles et al., 2003, p.1). Religious obsessions (also referred to as scrupulosity) include worries about blasphemous thoughts or images, such as thoughts about cursing at God, as well as worries that they might be behaving in an immoral manner or will go to Hell (Goodman et al., 1989; IOCDF, n.d.). Sexual obsessions include intrusive perverse thoughts, such as thoughts about incest (Goodman et al., 1989). Sex-related obsessions could also include worries that one is pedophile (IOCDF, n.d.). Importantly, obsessions are ego-dystonic and therefore, completely in conflict with the patient’s morals and beliefs (Veale & Roberts, 2014). In fact, OCD attaches itself to themes that the patient cares most about. For this reason, taboo obsessions can be incredibly distressing. For example, if the person strongly values helping others and being a good person, they could develop obsessions related to worrying that they are a murderer or pedophile (Levy, n.d.; Veale & Roberts, 2014). The patient will find these worries disgusting and anxiety-provoking (Veale & Roberts, 2014).
Identity-related obsessional content could entail excessive concern that one may be of a different sexual orientation or gender than they had previously thought (IOCDF, n.d.). Relationship-related obsessions can involve worries that one’s significant other is not “the one” or worries that their partner has been unfaithful (Duron & Derby, 2014).

Compulsions usually occur in reaction to the obsession. The person performs a compulsive behavior with hopes that it will make the obsession disappear (IOCDF, n.d.). Compulsions are ritualized actions that momentarily decrease anxiety (American Psychiatric Association, 2013; Lewis & Rudolph, 2014). Compulsions can be overt, such as repeatedly checking answers on assignments or hand washing, or can be covert, such as ruminating, praying, or mentally pushing thoughts away (Lewish & Rudolph, 2014; Levy, n.d.). Covert compulsions can also include mentally reciting a specific statement (Veale & Roberts, 2014). In the case of taboo obsessions, the accompanying compulsions are often covert, involving only mental rituals (Levy, n.d.). Importantly, taboo compulsions are not enjoyable and should not be confused with paraphilic actions, such as pedophilic actions (Veale & Roberts, 2014; Fisher & Marwaha, 2022). In the case of a patient with OCD who worries they are a pedophile, they may perform compulsions such as ruminating about their actions around children, checking their own genitals for symptoms of arousal, or conducting research about pedophilia to reassure themselves that they are not a pedophile (Hershfield, 2015).

Contamination related compulsions may include washing or cleaning in a ritualized manner (IOCDF, n.d.). Aggression-related compulsions might involve checking to make sure that one has not injured another person (IOCDF, n.d.). For example, a person with an obsession that involves worrying that they could have run over someone while driving may check their mirrors or drive the same route repeatedly to ensure that no one was injured. Other common
harm-related compulsions include ruminating about past events to ensure that one has not hurt anyone (IOCDF, n.d.). Individuals may also reread phrases, perform specific actions such as tapping things, or perform tasks a specific number of times, in attempts to make obsessions go away (IOCDF, n.d.). For example, someone may have the obsession that their family will die unless they tap an object. They then proceed to tap the object to prevent the feared consequence from occurring.

Of note, not all individuals with obsessions or compulsions meet diagnostic criteria for OCD. For example, some patients may experience intrusive thoughts that quickly pass and do not result in high levels of anxiety. These patients do not meet criteria for OCD, as their symptoms do not result in clinically significant impairment. Conversely, in the case of OCD, intrusive thoughts provoke high levels of anxiety, and the individual experiences urges to neutralize or avoid the thoughts (Lewis & Rudolph, 2014). Whether these thoughts provoke anxiety and ultimately lead to OCD has been shown to relate to many psychological factors, including an increased sense of personal accountability, increased appraisal of the likelihood of a negative outcome, perfectionism, and inability to cope with uncertainty (Lewis & Rudolph, 2014). Individuals with Thought-Action Fusion, or the belief that having a thought is the same thing as acting on it (American Psychological Association, n.d.), are also more likely to eventually meet diagnostic criteria for OCD (Lewis & Rudolph, 2014).

**Theoretical Background of OCD**

Symptoms of OCD generally occur in a cyclical manner (Heyman et al., 2006). First, an obsession appears (Heyman et al., 2006). A stimulus triggers the patient’s obsession. Because obsessions are heterogeneous throughout the population of individuals with OCD, individuals
with OCD have different triggers for their obsessions (Schienle et al., 2005). For example, a person with the obsession that they may have hit someone with their car may be triggered by hitting a bump in the road while driving. This triggers the obsession that they may have hit someone with their car. After the obsession enters the patient’s mind, anxiety increases (Heyman et al., 2006). The patient performs a compulsion in response to the increased anxiety, in an attempt to decrease anxiety (Heyman et al., 2006). The performance of the compulsion provides a temporary decrease in anxiety (Heyman et al., 2006).

This cycle is dictated by the principles of classical conditioning and operant conditioning (Grayson, 2014). In classical conditioning, a person relates a certain feeling with a specific stimulus (Grayson, 2014, p. 20). For example, a person who usually eats dinner at 5 pm might experience hunger at this time even if their body does not truly need food at 5 pm (Grayson, 2014). In OCD, when a person experiences a trigger to an obsession, they become anxious. For example, if a patient touches a doorknob and experiences an obsession that they will contract an illness, they become very anxious. In the future, they are conditioned to react with anxiety when they touch other doorknobs (Grayson, 2014). Similarly, individuals with contamination related obsessions may become anxious anytime they enter a public restroom (Grayson, 2014). Operant conditioning involves the principle of reinforcement. In the short term, compulsions may feel rewarding. For example, after touching the doorknob, the patient with contamination related obsessions may wash their hands for an hour. After this time, the anxiety may have decreased, as the patient feels less likely to contract a disease. Therefore, the next time that someone touches a doorknob, they have been conditioned to have a strong desire to wash their hands for an hour, as this behavior temporarily decreased anxiety the first time (Grayson, 2014). Anxiety may also temporarily decrease as a result of avoidance. For example, if a patient is nervous that they may
get a disease if they touch the doorknob, they may become anxious to touch it and avoid directly touching the doorknob. The anxiety was temporarily minimized, because the patient used paper towels to touch the knob rather than their bare hand. In this case, the patient has been classically conditioned to become anxious about touching public surfaces, while operant conditioning has made the patient more likely to utilize avoidance in the future during similar situations (Grayson, 2014).

Unfortunately, these behaviors create a vicious cycle, wherein the patient spends more and more time performing rituals or avoiding things (Grayson, 2014). In addition, compulsions are further reinforced by variable reinforcement. Gambling is one example of variable reinforcement. When someone wins only sometimes, it is psychologically addicting to continue playing. In OCD, compulsions only occasionally decrease anxiety. Therefore, they receive variable reinforcement (Grayson, 2014). Because variable reinforcement is especially strong, the person may continue performing compulsions for extended periods of time, in hopes that one of the rituals will decrease their anxiety, when in reality, over time, anxiety increases with the performance of compulsions (Grayson, 2014).

**Treatment Guidelines**

In terms of therapy, the first line treatment for OCD is Exposure and Response Prevention (ERP) (Koran & Simpson, 2013). Koran and Simpson (2013) specify that among psychotherapeutic interventions for OCD, ERP is the most empirically based. They state that additional research about cognitive therapy alone for OCD is required (Koran & Simpson, 2013). First-line medications include SSRIs or clomipramine (Koran & Simpson, 2013). If the patient is able to participate in therapy and does not want to try medication, only ERP is indicated (Koran
& Simpson, 2013). If a patient is too depressed, anxious, or otherwise incapable or not open to participating in therapy, only medication should be used. In cases wherein symptoms do not remit when only medication or only therapy is used, there are comorbid mental health disorders requiring SSRI or clomipramine, or patients want to remain on medication in only the short term, concurrent ERP and medication should be used (Koran & Simpson, 2013). Of note, in the treatment of OCD, medication doses may need to be higher than usual recommended doses to ensure an adequate response (Koran & Simpson, 2013). Any SSRI can be utilized, but clomipramine is the only tricyclic antidepressant that is advised (Koran & Simpson, 2013).

**Psychotherapy for OCD**

Psychotherapy, which includes ERP, is an incredibly important aspect of treatment for individuals with OCD. When medications for OCD are titrated off, there is a risk for relapse of symptoms. Behavioral therapy seems to mitigate the risk of symptom relapse (O’Neill & Feusner, 2015). In the beginning of the twentieth century, classical conditioning researchers utilized some principles of Exposure and Response Prevention (McLean Hospital, 2021). Later, Joseph Wolpe researched a therapeutic modality called systematic desensitization, wherein individuals were taught to relax in response to anxiety-provoking stimuli (McLean Hospital, 2021). In the 1960s, Cognitive Behavioral Therapy (CBT) was established by clinical psychologist Dr. Aaron Beck (Chand et al., 2022). CBT is used to treat multiple mental health disorders, including anxiety, depression, and substance use (Chand et al., 2022). It has shown to be useful not only for children and adults, but also for families (Chand et al., 2022). Initially, this form of therapy was primarily cognitive therapy, which involves addressing a patient’s thoughts and feelings (Chand et al., 2022; March & Mulle, 1998). Treatment for OCD usually involves
some elements of cognitive therapy, such as learning to externalize OCD. Externalizing OCD means helping the patient to develop an understanding that OCD is not who they are, but rather a mental health disorder that is separate from themselves (March & Mulle, 1998). For example, in the case of a person with OCD whose symptoms are significantly impacting the life of the family, it is important for the patient to understand that they themselves are not resulting in the family’s suffering; the symptoms of OCD are resulting in suffering. Externalizing OCD also involves “talking back to OCD” (March & Mulle, 1998, p. 86). This means that patients can be taught to recognize obsessions and urges to perform compulsions, label them as OCD, and tell OCD that they are not going to abide by its wishes (March & Mulle, 1998).

