The Diagnosis and Treatment of Obsessive-Compulsive and Related Disorders

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Obsessive-compulsive and related disorders (OCRDs) share a pattern of repetitive thoughts and ritualized behaviors. The categorization of obsessive-compulsive disorder (OCD), hoarding disorder, body dysmorphic disorder, hair-pulling disorder, and skin-picking disorder together in the *Diagnostic and Statistical Manual of Mental Disorders* – 5th edition (DSM-5; American Psychiatric Association [APA], 2013) represents a shift in the conceptualization of these concerns (Abramowitz, 2018). These disorders are grouped together due to their shared etiologies, neurobiological features, phenomenologies, and comorbidities (Hollander, Braun, & Simeon, 2008). Although symptoms manifest differently across disorders, all share traits of obsessive thoughts and compulsive behaviors (Hollander et al., 2009).

Defining Obsessions and Compulsions

Obsessions are persistent, unwanted, distressing, and intrusive thoughts – which can also include specific ideas, images, or urges (APA, 2013). These thoughts are often associated with strong emotions such as anxiety, distress, guilt, disgust, or uneasiness (Abramowitz & Jacoby, 2014; APA, 2013). The content of obsessions is influenced by individual and cultural beliefs about taboo topics such as blasphemy, sex, disease, and violence (Abramowitz & Jacoby, 2014; Lewis-Fernández et al., 2010). Thus, when experiencing these thoughts that are incongruent with the person's belief system, the person is likely to have a strong negative emotional reaction and attempt to suppress, ignore, or neutralize the thoughts (Abramowitz & Jacoby, 2014; APA, 2013). The person might also believe that thinking about something bad happening makes it more likely that the event will occur or that thinking about something unacceptable is the same as actually engaging in the unacceptable behavior (Franklin & Foa, 2008). This phenomenon, in

which the person equates thoughts and actions, is called thought-action fusion (Franklin & Foa, 2008). For example, a person with OCD might believe that having a sexual thought about someone other than his partner is the moral equivalent of an extramarital affair. As another example, a person with OCD might have an image of the plane her mother is boarding crashing and believing that somehow that her thought increases the likelihood of the plane actually wrecking. Although different from the obsessions of OCD, other OCRDs like body dysmorphic disorder and hoarding disorder involve specific repetitive preoccupations that are irrational and distressing.

In an attempt to undo, neutralize, or combat the negative believed consequences of these thoughts, the person might engage in compulsions (APA, 2013). Compulsions are repetitive, ritualized behaviors (e.g., washing, checking) or mental acts (e.g., praying, counting) that are performed in response to an obsession or to specific rule systems (Abramowitz & Jacoby, 2014; APA, 2013). For some, compulsions are perceived as a means of avoiding the terrible consequences of their obsessive thoughts – such as praying after having a violent thought to save the life of a loved one. For others, compulsions are performed in order to lessen the distress associated with their obsessions – such as seeking reassurances from others or checking that doors are locked. Not all compulsions exist in conjuncture with obsessions, such as ritualized ordering or counting behaviors. Compulsions are excessive to the situation and not realistically connected with the person's intended goal, such as preventing harm or distress (APA, 2013). Other OCRDs share characteristics of compulsions, including repetitive behaviors like skinpicking in excoriation disorder, hair-pulling in trichotillomania, or the accumulation of possessions in hoarding disorder.

Differences in DSM-5

Obsessive-Compulsive and Related Disorders is a new chapter in the DSM-5 and includes OCD, body dysmorphic disorder, hoarding disorder, hair-pulling disorder, excoriation (skin-picking) disorder, substance/medication induced OCRD, OCRD due to another medication condition, and other specified/unspecified OCRD (APA, 2013). Hoarding disorder, excoriation disorder, substance/medication induced OCRD, and OCRD due to another medication condition are newly defined disorders in the DSM-5. OCD was previously categorized under anxiety disorders in the DSM-IV-TR due to the shared characteristics of excessive fear, apprehension, and avoidance (Abramowitz, 2018). Hair-pulling disorder (trichotillomania) was previously categorized under impulse-control disorders not elsewhere classified. The combination of these disorders into the new OCRD category reflects growing evidence that these disorders share common etiological aspects, symptom features, comorbidities, genetic factors, neurobiological factors, and patterns of treatment outcomes (Hollander et al., 2008).