Later, behavioral interventions were added to traditional cognitive therapies (Chand et al., 2022). The behavioral component of CBT involves actions that the patient can perform to treat the illness (March & Mulle, 1998). Exposure and Response Prevention is within the behavioral treatment domain (the “B” within CBT) (March & Mulle, 1998). Until Exposure and Response Prevention appeared in the literature in the 1960s, OCD was not thought to be a treatable illness (National Collaborating Centre for Mental Health, 2006). The first publication involving the efficacious utilization of Exposure and Response Prevention for two OCD cases appeared in 1966 (Meyer, 1966). In the 1970s, other clinicians, such as Stanley Rachman, further developed behavioral treatment for OCD (Rachman et al., 1971). These techniques gave rise to Exposure and Response Prevention (ERP) in the 1980s (National Collaborating Centre for Mental Health, 2006).
Theoretical Background and Process of ERP

ERP involves directly facing the feared stimulus (Grayson, 2014). The goal of ERP is fear extinction (Jacoby & Abramowitz, 2016). In ERP, a person with OCD is faced with an obsessional trigger (conditioned stimuli) and does not experience an unpleasant outcome (unconditioned stimulus). With repeated exposure practice, the person learns that their initially feared outcome was safe, and their previously conditioned response (compulsive behavior) is extinguished (Jacoby & Abramowitz, 2016). The mechanism of how ERP works to extinguish fear may be explained by different theories, including the habituation model and the inhibitory learning model (Benito & Walther, 2015). Historically, ERP was thought to be based mostly on the model of habituation; researchers thought habituation must occur during exposure for the exposure to be effective (Foa & Kozak, 1986). Habituation indicates decreased anxiety or fear response, which occurs as a result of exposure to an anxiety-provoking stimulus (Grayson, 2014; IOCDF, 2022). According to the habituation model, in order for an exposure to be successful, anxiety must temporarily increase, compulsions must be limited, and a decrease in anxiety (habituation) will follow (Benito & Walther, 2015). Some studies state that habituation is not necessary for exposures to be successful, but Benito and Walther (2015) argue that these studies have major design flaws. For example, the researchers in these studies may state that habituation is occurring when the patient is actually ritualizing (Benito & Walther, 2015).

Jacoby and Abramowitz (2016) suggest that habituation during the exposure may not be needed for symptom reduction. Some studies show that habituation is correlated to positive treatment outcomes, while others do not (IOCDF, 2022; Jacoby & Abramowitz, 2016). While habituation might be necessary for short term learning, inhibitory learning theory might better explain the changes in long term learning processes (IOCDF, 2022). According to the inhibitory
learning model, new learned information during an exposure is intended to inhibit the previously learned information. For example, if a person with OCD fears sitting on toilet seats because they believe they might contract HIV, and they do ERP, the person learns that sitting on toilet seats can be safe when they do not contract HIV and they were able to tolerate the distress of the exposure. In the inhibitory learning model, the memory that sitting on toilet seats could be harmful does not disappear, but the new memory that doing so could be safe supersedes the old memory (IOCDF, 2022). The patient learns that their obsessions are not necessarily true, that they can tolerate anxiety, that compulsions are not needed, and a decrease in anxiety (habituation) usually happens but might not be needed to achieve those goals (Abramowitz, 2018). In some exposures, the person can learn shortly after the exposure that their feared outcome did not occur (such as contracting an illness or harming someone), but other obsessions involve potential outcomes that may happen years or decades later (such as a fear of getting arrested for past crimes or fear of going to Hell due to thinking a blasphemous thought). For exposures surrounding obsessions such as these, the goal, according to the inhibitory learning model, is for the person to learn that they tolerated uncertainty, not necessarily to habituate (Abramowitz, 2018). Both the model of habituation and the model of inhibitory learning are used in clinical practice to guide exposure therapy (IOCDF, 2022) and are not incompatible (Benito & Walther, 2015). Because the techniques derived from each model overlap, it may be impossible to study one model without including any components of the other. Both models may play a role in the efficacy of ERP (Benito & Walther, 2015).

To habituate to the feared stimulus or to extinguish the fear via inhibitory learning, it is vital that the patient does not engage in compulsions or safety behaviors during the exposure, as rituals take away the strength of the exposure (Grayson, 2014; Abramowitz, 2018). This is the
“response prevention” component of Exposure and Response Prevention (Grayson, 2014).

Rituals can be covert, or hidden from others, or overt, obvious to others. For example, a client who is afraid that they will get HIV as a result of touching a doorknob is engaging in an exposure wherein they touch a doorknob. If they are allowed to wash their hands afterward, or if they reassure themselves that they will not get HIV, the exposure will not be effective (Grayson, 2014). Clinicians must be aware of the types of compulsions that can occur while they are assisting clients with exposures, as clinicians must intervene to prevent the client from engaging in these behaviors.

A vital step in ERP involves establishing a fear hierarchy (Grayson, 2014). Exposure and exposure hierarchies are not unique to OCD and can be useful in other psychiatric disorders, such as social anxiety disorder (Katerelos et al., 2008). Establishing a hierarchy involves creating a list of anxiety-provoking stimuli and labeling each stimulus with a number, from zero to ten, which indicates the level of anxiety, also called Subjective Units of Discomfort Scale (SUDS), this would provoke, if the individual was not allowed to perform the compulsion (Grayson, 2014; March & Mulle, 1998). For example, in a case with a patient who is nervous about environmental contaminants, the patient may rate touching a doorknob with their whole hand without washing hands afterward as a 10/10. The patient might rate touching the doorknob with a single finger for one second without washing hands after at a 5/10. According to March and Mulle (1998), the first exposure should be chosen from the transition zone of the exposure hierarchy. The transition zone involves exposure tasks where the patient is sometimes successful in resisting compulsions and may be rated approximately 4-5 in SUDS on the exposure hierarchy (March & Mulle, 1998). Over time, the patient works with the therapist to address the remainder of the hierarchy. If the therapist starts with an exposure that is too high on the SUDS, the patient
may not be successful in completion of the exposure. If they become very overwhelmed by the intensity of the first exposure, they could refuse to engage in any further exposures and may potentially abandon therapy.

There are various types of exposures that can be utilized. For example, in vivo exposures indicate exposures that are performed with real anxiety-provoking stimuli (Gillihan et al., 2012). For example, a patient with a fear of germs may touch a doorknob during an in vivo exposure. Imaginal exposures involve artificially exposing the patient to the patient’s imagined worst-case scenario (Gillihan et al., 2012). For example, the patient who is afraid of contracting AIDS writes a thorough account of what their life would look like if they contracted AIDS and what the consequences would be. They then record themselves reading this script and listen to it as an exposure. The patient will listen to the recording until the anxiety decreases significantly (Huppert & Roth, 2003). Abramowitz (1996) found that when imaginal exposures were done in combination with in vivo exposures, symptoms were most controlled.

III. Purpose/PICO Clinical Question/SMART Goals

Purpose/PICO Clinical Question

The purpose of this quality improvement project was outlined by utilizing the PICO framework. According to Polit and Beck (2017), the components of the PICO framework include the population, intervention, comparison, and outcomes. The population in this study includes mental health providers who diagnose and care for patients with OCD. These mental health providers include clinical psychologists, licensed clinical social workers, licensed mental health counselors, licensed marriage and family therapists, psychiatric nurse practitioners, and psychiatrists. The intervention involved an educational program focused on the diagnosis of
OCD and the utilization of Exposure and Response Prevention (ERP). Knowledge and attitudes regarding the diagnosis of OCD and the use of ERP were tested before and after the intervention using questionnaires, which served as the comparison in the PICO question. Behaviors regarding the diagnosis of OCD and the use of ERP were assessed with a questionnaire after the intervention. The PICO question guiding the project was stated as follows: For mental health providers in an outpatient clinic setting, will an educational program regarding OCD diagnosis and ERP improve knowledge, attitudes, and behaviors regarding the diagnosis of OCD and the utilization of ERP?

**SMART Goals**

The goals of this DNP project were to enhance mental health providers’ knowledge, attitudes, and behaviors regarding diagnosis of obsessive-compulsive disorder (OCD) and the utilization of Exposure and Response Prevention (ERP).

The goals and outcomes of the project were as follows: At the end of the educational session, there would be statistically significant improvement in the knowledge, attitudes, and behaviors regarding the identification of OCD and the use of ERP.

**IV. Organizational Assessment/SWOT Analysis**

This quality improvement project was conducted at an outpatient mental health center. The practice offers individual therapy (including ERP), group therapy, medication management, and neuropsychological testing. Mental health professionals at the practice specialize in a variety of mental health disorders, including attention deficit hyperactivity disorder, anxiety, depression, OCD, and eating disorders. There are practice locations in Rhode Island and Connecticut.
There were 15 members of the administrative team, including billing specialists, receptionists, intake coordinators, and medical records managers. There was only one staff member in Human Resources and only one employee in the IT department.

At the time of this organizational analysis, there were 73 mental health professionals employed by the mental health practice. There were 35 practitioners at the organization who offered treatment for OCD. Of these mental health providers, there were 2 psychiatrists, 3 Psychiatric-Mental Health Nurse Practitioners, 12 providers with PhDs in Clinical Psychology, two providers with PsyDs in Clinical Psychology, four Licensed Clinical Social Workers, four Licensed Mental Health Counselors, three Master level providers who were not yet licensed, and three students.

A SWOT analysis was conducted according to guidelines as outlined by White et al. (2021). As a group mental health practice, the organization has many strengths. The practice has many experienced clinicians in several specialty areas. For example, the practice employs clinical experts in OCD, sleep, treatment resistant depression, ADHD, children’s mental health, and geriatric psychology. The organization is committed to the educational efforts of its employees, and employees are encouraged to attend educational continuing education seminars. The organization has a positive reputation in the community and receives referrals from many hospitals and primary care providers.

Weaknesses include recently increased staff turnover. In addition, a potential lack of time of the providers serves as a threat to project completion. If the providers do not have time to attend the educational seminar, the success of the project will be limited.

This quality improvement project serves as an opportunity to improve the diagnosis and management of OCD within the practice. An assessment to determine the baseline need for this
quality improvement project was conducted, and overall, the findings at the organization were congruent with the review of the literature. This assessment was conducted by speaking directly with mental health providers at the organization and via chart reviews of this writer’s patients with diagnoses of OCD.

Mental health providers at the organization who specialize in OCD have confirmed that there is a strong need for this quality improvement project. These providers have expressed agreement that in general, among outpatient providers, misdiagnosis of OCD is a problem, specifically as it relates to obsessional content with taboo themes. Clinical experts also agree that among providers, there is a need to improve recognition of common errors that may occur during Exposure and Response Prevention. Providers could benefit from additional education regarding diagnosis of OCD as well as utilization of Exposure and Response Prevention.

In terms of treatment for OCD, there are potential opportunities for growth among providers. For example, many providers at the organization offer treatment for other anxiety disorders but do not utilize Exposure and Response Prevention. Therefore, clients with OCD may be faced with long waiting lists for services. Sometimes, patients with OCD may be paired with a provider who does not routinely utilize Exposure and Response Prevention.

Among providers at the organization who utilize Exposure and Response Prevention, there are areas for potential improvement, and many of these are in alignment with the common errors associated with ERP, as outlined by Gillihan et al. (2012). For example, some therapists choose to utilize exposures that are too low on the SUDS scale (1 or 2, for example), leading to insufficient symptom reduction. Further, there is sometimes a lack of recognition of covert compulsions (such as reassuring self or avoiding the feared stimulus or obsession) during exposure or overt compulsions that occur after the exposure. Lastly, therapists may fail to deliver
adequate psychoeducation about how accommodation of OCD by friends or family serves as a compulsion.

V. Definition of Terms

*Cognitive Behavioral Therapy (CBT)*: A modality of psychotherapy that focuses on the relationships between thoughts, behaviors, and feelings, and modifying thoughts and behaviors in order to improve mental health symptoms. It is an evidence-based treatment modality for patients with anxiety, depression, substance use disorders, eating disorders, and many other psychiatric diagnoses (American Psychological Association, 2022).

*Exposure and Response Prevention (ERP)*: Exposure and Response Prevention is a specific type of CBT treatment modality that is the first line therapeutic treatment for OCD (Koran & Simpson, 2013). ERP involves the gradual confrontation of the feared stimulus that normally precipitates the obsession (International OCD Foundation, n.d.). Response prevention indicates that the individual will not engage in the compulsions that normally accompany the obsession (International OCD Foundation, n.d.). Exposure and Response Prevention results in improved outcomes in up to 60% of patients (Law & Boisseau, 2019).

*Subjective Units of Discomfort (SUDS)*: A numeric grading scale from zero to ten, in which patients rate their anxiety level before, during, and after exposures (March & Mulle, 1998).

*Mental Health Providers*: Mental health providers will include any mental health professional that is employed by the outpatient mental health organization where the quality improvement project is conducted. This includes: psychiatrists, psychiatric nurse practitioners, licensed mental health counselors, licensed clinical social workers, clinical psychologists, and Master level providers who are not yet licensed.
VI. Conceptual Underpinning and Theoretical Framework of the Project

This project will be directed by the principles of Lewin’s (1947) change model. According to this model, there are both driving forces and restraining forces that can impact a project’s success throughout three defined stages. Driving forces will help the employees attend the educational seminar and learn the information in the session. Restraining forces are those that will make it difficult for employees to attend and gain information from the intervention (Kritsonis, 2005). The three phases of Lewin’s (1947) model include unfreezing, moving, and freezing. The unfreezing process involves preparation to change the current practice; movement involves making the change to participants’ behaviors and attitudes, and refreezing involves ensuring that the change in practices continues over time (Channell, 2021).

During unfreezing, the driving forces will be maximized, while the restraining forces will be minimized (Kritsonis, 2005). In this project, unfreezing will be accomplished by speaking with therapists and providers directly to motivate them to come to the educational session, advertising the session via email, and ensuring that the session occurs during a previously scheduled case conference time, so that therapists will already have the time blocked out of their schedule to attend. Further, according to Lewin (1947), it may be helpful during this stage to engage the emotions of the individuals involved in the change. Therefore, case studies outlining the severe impact of misdiagnosis and incorrect treatment will be included in the presentation to evoke emotions in the study participants and enhance motivation for change.

To accomplish Lewin’s movement phase, staff members will be further encouraged to attend the seminar and to improve their diagnosis and treatment of OCD (Kritsonis, 2005). Fawcett (2014) recommends including stakeholders in the quality improvement process in order
to complete the movement step of Lewin’s model. Therefore, staff members will be involved in
the process of creating the educational seminar via individual interviews with stakeholders.

The process of refreezing would involve encouraging staff to continue using the
diagnostic parameters and ERP tools that are taught in the educational seminar (Fawcett, 2014).
While the refreezing step will occur outside the timeframe of the DNP project, the quality
improvement cycle will continue to ensure that progress is maintained.

VII. Methodology

QI Methodology and Study Design

This quality improvement project will be guided by the Plan-Do-Study-Act cycle. The
first stage, planning, involves creating a group to work on this project, identifying project goals,
assessing data regarding present diagnosis and use of ERP at the site, and conducting a SWOT
(strengths, weakness, opportunities, threats) analysis (White et al., 2021; Minnesota Department
of Health, n.d.). The establishment of goals, needs assessment, and thorough description of the
problem, which are designated as important components of the planning process, have been
completed (Minnesota Department of Health, n.d.). According to the Minnesota Department of
Health (n.d.), an additional important component in the planning stage is to investigate possible
causes of the problem. Through interviews with stakeholders and literature review, it was
determined that one potential cause of misdiagnosis of OCD, underutilization of ERP, and errors
in ERP is the lack of education surrounding these topics. Therefore, an educational intervention
in the form of a PowerPoint presentation and lecture was developed. The presentation addressed
two major educational components. The first component included information regarding OCD symptoms and diagnosis, and the second component included information regarding ERP.

During the Do phase, the project was implemented, and the educational intervention took place. The study used a pre-test post-test design. After consenting to participate in the study, participants first completed a Demographics and Professional Data Form to specify various data points, including race, gender, level of education, type of professional licensure, and number of years of experience. They also completed a Knowledge and Attitudes Pre-test to assess their level of knowledge regarding OCD diagnosis and the use of ERP, as well as their attitudes surrounding these topics. Participants then attended the one-hour educational program, which consisted of a PowerPoint presentation and lecture about the diagnosis of OCD and the use of ERP. After this, they completed a Knowledge, Attitudes, and Behaviors Post-test regarding the diagnosis of OCD and the use of ERP.

During the Study phase, data from the pre-test post-test surveys were analyzed to determine if improvement has occurred in knowledge, behaviors, and attitudes surrounding OCD diagnosis and utilization of ERP (Minnesota Department of Health, n.d.). Then, during the Act phase, future projects can be designed regarding education about diagnosis and treatment of OCD, but these future projects fall outside the scope of this quality improvement project. If the project was not successful in enhancing knowledge, attitudes, and behaviors related to diagnosis and treatment of OCD, the planning stage would have been revisited with the aim to design a more effective educational intervention (Minnesota Department of Health, n.d.).
Setting and Sample

The project was conducted at an outpatient mental health group practice in the Northeast of the United States. Participants included mental health providers who were employed by the organization, including a target number of 15 total participants. Ultimately, 19 participants were enrolled in the study. Inclusion criteria included: Mental health provider currently employed at the organization, English speaking, and age 18 and older. Individuals who did not meet these criteria were excluded from the study. Individuals were also excluded if they were not able to or were unwilling to provide informed consent or if they were students who had not yet completed their training programs.

Instruments

The DNP candidate developed the Demographics and Professional Data Form, a 7-item form that was used to collect the following information: age, professional certification/degree, number of years in current role, race/ethnicity, gender identity, whether the participant uses psychotherapy and/or ERP with patients, whether the participant has had formal training in ERP, and whether or not they provide care for patients with OCD.