Shared Etiology

Vulnerability to developing OCRDs appears related to a number of biological and environmental factors. Results from twin-studies suggest that between 27% and 47% of the variance in obsessive and compulsive symptoms can be attributed to genetic factors (van Grootheest et al., 2007a, 2007b). Hoarding disorder, hair-pulling disorder, and other OCRDs also appear to have genetic and biological predispositions (Duke, Keeley, Geffken, & Storch, 2010; Raines, Oglesby, Allan, Short, & Schmidt, 2016). However, these predispositions likely interact with environmental factors that trigger and maintain OCRD symptoms (Schuurmans et al., 2012). General psychological vulnerabilities (e.g., anxiety sensitivity, low distress tolerance, poor self-regulation) and specific psychological vulnerabilities (i.e., learning history associated with disorder-specific cognitions and behaviors) also seem to predict the development of OCRDs

(Duke et al., 2010; Raines et al., 2016). It is important to be aware of the shared etiology across OCRDs because of its impact on the comorbidity among these disorders and the conceptualization of these disorders in the DSM-5.

The preoccupations, obsessions, compulsions, behaviors, and rituals characteristic of the OCRDs appear to be maintained by similar mechanisms. Compulsions and repetitive behaviors such as skin-picking, hair-pulling, excessive grooming, or mirror checking are associated with an immediate reduction in distress and disturbing thoughts (Abramowitz & Jacoby, 2014; APA, 2013; Duke et al., 2010). Because the behaviors lessen the person's distress, they are negatively reinforced – making it more likely that the person will engage in these behaviors in the future. For example, someone with body dysmorphic disorder is likely to continue to repetitively seek reassurances from others about their appearance because their anxiety lessens when others tell them they look fine. Continuing to engage in repetitive or compulsive behaviors also prevents the person from learning that the feared outcome is unlikely to occur (Abramowitz & Jacoby, 2014). For example, someone who engages in compulsive hand washing in response to obsessions that they will contract HIV will never have the opportunity to learn that they were unlikely to contract HIV in the first place. Ultimately, these patterns lead to an escalation in the frequency and intensity of intrusive thoughts, emotional distress, and maladaptive behaviors (Abramowitz & Jacoby, 2014). Subsequently, treatment for OCRDs often involves interventions targeted at disrupting these behavioral and thinking patterns.

Obsessive-Compulsive Disorder

Characteristics and Symptoms

OCD is characterized by the experience of obsessions or compulsions that cause clinically significant distress or impairment (APA, 2013). Clinically significant obsessions are

defined in the DSM-5 as persistent, intrusive, and unwanted thoughts, images, or urges that cause distress and are purposefully avoided or suppressed. Someone with obsessions may also experience compulsions, although this is not required for the diagnosis. To meet diagnostic criteria for compulsions, the behaviors or mental actions are performed repetitively in an attempt to lessen or prevent anxiety, distress, or some feared outcome (such as contracting a disease, causing someone's death, or eternal damnation). Compulsions are performed in response to obsessions or specific rules that are excessive and irrational. Some people with OCD have compulsions without obsessions, a presentation more common in children and adolescents (Geller, 2006). The obsessions or compulsions must be time consuming, distressing, or impairing (APA, 2013). An individual with time-consuming obsessions and compulsions may experience them from one hour per day to nearly constantly. OCD should not be diagnosed if symptoms are better explained by a medical condition, substance use, medication, or other mental disorder.

People without OCD commonly experience ritualized behaviors and intrusive thoughts similar to those with OCD. The presence of these experiences is not necessarily clinically significant. In fact, about 28% to 80% of people report having experienced obsessions or compulsions (Ruscio, Stein, Chiu, & Kessler, 2010; Salkovskis & Harrison, 1984). Furthermore, the content of obsessions are similar across clinical and non-clinical populations, and it is difficult to differentiate clinical obsessions based on content alone (Rassin & Muris, 2006). That is, like people with OCD, people without OCD will have fleeting thoughts that they have left the stove on, contracted a disease from a doorknob, hit someone with their car, and so on. For both people with and without OCD, checking, hoarding, and ordering symptoms are also common; harming, religious, and sexual symptoms are more strongly indicative of an OCD diagnosis

(Ruscio et al., 2010). Thus, it is important to consider obsessive and compulsive symptoms in the context of other symptom criteria such as the level of impairment.

The symptom structure of OCD appears to be similar cross-culturally, with obsessions related to contamination and compulsive cleaning being common (Lewis-Fernández et al., 2010). However, the focus of the obsessions and compulsions may vary by culture, such as religious concerns in the Middle East, aggressive obsessions in Brazil, and HIV obsessions following the emergence of the disease (Lewis-Fernández et al., 2010).