The DNP candidate also developed the Obsessive-Compulsive Disorder (OCD) and Exposure and Response Prevention (ERP) Knowledge and Attitudes Pre-Test Questionnaire, which contains 11 total questions regarding knowledge of the diagnosis of OCD (5 questions) and the use of ERP (6 questions). The total possible score on the Knowledge Test is 100% (11/11). Following the Knowledge Test, there are 4 questions that assess Attitudes surrounding comfortability with: ERP, diagnosis of OCD, identification of taboo content, and ability to
perform exposures in patients with covert compulsions. These questions utilize a 5-point Likert scale, with responses ranging from “very uncomfortable” to “very comfortable”.

The Obsessive-Compulsive Disorder (OCD) and Exposure and Response Prevention (ERP) Knowledge, Attitudes, and Behaviors Post-Test Questionnaire is identical to the Pre-Test, aside from 3 items that assess the likeliness of behavior change as it relates to how providers assess for obsessions and compulsions, how often they conduct ERP, and how they conduct ERP. These questions also use a 5-point Likert scale, with responses ranging from “very unlikely” to “very likely” to modify behavior. Regarding each of these instruments, content validity was established by review of the lead faculty, clinical preceptor, and a clinical psychologist.

**Intervention**

The intervention was an educational program conducted via Zoom. The program consisted of a 1-hour PowerPoint presentation, which was created based on a comprehensive literature review. The presentation included examples from clinical cases and a group discussion. The first component of the program summarized common obsessional themes and compulsions, including those that are frequently unrecognized as symptoms of OCD or missed in the clinical assessment. It included information regarding how to enhance assessment for these commonly missed symptoms, including taboo obsessions and covert compulsions. The presentation also covered the clinical practice guidelines for OCD, as well as the theoretical background of OCD and ERP. The second component of the presentation focused on how to prepare for ERP and the steps of conducting ERP, including building a fear hierarchy and how to conduct an exposure with a patient. Common errors in ERP were also addressed.
Data Collection, Management, Recruitment, and Protection of Human Subjects

In terms of recruitment, the educational session was advertised at the facility via an email sent to all mental health providers. The session was also advertised via dissemination of a handout about the project, as well as during virtual case conferences with other mental health providers at the facility. Individuals who were interested in the study were instructed to reach out to the DNP candidate via email. When interested individuals contacted the DNP candidate for further information regarding the study, individuals were screened for eligibility. If they were eligible, they were assigned a study ID number, which was paired with their email and stored in a Master Key in Microsoft SharePoint, a secure server that requires username and password access and only allows access from study personnel. Potential participants were then sent a Qualtrics link, which led to the Online Informed Consent form. In terms of protection of human subjects and data collection, Qualtrics is a HIPAA compliant platform for data management, which allowed secure collection and storage of study data (Qualtrics, 2023). In the Online Informed Consent form, subjects read that their participation in the study was completely voluntary, and they could withdraw at any time, with no negative consequences. The consent form also included a thorough explanation of the potential risks and benefits of participating in the study. In terms of risk, there was a possibility of discomfort for participants who were expected to attend the seminar during the workday. However, participants were free to complete all study documents remotely at their own convenience to minimize the risk of any potential discomfort. In terms of potential benefits to participating in the study, participants were predicted to have an increase in knowledge regarding OCD diagnosis and utilization of ERP, and a possible contribution to identifying the value of educational interventions in improving the diagnosis and treatment of patients with OCD.
If participants agreed to be part of the study, they entered their study ID number, electronically consented to the study, and were automatically led to the Demographics and Professional Data Form. Participants were informed that they may choose not to reveal personal data on the Demographic and Professional Data Form. After completing this form, Qualtrics automatically loaded and prompted individuals to complete the Pre-test. No personal identifiable data was included on the Qualtrics Pre-test or Post-test.

The educational program was conducted twice to maximize the number of participants who could attend. On the day of the educational program, individuals were sent the Zoom link via email, if they had completed the necessary study documents (Consent, Demographics and Professional Data Form, and Pre-test). After attending the program, participants were sent a Qualtrics link for the Post-test. Participants needed to record their study ID number into the Post-test on Qualtrics in order to pair the Post-test data with Pre-test data.

At the conclusion of the study, de-identified data were downloaded and stored onto a secure server (SharePoint). A VPN was used when downloading data. The Master Key was kept separate from survey responses in a document on the secure server that was only accessible to the DNP candidate. To further minimize the possibility of a breach in confidential information, all study data were removed from the server following completion of the project.

Data Analysis

Data in the Demographics and Professional Data Form were analyzed using descriptive statistics. The change in Pre-test and Post-test scores regarding Knowledge and Attitudes were analyzed using paired samples t-tests, and Cohen’s $d$ for effect size. Perceived behavior changes
were analyzed using descriptive statistics. Jamovi software was utilized for data analyses (Jamovi Project, 2023).

VIII. Results

Sample Demographics and Professional Data

In total, there were 19 participants in the study. Most participants identified as White (94.7%), 5.3% of participants identified as Black or African American, and 10.5% identified as Hispanic or Latinx regardless of race. In terms of gender, 36.8% of the sample identified as male, and 63.2% identified as female. The mean age of participants was 31.6 years (SD= 8.55, range 25-54). Providers reported a variety of backgrounds and professional licenses, including licensed mental health counselors, licensed clinical social workers, psychiatric mental health nurse practitioners, and clinical psychologists (see Table 1).

Of these participants, 100% replied that they utilize psychotherapy with patients. While 89.5% of the participants noted that they do treat patients with OCD, and 78.9% reported using ERP with their patients, only 36.8% of participants noted that they had formal training in Exposure and Response Prevention.

Table 1.

<table>
<thead>
<tr>
<th>Degree</th>
<th>Counts</th>
<th>% of Total</th>
<th>Cumulative %</th>
</tr>
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<tr>
<td>Licensed mental health counselor</td>
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<td>Licensed clinical social worker</td>
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<td>Psychiatric mental health nurse practitioner</td>
<td>3</td>
<td>15.8 %</td>
<td>47.4 %</td>
</tr>
<tr>
<td>Medical doctor</td>
<td>1</td>
<td>5.3 %</td>
<td>52.6 %</td>
</tr>
<tr>
<td>Clinical psychologist (PhD)</td>
<td>4</td>
<td>21.1 %</td>
<td>73.7 %</td>
</tr>
</tbody>
</table>
Table 1.
*Frequencies of Degrees*

<table>
<thead>
<tr>
<th>Degree</th>
<th>Counts</th>
<th>% of Total</th>
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<td>Clinical psychologist (PsyD)</td>
<td>1</td>
<td>5.3 %</td>
<td>78.9 %</td>
</tr>
<tr>
<td>Licensed marriage and family therapist</td>
<td>1</td>
<td>5.3 %</td>
<td>84.2 %</td>
</tr>
<tr>
<td>Master’s degree – not yet licensed.</td>
<td>3</td>
<td>15.8 %</td>
<td>100.0 %</td>
</tr>
</tbody>
</table>

**Obsessive-Compulsive Disorder (OCD) and Exposure and Response Prevention (ERP)**

**Knowledge Pre-test to Post-test**

A paired samples t-test was conducted separately for OCD diagnosis knowledge, knowledge of ERP, and attitudes about perceived comfort in regard to OCD diagnosis and treatment. Knowledge of OCD diagnosis improved from pre-test (M = 83.2%, SD = 18%) to post-test (M = 92.6%, SD = 11.9%). The paired samples t-test revealed a trend towards a significant difference between pre and post-test, t(18) = 1.92, p = 0.07, though the Cohen’s d effect size was moderate (d = 0.441). ERP knowledge improved from pre-test (M = 69.3%, SD = 23.7%) to post-test (M = 87.7%, SD = 15.6%). The paired samples t-test revealed a statistically significant difference between pre and post-test, t(18) = 3.88, p = 0.001, with a large Cohen’s d effect size (d = 0.89).
Figure 1. *Knowledge of OCD Diagnosis Pre-test to Post-test.*

Figure 2. *ERP Knowledge Pre-test to Post-test.*
OCD and ERP Attitudes Pre-test to Post-test

First, an overall score of mental health provider attitudes was examined across four items on a Likert scale (1 = very uncomfortable to 5 = very comfortable). The overall score improved from pre-test (M = 2.91, SD = 0.98) to post-test (M = 3.70, SD = 0.91). The paired samples t-test revealed a statistically significant difference between pre and post-test, t(18) = 3.68, p = 0.002, with a large Cohen’s $d$ effect size ($d = 0.843$) (see Figure 3).

More specifically, mental health providers’ attitudes regarding perceived comfort in their ability to diagnose OCD improved from pre-test (M = 3.26, SD = 1.10) to post-test (M = 3.89, SD = 0.994). The paired samples t-test revealed a statistically significant difference between pre and post-test, t (18) = 2.72, p = 0.014, with a medium Cohen’s $d$ effect size ($d = 0.624$). Further, mental health providers’ attitudes regarding perceived comfort in their ability to use ERP improved from pre-test (M = 2.95, SD = 1.22) to post-test (M = 3.84, SD = 0.834). The paired samples t-test revealed a statistically significant difference between pre and post-test, t (18) = 3.72, $p = 0.002$, with a large Cohen’s $d$ effect size ($d = 0.853$). Mental health providers’ attitudes regarding perceived comfort in their ability to identify taboo obsessional content improved from pre-test (M = 2.89, SD = 1.10) to post-test (M = 3.63, SD = 1.12). The paired samples t-test revealed a statistically significant difference between pre and post-test, t (18) = 3.07, $p = 0.007$, with a large Cohen’s $d$ effect size ($d = 0.705$). Lastly, mental health providers’ attitudes regarding perceived comfort in their ability to perform exposures with patients with covert compulsions improved from pre-test (M = 2.53, SD = 1.12) to post-test (M = 3.42, SD = 1.12). The paired samples t-test revealed a statistically significant difference between pre and post-test, t (18) = 3.26, $p = 0.004$, with a large Cohen’s $d$ effect size ($d = 0.747$).
The OCD and ERP Behaviors Post-Test Questionnaire

Perceived behavior change was assessed at post-test on a Likert scale ranging from 1 = very unlikely to change to 5 = very likely to change. Regarding perceptions of changes in assessment practices, 66.7% of mental health providers reported that they would likely change and 33.3% reported that were very likely to change assessment practices. Next, 47.4% of mental health providers reported they would likely increase how often they conduct ERP, and 42.1% of mental health providers reported they were very likely to increase how often they conduct ERP. However, 10.5% reported they were neither unlikely nor likely to increase the frequency at which they conduct ERP. Finally, 42.1% reported that they would likely change how they conduct ERP; 42.1% reported they would very likely change how they conduct ERP; and 15.8% said they were neither likely or unlikely to change how they conduct ERP.
IX. Discussion

The purpose of this study was to determine whether an educational program regarding OCD diagnosis and ERP resulted in statistically significant improvement in the knowledge, attitudes, and behaviors of mental health providers regarding the diagnosis of OCD and the utilization of ERP. While knowledge surrounding OCD diagnosis showed a marginally significant improvement, a statistically significant difference was noted in knowledge surrounding the use of ERP. A minority of participants (36.8%) reported having no formal training in ERP, yet a majority (78.9%) endorsed using ERP with their clients. Therefore, an improvement in knowledge surrounding the use of ERP was especially important. The ERP Knowledge Questionnaire was designed to capture the common mistakes made in ERP, as outlined by Gillihan et al. (2012), including the lack of identification of mental compulsions, giving the patient reassurance, lack of identification of the core fear, distracting the patient, and inadequate management of family accommodation. These mistakes can impact the efficacy of treatment (Gillihan et al., 2012), and this study population indicated an overall improvement in understanding of these domains, indicating that the use of ERP among the study participants may be more effective after attending the educational program.

In terms of attitudes, the overall score indicated that after the educational program, participants had a statistically significant improvement in attitudes surrounding their comfortability with using ERP. Self-efficacy among providers has been found to influence whether evidence-based treatments are performed (Shapiro et al., 2021; Turner et al., 2011). Shapiro et al. (2021) describes self-efficacy as provider confidence with the specific therapeutic modality. As provider comfortability with ERP increased after the educational intervention, it is then expected that the providers would be more likely to utilize ERP in the future. It was an
especially important finding that the providers’ comfort level with using ERP improved even with patients with covert compulsions, given that many clinicians define these types of compulsions as a barrier to using ERP (Keleher et al., 2020).

Further, participants were also found to have an improvement in their comfort level with diagnosing OCD and in identifying taboo obsessional content. Improvements in attitudes in these domains are especially vital given that OCD is commonly misdiagnosed (Stahnke, 2021; Glazier et al., 2013), and taboo obsessions are both common and frequently unrecognized (Jaisoorya et al., 2017; Levy, n.d.). As misdiagnosis likely contributes to treatment delays, which can negatively impact patient outcomes (Fineberg et al., 2019; Perris et al., 2021), improvements in mental health providers’ comfortability with the diagnosis of OCD could have the potential to accelerate the onset of treatment for OCD and enhance patient outcomes.

In terms of behaviors, results indicate that this educational program was effective at improving how mental health providers assess for OCD and how often they will use ERP. These behavior changes indicate that this educational program has the potential to reduce misdiagnosis of OCD and enhance access to the evidence-based treatment of ERP. Further, as common errors in ERP were addressed in the presentation and results indicated that a majority of providers were likely to modify how they conduct ERP, this intervention has the potential to enhance the efficacy of ERP.

X. Limitations

This study had a few limitations, including small sample size, which was possibly a factor in the intervention indicating only marginally significant improvement to participant knowledge of OCD diagnosis. This study was conducted in a single practice with a
predominantly White sample, which serves as a limitation to generalizability of study results. Further, in terms of behavior, perceptions of behavior change were captured, rather than actual behaviors, which could serve as a threat to validity. Lastly, knowledge, attitudes, and behaviors were only assessed shortly after the study intervention, and long-term change was not analyzed.

XI. Implications for Advanced Nursing Practice and Directions for Future Research

This educational program is a 1-hour presentation with the potential to result in improvements to OCD diagnosis and treatment with ERP. The intervention is relatively simple and cost-effective to disseminate and shows promise in the ability to enhance knowledge, attitudes, and behaviors surrounding the diagnosis of OCD and the use of ERP. It could potentially be utilized at other mental health practices to result in more widespread improvements to the diagnosis and treatment of OCD. Future directions for research could include a multisite study in order to enhance external validity. To further enhance generalizability, future research should also include studies with larger, more diverse samples, as well as longitudinal assessments with longer term follow ups to assess whether changes to knowledge, attitudes, and behaviors surrounding the diagnosis of OCD and use of ERP are maintained over time.

XII. Conclusion

In summary, OCD is often misdiagnosed (Stahnke, 2021), and the primary behavioral treatment for OCD, which is Exposure and Response Prevention (ERP), is frequently underutilized (Mancebo et al., 2021) or conducted incorrectly (Gillihan et al., 2012), despite a breadth of evidence (Abramowitz et al., 1996). Stakeholder interviews revealed that there is a
lack of formal education among mental health providers regarding ERP, and this was supported by the findings of this study. Therefore, this project aimed to enhance diagnosis and treatment of OCD by designing an intervention to educate mental health providers about symptoms of OCD that are commonly misdiagnosed or missed, the utility of ERP and the harmful nature of other treatment modalities for OCD, and the fundamentals of conducting ERP.

This project showed enhancements in provider knowledge about diagnosing OCD and the use of ERP in addition to improvements in attitudes and behaviors surrounding the diagnosis of OCD and the utilization of ERP. These improvements are especially important given that the longer that an individual goes untreated for OCD, the less likely they will respond to usual treatments (Dell’Osso et al., 2010). Untreated OCD can also lead to more severe symptoms, including depression and suicide (Stahnke, 2021). This educational intervention demonstrates potential to improve the time it takes for patients to receive a correct diagnosis and to increase the likelihood that patients will receive effective treatment.

**XIII. Dissemination Plan**

According to the American Association of Colleges of Nursing (AACN, 2015), it very important to disseminate the results of the DNP project. This can be accomplished in several ways, such as through publishing an article, creating a poster, or designing another modality of presentation (AACN, 2015).

These results will be disseminated first at the Doctor of Nursing Practice (DNP) Symposium at Florida International University. Subsequently, the DNP candidate will design and submit a poster to present at the Annual International OCD Foundation Conference, to be
held in 2024. The poster can also be submitted for presentation at the American Psychiatric Nurses Association Annual Conference, also held in 2024.

In terms of article submissions, the DNP candidate will submit a clinical article to educate nurses and nurse practitioners about the diagnosis and treatment of OCD. This article will be submitted to the *Journal of Psychosocial Nursing and Mental Health Sciences*, while an article delineating the details of this quality improvement project will be submitted to the *Journal of Nursing Care Quality*. 
XIV. References


https://www.ncbi.nlm.nih.gov/books/NBK554425/#:~:text=Paraphilias%20are%20persistent,and%20recessive,that%20are%20atypical%20in%20nature.


https://doi.org/10.1037//0022-006x.65.3.405


https://www.youtube.com/watch?v=C8hUh9Cg4xM


https://iocdf.org/pandas/


https://doi.org/10.1177/001872674700100103


More information, What is PDSA? Works and what doesn't.


OCD Center of Los Angeles. (2019). OCD vs. GAD and how to tell the difference. https://ocdla.com/ocd-vs-gad-7071


Puccinelli, C., Gagne, J., Gavric, D., Milosevic, I., McCabe, R.E., Soreni, N., Alcolado, G.M., & Rowa, K. (2023). Falling into the OCD trap: Are clinicians hesitant to encourage


Turner, K. M. T., Nicholson, J. M., & Sanders, M. R. (2011). The role of practitioner self-efficacy, training, program and workplace factors on the implementation of an evidence-based...


XV. Appendices
MEMORANDUM

To: Dr. Deborah Sherman
CC: Jena Lerch
From: Carrie Bassols, BA, IRB Coordinator
Date: March 28, 2023

Proposal Title: “An Educational Program to Enhance the Identification of Obsessive-Compulsive Disorder (OCD) and the Utilization of Exposure and Response Prevention Among Outpatient Mental Health Providers: A Quality Improvement Project”

The Florida International University Office of Research Integrity has reviewed your research study for the use of human subjects and deemed it Exempt via the Exempt Review process.