Insight specifier. OCD diagnoses are specified based on the person's level of insight into their symptoms (APA, 2013). OCD with absent insight/ delusional beliefs describes those who completely accept their OCD beliefs as true. Those who accept their OCD beliefs as probably true are deemed to have OCD with poor insight. Those who accept that their OCD are not – or probably are not – true are specified as having good or fair insight.

Tic specifier. When diagnosing OCD, clinicians can specify if the disorder is tic-related if the client has a history of a tic disorder presently or in the past (APA, 2013; Højgaard et al., 2017). Tics are repeated, sudden, quick, and non-rhythmic movements (e.g., shrugging, blinking, imitating others' movements) or vocalizations (sniffing, throat clearing, grunting, obscenities, repeating words; APA, 2013). Motor and verbal tics are more commonly experienced by men and boys as well as those with an earlier onset of OCD (Højgaard et al., 2017).

Impairment and Distress

A recent epidemiological study found that high levels of impairment are characteristic of OCD (Ruscio et al., 2010). Two-thirds of those with OCD experienced severe role impairment in one or more areas such as home management, work, relationships, or social lives. The ability to manage family life or home responsibilities was the most common area of impairment, but

difficulties with interpersonal relationships were more likely to be rated as severe. On average, those with OCD lost about 46 days per year because their symptoms interfered with their ability to carry out daily responsibilities. About 6% of sufferers had been hospitalized due to their OCD symptoms.

Studies in clinical populations also reveal significant disability in OCD. In hospital settings, those with OCD report significant difficulties with social functioning and independent living skills, with levels of impairments similar to clients hospitalized with schizophrenia spectrum disorder (Bystritsky et al., 2001). Maintaining employment and leisure activities. relationships with others, taking care of their household, managing money, and physical health have been shown to be common areas of impairment in OCD (Bystritsky et al., 2001; Huppert, Simpson, Nissenson, Liebowitz, & Foa, 2009). In addition to the amount of time consumed each day by obsessions and compulsions, avoidance behaviors may prevent someone with OCD from entering feared situations. For example, someone with obsessions related to fears of contamination may avoid public spaces or medical settings; someone with obsessions related to violence or aggression may avoid interacting with loved ones. The rigidly held beliefs associated with obsessions and compulsions may also extend to family relationships as the person with OCD expects others to comply with these rules or rituals. For example, a client with contamination fears may require family members to go through certain washing rituals. Quality of life tends to be moderately low for those with OCD, especially for those with comorbid mental disorders (Bystritsky et al., 2001; Hertenstein et al., 2013; Huppert et al., 2009).

Differences in DSM-5

The main change in the DSM-5 was the removal of OCD from the anxiety disorders chapter. This move was somewhat divisive due to the similarities of excessive irrational fears

and avoidant or safety behaviors across these disorders (Abramowitz, 2018). A significant change to the symptom criteria was that people with OCD no longer needed to recognize that the obsessions or compulsions were excessive, unreasonable, or the product of their own mind (APA, 2000; 2013). There were some changes to the wording of OCD symptoms criteria; obsessive thoughts were defined as "unwanted" rather than "inappropriate" and obsessive "urges" replaced "impulses" (APA, 2013).

Prevalence

In the United States, approximately 2.3% to 2.7% of the general population will meet criteria for OCD at some point over the course of their lives and approximately 1.2% will have met criteria within the last year (Kessler, Petukhova, Sampson, Zaslavsky, & Wittchen, 2012; Ruscio et al., 2010). Women appear to have a slightly higher risk of developing OCD (Kessler et al., 2012; Ruscio et al., 2010). Older adults appear less likely to meet full OCD criteria, with only 0.3% of adults aged 65 and older experiencing OCD within the last year (Kessler et al., 2012). Within the United States, there does not seem to be significant differences in the lifetime prevalence of OCD across racial groups. Internationally there is some cross-cultural variability (Lewis-Fernández et al., 2010), with higher 12-month prevalence rates of OCD in the United States, European countries, Turkey, Australia, and South Korea (0.5-3%) as compared to metropolitan China (0%) and Nigeria (0.1%).

Course of the Disorder

The typical onset of OCD is late adolescence, with a mean age of onset of about 19 years (Ruscio et al., 2010; Schuurmans et al., 2012). However, age of onset differs across gender. Women are more likely to develop OCD slightly later than men; up to a quarter of men met criteria by age 10 (Ruscio et al., 2010). Early onset of OCD in childhood may have a stronger

hereditary component (Schurrmans et al., 2012). It is unusual for OCD to occur for the first time after 30 years of age, and most people live with the disorder for 9 to 18 years (Ruscio et al., 2010; Schuurmans et al., 2012).

The course of OCD is typically chronic, although symptoms may improve slowly over the course of years for some (van Oudheusden et al., 2018). Childhood trauma, recent negative life events, and lack of social support are associated with a more chronic course of OCD (van Oudheusden et al., 2018). About half of people with OCD reported seeking mental health treatment within the last year, although only 20% sought treatment for OCD specifically within the last year (Ruscio et al., 2010).

Comorbid Disorders

Most people with OCD (64% to 90%) experience other mental disorders over the course of their lives (Ruscio et al., 2010; Schuurmans et al., 2012). Anxiety disorders are most common, with 76% meeting for any anxiety disorder, 44% for social anxiety disorder, 43% for specific phobia, 37% for separation anxiety disorder, 20% for panic disorder, 8% for agoraphobia, and 8% for generalized anxiety disorder (Ruscio et al., 2010). Approximately 63% to 71% of those diagnosed with OCD are likely to also experience a mood disorder at some point during their lives and 32% experience a mood disorder concurrently (Brown, Cambell, Lehman, Grisham, & Mancill, 2001; Ruscio et al., 2010; Schuurmans et al., 2012). OCD is also comorbid with posttraumatic stress disorder (PTSD), although it is likely that the person's PSTD symptoms are more severe and precede the onset of OCD (Brown et al., 2001). The high comorbidity pattern between OCD, anxiety, and depressive disorders appears to be consistent across cultures (Lewis-Fernández et al., 2010). Up to 20% to 59% of children with OCD have a comorbid tic disorder, such as Tourette's disorder or persistent motor or vocal tic disorder (Højgaard et al., 2017).

Those with OCD are also likely to have substance use disorders (up to 39%) and impulse-control disorders (56%) such as oppositional-defiant disorder, attention-deficit/ hyperactivity disorder, conduct disorder, and intermittent explosive disorder (Ruscio et al., 2010). Typically, the onset of anxiety and impulse-control disorders predate the occurrence of OCD, while substance use and mood disorders are just as likely to occur before or after the onset of OCD (Ruscio et al., 2010).

Differential Diagnostic Issues

Recurrent intrusive thoughts and repetitive behaviors are symptoms shared by a range of disorders. In contrast to anxiety disorders like social anxiety disorder and specific phobia, the obsessions are typically less restricted to specific situations (APA, 2013). Additionally, the content of obsessions are typically odd or irrational and unrelated to real life concerns, unlike the preoccupations of generalized anxiety disorder or the ruminations of depressive disorders.

The presence of compulsions can typically differentiate between OCD and other disorders. However, eating disorders, tic disorders, and body dysmorphic disorder may have similar repetitive behavioral symptoms (APA, 2013). In these cases, the repetitive behaviors or thoughts would be restricted to specific situations characteristic of each disorder – such as hair-pulling in trichotillomania, appearance related concerns in body dysmorphic disorder, or eating behaviors in anorexia nervosa. However, if these behaviors are associated with specific obsessions or rules that are unrelated to other disorders, then OCD may better account for symptoms. For example, if eating is restricted due to fears of contamination rather the fears related to body shape and size. Tics (e.g., eye blinking, grunting) and stereotyped behaviors (e.g., rocking, head banging) are usually less complex than compulsions, although not always, and are performed in response to sensory urges rather than obsessions or rules (APA, 2013).

Differentiating between OCD and psychotic disorders can be difficult when clients have limited insight, and this distinction has considerable consequences for treatment (Hunter, Glazier, & McGinn, 2016). If the delusional beliefs are limited to only specific obsessions and compulsions, then an OCD diagnosis may better explain symptoms (APA, 2013). In contrast, if there are delusional beliefs unrelated to obsessions or if hallucinations or other thought disorder symptoms are present, then a psychotic disorder diagnosis may better explain symptoms. Both OCD and psychotic disorders can be diagnosed together if symptoms are not captured by a single diagnosis.