IRB Protocol Exemption #: IRB-23-0140  IRB Exemption Date: 03/28/23
TOPAZ Reference #: 112881

As a requirement of IRB Exemption you are required to:

1) Submit an IRB Exempt Amendment Form for all proposed additions or changes in the procedures involving human subjects. All additions and changes must be reviewed and approved prior to implementation.
2) Promptly submit an IRB Exempt Event Report Form for every serious or unusual or unanticipated adverse event, problems with the rights or welfare of the human subjects, and/or deviations from the approved protocol.
1) Submit an IRB Exempt Project Completion Report Form when the study is finished or discontinued.

Special Conditions: N/A

For further information, you may visit the IRB website at http://research.fiu.edu/irb.
Dear IRB Members,

I am writing this letter in support of Jena Lerch to implement her study at RICBT entitled:

An Educational Program to Enhance the Identification of Obsessive-Compulsive Disorder (OCD) and the Utilization of Exposure and Response Prevention Among Community Mental Health Providers: A Quality Improvement Project.

Sincerely,

Ben Johnson, PhD, ABPP
CEO & Clinical Director
We need your help to complete this study! All mental health professionals at RICBT are eligible.

What does the study entail?

- Fill out consent form, demographics and professional data form, and pre-test on Qualtrics (~20 mins).
- Attend educational seminar during case conference (1 hr).
- Take a post-test (~15 mins).

What will the presentation be about?

- Identifying OCD, including commonly misidentified symptoms
- How to conduct ERP, including common errors that occur when conducting ERP

If you are interested in participating in the study, please contact Jena Lerch, Doctor of Nursing Practice Candidate (Florida International University) at jlerc001@fiu.edu or 401 294 0451 ext 922 for more information.
**ADULT ONLINE CONSENT TO PARTICIPATE IN A RESEARCH STUDY**
An Educational Program to Enhance the Identification of Obsessive-Compulsive Disorder (OCD) and the Utilization of Exposure and Response Prevention Among Outpatient Mental Health Providers: A Quality Improvement Project.

**SUMMARY INFORMATION**

Things you should know about this study:

**Purpose:** The purpose of the study is to determine whether an educational program will improve the knowledge, attitudes, and behaviors of mental health providers regarding the diagnosis of obsessive-compulsive disorder (OCD) and utilization of exposure and response prevention (ERP).

- **Procedures:** If you choose to participate, you will be asked to complete a Demographic and Professional Data Form as well as a Knowledge and Attitudes Pre-test, attend a one-hour educational program via zoom reviewing the diagnosis of OCD and how to conduct ERP, and complete a Knowledge, Attitudes, and Behaviors Post-test.
- **Duration:** This study will take about 1.5-2 hours of your time.
- **Risks:** This study is minimal risk. The main risk or discomfort from this research study are that you might be uncomfortable with spending 1.5-2 hours of your time in an educational activity.
- **Benefits:** There is a potential benefit of improving your knowledge of OCD diagnosis and treatment, including ERP. Your participation will also benefit the science of how educational programs can be used to improve access to specialty care for OCD.
- **Alternatives:** There are no known alternatives available to you other than not taking part in this research study.
- **Participation:** Taking part in this research project is voluntary. You may withdraw from the study at any time.

Please carefully read the entire document before agreeing to participate.

**PURPOSE OF THE STUDY**
The purpose of this study is to determine whether an educational program will improve knowledge, attitudes, and behaviors regarding the diagnosis of OCD and the use of ERP to treat OCD among outpatient mental health providers.

**NUMBER OF STUDY PARTICIPANTS**

If you decide to be in this study, you will be one of approximately 15 mental health professionals in this research study.

**DURATION OF THE STUDY**

Your participation will involve about 1.5-2 hours of your time.

The approximately duration of each study activity is as follows:

- The Demographics and Professional Data Form – 5 minutes
- Pre-Test – 15 minutes
- Educational session – 1 hour
- Post-Test – 15 minutes

**PROCEDURES**

1. Review this informed consent document and if you agree to participate, click the button at the end of this document that indicates your decision to participate.

2. Complete Demographics and Professional Data Form (which will include race, ethnicity, gender, occupation, and number of years of clinical experience) and the Obsessive-Compulsive Disorder (OCD) and Exposure and Response Prevention (ERP) Knowledge and Attitudes Pre-Test Questionnaire (which will include a series of multiple-choice questions about OCD diagnosis and ERP, in addition to questions about your attitudes as they relate to the diagnosis of OCD and the use of ERP). These forms will be completed via Qualtrics, and the link will be sent to your email.

3. Attend a 1-hour educational session via zoom, which will include a presentation about the diagnosis of OCD and the use of ERP.

4. Complete the Obsessive-Compulsive Disorder (OCD) and Exposure and Response Prevention (ERP) Knowledge, Attitudes, and Behaviors Post-Test Questionnaire, which will include a series of multiple-choice questions about OCD diagnosis and ERP, in addition to questions about your attitudes and behaviors as they relate to the diagnosis of OCD and the use of ERP. The Post-test will be completed via Qualtrics, and the link will be sent to your email.
RISKS AND/OR DISCOMFORTS

There are no physical, social, legal, or economic risks to you. Although there are minimal to no expected psychological risks, participants may feel stress regarding participation within the workday. The severity and likelihood of occurrence of this risk is expected to be minimal. While the presentation will take place during workday hours, all other study documents may be completed at your own convenience. The research team will be available to you if at any point you feel uncomfortable or have any questions during your participation. If there is a question in any study document that you feel uncomfortable answering, you can choose to not answer that question.

BENEFITS

Participation in this study may improve your knowledge, attitudes, and behaviors related to the diagnosis of OCD and the use of ERP to treat OCD. In addition, your participation in the study will benefit the science of how educational programs can be used to improve access to specialty care for OCD.

ALTERNATIVES

There are no known alternatives available to you other than not taking part in this study. Any significant new findings developed during the course of the research which may relate to your willingness to continue participation will be provided to you.

CONFIDENTIALITY

The records of this study will be kept private and will be protected to the fullest extent provided by law. In any sort of report we might publish, we will not include any information that will make it possible to identify you. Research records will be stored securely and only the researcher team will have access to the records. However, your records may be inspected by authorized University or other agents who will also keep the information confidential.

USE OF YOUR INFORMATION

- Your information collected as part of the research will not be used or distributed for future research studies even if identifiers are removed.

COMPENSATION & COSTS
There is no compensation for participating in this study. There are no costs to you for participating in this study.

**RIGHT TO DECLINE OR WITHDRAW**

Your participation in this study is voluntary. You are free to participate in the study or withdraw your consent at any time during the study. You will not lose any benefits if you decide not to participate or if you quit the study early. The investigator reserves the right to remove you without your consent at such time that he/she feels it is in the best interest.

**RESEARCHER CONTACT INFORMATION**

If you have any questions about the purpose, procedures, or any other issues relating to this research study you may contact Dr. Deborah Sherman, principal investigator, at Florida International University, Nicole Wertheim School of Nursing and Health Sciences, at desherma@fiu.edu or 845-774-9894. You can also contact Jena Lerch, co-investigator, at jlerc001@fiu.edu or 401-234-3989.

**IRB CONTACT INFORMATION**

If you would like to talk with someone about your rights of being a subject in this research study or about ethical issues with this research study, you may contact the FIU Office of Research Integrity by phone at 305-348-2494 or by email at ori@fiu.edu.

**PARTICIPANT AGREEMENT**

I have read the information in this consent form and agree to participate in this study. I have had a chance to ask any questions I have about this study, and they have been answered for me. By clicking on the “consent to participate” button below I am providing my informed consent.

(Insert Consent to Participate Button Here on the Website)
Demographics and Professional Data Form

1. What is your age? _____________

2. What professional certification or degree do you hold?

   o Licensed mental health counselor
   o Licensed clinical social worker
   o Master’s degree – not yet licensed. Please specify which degree you hold: _____________
   o Psychiatric mental health nurse practitioner
   o Medical doctor
   o Doctor of osteopathic medicine
   o Clinical psychologist (PhD)
   o Clinical psychologist (PsyD)
   o Licensed marriage and family therapist
   o Other - please specify _____________

3. What is your race or ethnicity?
   o White
   o Black or African American
   o American Indian or Alaska Native
   o Asian
   o Native Hawaiian or Pacific Islander
   o Hispanic or Latinx
   o Other – please specify _____________
   o Prefer not to respond
4. What is your gender identity?
   - Male
   - Female
   - Trans male/trans man
   - Trans female/trans woman
   - Non-binary/non-conforming
   - Different identity (please state) _____________
   - Prefer not to respond

5. Do you use psychotherapy with your patients?
   - Yes
   - No

6. Have you had formal training in exposure and response prevention?
   - Yes – please describe _____________
   - No

7. How many years have you been practicing in your current role?
   - Less than 1 year
   - 1-2 years
   - 3-5 years
   - 6-10 years
   - More than 10 years

8. Do you see patients with OCD?
   - Yes
   - No

9. Do you use exposure and response prevention (ERP) as a therapeutic treatment modality?
   - Yes
   - No
Obsessive-Compulsive Disorder (OCD) and Exposure and Response Prevention (ERP)
Knowledge and Attitudes Pre-Test Questionnaire

Please complete this measure by answering the questions to the best of your ability. This Doctor of Nursing Practice (DNP) project is assessing whether an educational program enhances knowledge and attitudes surrounding the diagnosis of ERP and the use of ERP, and behaviors related to the use of ERP.

If you have any questions about this project or this questionnaire, please contact Dr. Dana Sherman, principal investigator, at dsherman@fiu.edu or 305-348-4227 or the co-investigator, Jena Lerch, at jlerc001@fiu.edu or 401-234-3989. Thank you.

Knowledge

OCD Diagnosis Questions

1. You have a patient who is struggling with existential worries such as “why are we here?”, “what is the meaning of life?”, and “are we living in a matrix?” She has been listening to OCD podcasts, which makes her feel better, because she realizes there are other people suffering with the same symptoms. What is true in this scenario?

A. This is not a theme of OCD. The patient should be referred for treatment for psychosis.
B. Consider the possibility that the patient is listening to OCD podcasts as a compulsion.
C. Existential OCD in this case cannot be targeted with exposures because the patient’s compulsions are mental rituals.
D. Encourage the patient to continue listening to these podcasts, as psychoeducation is an important part of treatment for OCD.

2. A 42-year-old male patient informs you that he is worried he might be a pedophile. He is very distressed and finds this idea disgusting. He thinks that he might have abused his 8-year-old daughter. He cannot recall the details of the potential abuse. What is your next step?

A. Report the situation to Child Protective Services.
B. Further assess for signs and symptoms of OCD using the Y-BOCS.
C. Review the criteria for pedophilic disorder with the patient.
D. Further assess for signs and symptoms of OCD using the Y-BOCS, but in the meantime, treat the patient for psychosis.

3. You have a patient who expresses that lately, he wants to stab his partner. When he sees knives, he contemplates what this would be like. He denies anxiety surrounding these thoughts and expresses anger toward his partner. What do you do?

A. Create a safety plan. Report the situation and refer the patient to emergency services, if necessary.
B. Create a hierarchy for aggressive related obsessions.
C. Plan an in-session exposure for aggressive related obsessions.
D. Provide education about the presence of ego-dystonic thoughts and assure the patient that this is likely OCD.

4. Which of the following is not an OCD obsessional theme that is commonly misdiagnosed?
A. Religious
B. Harm
C. Sex
D. Symmetry

5. You meet a patient who says they have been avoiding going anywhere where they might come into contact with an old friend, Peter. Peter cheats on all of his girlfriends, lies constantly to other friends, and sometimes cheats on his exams. Your patient is concerned that if he comes into contact with Peter, he might also become a bad person. He tries to keep track of places Peter might go so that he doesn’t have to see him or talk to him. What is most likely occurring?
A. This patient is stalking Peter and you should do a safety assessment to make sure he’s not going to imminently harm Peter.
B. The patient is paranoid and should likely be diagnosed with a psychotic disorder.
C. This patient has “emotional contamination” obsessions and compulsions.
D. This patient has relationship OCD.

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A. Yes, habituation has occurred so it will generalize to other triggers.
B. No, distress decreased because the patient engaged in mental rituals.
C. Yes, the patient learned that they could use coping skills to manage their obsessions.
D. No, the patient’s distress went down too quickly, and it needs to be slower.

2. You have a patient who is Christian and has morality related obsessions that present as blasphemous thoughts like swearing at God. The patient’s compulsions include saying sorry to God and silently praying in a specific way several times in a row. Can this obsession-compulsion cycle be a target for ERP?
A. No, you cannot use exposure to effectively target this fear because the compulsions are covert.
B. No, you can’t use ERP for this because it would go against their religion.
C. Yes, you can, and it should involve reassuring the patient that they are a good Christian.
D. Yes, you can and should use ERP to target these symptoms. Correct use of ERP would involve having the patient sit with the discomfort that they might not be a good Christian.

3. What are the correct components of a fear hierarchy in ERP?
   A. Trigger, specific fear, compulsion, distress rating
   B. Specific fear, compulsion, distress rating
   C. Trigger, specific fear, distress rating
   D. Trigger, specific fear, compulsion, distress rating, and exposure

4. You have a patient who is cleaning out the shower for 2 hours per day. Which of the following is not a step that is necessary to plan for ERP and design the exposure?
   A. Explore ways that the patient’s family is accommodating the anxiety.
   B. Ask the patient why they are cleaning the shower to identify the core fear.
   C. Ask the patient what steps are involved in cleaning the shower.
   D. Discuss how the patient can distract themselves if the exposure becomes too stressful.

5. You have a patient who is struggling with obsessions about household chemicals. The patient is worried that they will become poisoned by household cleaners. Which of the following is not an example of a compulsion, when performed repeatedly in response to an obsession?
   A. Cognitive restructuring, such as telling self that the chances of this happening are very low, as thousands of other people use cleaners without serious health complications.
   B. Reading articles online about contamination OCD to remind self that these fears must be OCD and not real.
   C. Mentally reviewing a previously completed compulsion of googling about different household cleaners to reassure self that nothing bad will happen.
   D. Using a statement such as “I am sitting with the uncertainty that I might get sick from household chemicals. It is one of many possibilities”.

6. You have a patient who is completing an exposure surrounding the obsession of concerns that she will die due to contact with household contaminants. The exposure involves eating a piece of old bread. She just took a bite of the bread and reports low anxiety levels. She says that she knows she won’t die from eating possible mold, because she trusts that you would not plan an unsafe exposure. How do you respond?
   A. It is true that we won’t plan an exposure that is unsafe.
   B. We can stop the exposure for today because it was successful.
   C. We can’t know for sure whether you’ll get sick because of eating the bread.
   D. Let’s inspect the bread for any signs of mold to make sure it’s safe.
**Attitudes**

1. How comfortable are you in your ability to use exposure and response prevention with your patients?

<table>
<thead>
<tr>
<th>Very uncomfortable</th>
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Obsessive-Compulsive Disorder (OCD) and Exposure and Response Prevention (ERP)
Knowledge, Attitudes, and Behaviors Post-Test Questionnaire

Please complete this measure by answering the questions to the best of your ability. This Doctor of Nursing Practice (DNP) project is assessing whether an educational program enhances knowledge and attitudes surrounding the diagnosis of ERP and the use of ERP, and behaviors related to the use of ERP.

If you have any questions about this project or this questionnaire, please contact Dr. Dana Sherman, principal investigator, at dsherman@fiu.edu or 305-348-4227 or the co-investigator, Jena Lerch, at jlerc001@fiu.edu or 401-234-3989. Thank you.

Knowledge

OCD Diagnosis Questions

1. You have a patient who is struggling with existential worries such as “why are we here?”, “what is the meaning of life?”, and “are we living in a matrix?” She has been listening to OCD podcasts, which makes her feel better, because she realizes there are other people suffering with the same symptoms. What is true in this scenario?

A. This is not a theme of OCD. The patient should be referred for treatment for psychosis.
B. Consider the possibility that the patient is listening to OCD podcasts as a compulsion.
C. Existential OCD in this case cannot be targeted with exposures because the patient’s compulsions are mental rituals.
D. Encourage the patient to continue listening to these podcasts, as psychoeducation is an important part of treatment for OCD.

2. A 42-year-old male patient informs you that he is worried he might be a pedophile. He is very distressed and finds this idea disgusting. He thinks that he might have abused his 8-year-old daughter. He cannot recall the details of the potential abuse. What is your next step?

A. Report the situation to Child Protective Services.
B. Further assess for signs and symptoms of OCD using the Y-BOCS.
C. Review the criteria for pedophilic disorder with the patient.
D. Further assess for signs and symptoms of OCD using the Y-BOCS, but in the meantime, treat the patient for psychosis.

3. You have a patient who expresses that lately, he wants to stab his partner. When he sees knives, he contemplates what this would be like. He denies anxiety surrounding these thoughts and expresses anger toward his partner. What do you do?

A. Create a safety plan. Report the situation and refer the patient to emergency services, if necessary.
B. Create a hierarchy for aggressive related obsessions.
C. Plan an in-session exposure for aggressive related obsessions.
D. Provide education about the presence of ego-dystonic thoughts and assure the patient that this is likely OCD.

4. Which of the following is **not** an OCD obsessional theme that is commonly misdiagnosed?
   A. Religious
   B. Harm
   C. Sex
   D. Symmetry

5. You meet a patient who says they have been avoiding going anywhere where they might come into contact with an old friend, Peter. Peter cheats on all of his girlfriends, lies constantly to other friends, and sometimes cheats on his exams. Your patient is concerned that if he comes into contact with Peter, he might also become a bad person. He tries to keep track of places Peter might go so that he doesn’t have to see him or talk to him. What is most likely occurring?
   A. This patient is stalking Peter and you should do a safety assessment to make sure he’s not going to imminently harm Peter.
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### Behaviors

1. How likely are you to change how you assess for obsessions and compulsions in your patients based on this presentation?

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Diagnosis of OCD and Treatment with Exposure and Response Prevention

Jena Lerch, MSN, ARNP, PMHNP-BC
Doctor of Nursing Practice Candidate
Nicole Wertheim College of Nursing and Health Sciences
Florida International University

Background

Even among mental health providers, OCD is commonly misdiagnosed (Glazier et al., 2013).

Patients may wait 12-17 years from symptom onset to diagnosis (Ziegler et al., 2021; International OCD Foundation, n.d.).

Increased duration of symptoms is related to decreased remission (Fineberg, 2013) and symptom exacerbation (Stahnke, 2021).

Patients with OCD who have gone untreated for at least two years had a less favorable response to medication management (Dell’Osso et al., 2010).

Exposure and response prevention is one of the most empirically backed therapeutic treatment modalities that is currently available, but it is widely underutilized (Deacon & Farrell, 2013).
Diagnostic Criteria

Obsessions

- “Recurrent and persistent thoughts, urges, or images that are experienced...as intrusive, unwanted, and that in most individuals cause marked anxiety or distress.”
- “The individual attempts to ignore or suppress such thoughts, urges, or images, or to neutralize them with some thought or action.”

Compulsions

- “Repetitive behaviors or mental acts that the individual feels driven to perform in response to an obsession or according to rules that must be applied rigidly.”
- “The behaviors or mental acts are aimed at preventing or reducing anxiety or distress, or preventing some dreaded event or situation.”

(American Psychiatric Association, 2013, p. 237)

Common Obsessional Themes

- Aggressive
- Contamination
- Sexual
- Hoarding/saving
- Scrupulosity
- Symmetry
- Superstitious fears

- Relationship
- Existential
- “False memory”
- “Emotional contamination”

(Goodman et al., 1989; International OCD Foundation, n.d.)
Key Points

- Obsessions are ego-dystonic - completely in conflict with the person's morals and beliefs.
- Misdiagnosis is especially high with taboo obsessions - those related to religion, harm, or sex.
- OCD is often not what people think it is.

(Yeale & Roberts, 2014; Glazier et al., 2015; National Institute of Mental Health, n.d.)

Common Compulsions

- Cleaning or washing
- Checking
- Repeating
- Counting
- Ordering
- Hoarding
- Mental compulsions
- Reassurance seeking
- Touching or tapping

(Goodman et al., 1989)
Key Points - Covert Compulsions

- Compulsive avoidance or distraction
- Reassuring self
- Mentally reviewing scenarios
- Praying
- Counting
- Neutralizing thought or image

(OCD UK, n.d.)

Examples of Obsessions and Compulsion Pairs

- Someone will die/Tapping an object to prevent this from happening
- I might stab someone/Scanning the environment to make sure everyone is safe
- The house might burn down/Checking knobs on the gas stove
- I am a pedophile/Checking body for signs of arousal
- There are contaminants on my body that might make others sick/Excessively washing my body
Check Your Knowledge

- What are examples of compulsions that may relate to the obsession “maybe my partner is not the right person for me”?
- What are examples of compulsions that may relate to the obsession “maybe I’m a bad person”?

In patients diagnosed with OCD, what therapeutic modalities are harmful?

- Psychodynamic/psychoanalytic therapy
- Interpersonal therapy
- Thought stopping
- Cognitive strategies
  - Using cognitive restructuring to reassure self as a compulsion
  - Getting reassurance directly from the therapist

(McKay, Abramowitz, & Storch, 2019)
Clinical Practice Guidelines

- First line: Exposure and Response Prevention (ERP) and SSRI or amitriptyline (Koran & Simpson, 2013)

Theoretical Background of OCD

- **Cycle of OCD**: A stimulus triggers an obsession (Schienle et al., 2005). Anxiety increases. The patient performs a compulsion in response to the increased anxiety (Heyman et al., 2006). The performance of the compulsion provides a temporary decrease in anxiety (Heyman et al., 2006).

- OCD is dictated by the principles of classical conditioning and operant conditioning (Grayson, 2014).

*Figure 1. The OCD cycle. (Source: Mariner, 2022)*
Exposure and Response Prevention

- ERP involves gradual confrontation of the feared stimulus that normally precipitates the obsession (International OCD Foundation, n.d.).
- The exposure must evoke fear (Franklin et al., 2019).
- Response prevention indicates that the individual will not engage in the compulsions that normally accompany the obsession (International OCD Foundation, n.d.).
- The mechanism of how ERP works to extinguish fear may be explained by different theories, including the habituation model and the inhibitory learning model (Benito & Walther, 2015).
- The goal of ERP is fear extinction (Jacoby & Abramowitz, 2016).

Figure 2. The vicious cycle of avoidance. (Source: Wagner, 2011)

Preparing for ERP

Assessment: Yale-Brown Obsessive Compulsive Scale (Y-BOCS) or Children’s Yale-Brown Obsessive Compulsive Scale (CY-BOCS) and functional analysis

Psychoeducation

<table>
<thead>
<tr>
<th>Defining the terms</th>
<th>What are the patient’s obsessions and compulsions?</th>
<th>Explaining the OCD cycle</th>
</tr>
</thead>
</table>

(Franklin et al., 2019)
Building a Hierarchy

- What theme do the obsessions fall under? What is the core fear?
- Different hierarchies for each core fear
- The fear ladder contains: triggers, “specific fear”, compulsion, and distress scale
- The trigger will be used as the exposure.
- Imaginal exposure will be used for situations that can’t be targeted with in vivo exposure.
- The hierarchy should be edited over time.

(Fremlin et al., 2012; Freeman & Garcia, 2009)

### Fear Hierarchy Example

<table>
<thead>
<tr>
<th>Trigger</th>
<th>Specific Fear</th>
<th>Compulsion</th>
<th>Distress</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cleaning or seeing that someone recently cleaned w/ products</td>
<td>I might become ill or die from coming into contact with these products</td>
<td>Avoiding eating or cooking on the surface.</td>
<td>10</td>
</tr>
<tr>
<td>Cleaning or seeing that someone recently cleaned w/ products</td>
<td>I might become ill or die from coming into contact with these products</td>
<td>Asking partner for reassurance about whether I will die or become sick</td>
<td>8</td>
</tr>
<tr>
<td>Cleaning or seeing that someone recently cleaned w/ products</td>
<td>I might become ill or die from coming into contact with these products</td>
<td>Wiping the freshly cleaned surface with water.</td>
<td>7</td>
</tr>
<tr>
<td>Eating unrefrigerated foods</td>
<td>My food might be contaminated with mold, and I might get sick or die</td>
<td>Checking my food for signs of contamination</td>
<td>6</td>
</tr>
<tr>
<td>Touching the wall</td>
<td>The wall might have lead paint or other chemicals that could harm me.</td>
<td>Avoiding touching the wall.</td>
<td>5</td>
</tr>
</tbody>
</table>

(Freeman & Garcia, 2009)
### Zeroing in...

<table>
<thead>
<tr>
<th>Exposure Task</th>
<th>SUDS rating</th>
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</thead>
<tbody>
<tr>
<td>Clean the counter with Lysol and make a sandwich on the surface afterward</td>
<td>10</td>
</tr>
<tr>
<td>Clean the counter with a &quot;natural&quot; cleaner and make a sandwich on the surface afterward</td>
<td>5</td>
</tr>
<tr>
<td>Clean the counter with Lysol, touch a cookie to the surface for 3 seconds, and eat the cookie</td>
<td>4</td>
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</table>

### Fear Hierarchy Example - Long Routine

<table>
<thead>
<tr>
<th>Trigger</th>
<th>Specific fear</th>
<th>Compulsion</th>
<th>Distress</th>
</tr>
</thead>
<tbody>
<tr>
<td>Going to the bathroom</td>
<td>I will contaminate others with germs</td>
<td>Wipe after using bathroom, Sanitize legs x2, sanitize hands x2, take a shower (wash body x2 from head to toe), wash hands again x2 with dish soap</td>
<td>10</td>
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<td>Go the bathroom without doing any of washing routine</td>
<td>10</td>
</tr>
<tr>
<td>Go to the bathroom, full routine, but no sanitizing</td>
<td>9</td>
</tr>
<tr>
<td>Go to the bathroom, full routine, but sanitize only once</td>
<td>6</td>
</tr>
<tr>
<td>Go to the bathroom, full routine but use regular soap instead of dish soap</td>
<td>4</td>
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(Freeman & Garcia, 2009)
### Completion of Exposure

<table>
<thead>
<tr>
<th>Choose</th>
<th>Choose exposure from the hierarchy.</th>
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<tbody>
<tr>
<td>Educate</td>
<td>Make sure the patient understands that they cannot perform rituals during or after the exposure.</td>
</tr>
<tr>
<td>Monitor</td>
<td>Monitor subjective units of distress (SUDS) during the exposure.</td>
</tr>
<tr>
<td>Continue</td>
<td>Continue the exposure until anxiety has dropped significantly.</td>
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(Freeman & Garcia, 2009)

### Common Errors

- Distraction
- Reassuring the patient
- Not targeting the core fear
- Not recognizing mental compulsions
- Not addressing accommodation
- Not performing exposures of sufficient difficulty

(Gillihan et al., 2012)
Recommended Resources for Further Education

- International OCD Foundation - https://iocdf.org/
- Family Based Treatment for Young Children With OCD: Therapist Guide by Jennifer Freeman and Abbe Garcia
- Freedom from Obsessive Compulsive Disorder by Jonathan Grayson
- Exposure and Response Prevention for Obsessive-Compulsive Disorder by Edna Foa, Elna Yadim, and Tracey Lichner

References