Treatment

Unfortunately, half of those with OCD do not seek mental health treatment and, of those, only about 10% obtain treatment that is evidence-based (Abramowitz, Blakey, Reuman, & Buchholz, 2018; Ruscio et al., 2010). In part, this is because OCD symptoms are underreported due to client shame and underdiagnosed due to lack of assessment by clinicians (Abramowitz et al., 2018; Hirschtritt, Bloch, & Mathews, 2017). Thus, it is important to assess for OCD symptoms at intake and consider using screeners such as the Yale-Brown Obsessive Compulsive Scale (Y-BOCS) or the briefer, Obsessive Compulsive Inventory – Short Form (Hirschtritt et al., 2017). Fortunately, most clients do benefit from evidence-based treatment, including cognitive behavioral therapy (CBT) and selective serotonin reuptake inhibitors (SSRIs; Hirschtritt et al., 2017).

Evidence-based intervention. Research supports the use of CBT (particularly exposure and response prevention, described in more detail below) as a first line treatment of OCD for both adults and children (Abramowitz et al., 2018; Hirschtritt et al., 2017; Ost, Riise, Wergeland, Hansen & Kvale, 2016). Psychopharmacology, specifically SSRIs, alone or in combination with

CBT is also effective – particularly for those who do not respond to CBT alone (Abramowitz et al., 2018; Ost et al., 2016). Although most people with OCD benefit from CBT and psychopharmacological treatment, almost half of clients still have difficulty managing their symptoms of OCD (Abramowitz et al., 2018). Subsequently, clinicians should work to manage client expectations of being symptom-free following treatment and set realistic goals of improving symptoms and functioning (Franklin & Foa, 2008). Throughout treatment, clinicians should also work with clients to identify and address specific barriers to progress.

Clinicians can take evidence-based steps to address barriers to treatment. Multiple modalities of CBT are evidenced to be effective in treating OCD, including individual, couples, family, internet-based, and group therapies (Abramowitz et al., 2018; Ost et al., 2016). Thus, clinicians may adjust treatment recommendations based on client factors like age, financial resources, access to care, and social support. For clients who have difficulty completing exposures outside of session, it may be helpful to incorporate interventions to build client motivation, confidence, and social support. Engaging family members in treatment and home visits by the clinician are additional strategies that may improve client's ability to generalize progress outside of session (Frankling & Foa, 2008).

Exposure and response prevention. CBT for OCD involves gradually and repeatedly confronting distressing obsessions through exposures while not engaging in compulsions – an intervention called exposure and response prevention (Abramowitz et al., 2018). Exposure and response prevention works by disrupting the cycle of obsessive thoughts and ritualized compulsions. OCD symptoms are maintained when clients become distressed by obsessive thoughts and then engage in compulsions in an attempt to lessen their distress (Franklin & Foa, 2008). While this response reduces distress in the moment, it strengthens the pattern of obsession

and compulsions – leading to more frequent and severe symptoms. To break this cycle, therapy focuses on helping clients to repeatedly face their obsessive thoughts through exposures while resisting the urge to engage in compulsions (Abramowitz et al., 2018; Franklin & Foa, 2008).

Exposures. Clinicians and clients collaboratively plan exposures by identifying the thoughts, situations, and behaviors that trigger clients' obsessions and compulsions. *In vivo* exposures involve facing real-life situations and behaviors that cause distress (Franklin & Foa, 2008). This might include repeatedly touching objects that are thought to be contaminated, saying and writing words or numbers that are typically avoided, or holding sharp objects that elicit violence obsessions. Imaginal exposures involve repeatedly thinking about the obsessions and what the client believes will happen if they have obsessive thoughts without engaging in compulsions (Franklin & Foa, 2008). In as much detail as they can, clients practice imagining feared situations like contracting a deadly disease, eternal damnation, killing loved ones, getting cancer, or unwanted sexual images. Because obsessive thoughts tend to be thoughts that elicit strong emotions and taboo cultural beliefs, exposures may involve taboo situations (Abramowitz & Jacoby, 2014). For example, someone who avoids eating certain foods due to contamination fears might complete exposures that include eating food off the floor. As an additional example, someone who has obsessive thoughts of hurting her baby might complete exposures that include holding a knife while standing near her child (Abramowitz et al., 2018).

Response prevention. While completing exposures, clients simultaneously engage in response prevention – where they stop themselves from acting on compulsive or avoidance urges (Abramowitz et al., 2018; Hirschtritt et al., 2017). For example, clients with prayer compulsions may practice saying blasphemous things *without* praying afterwards. Exposure and response

prevention is practiced repeatedly to be effective, including weekly or biweekly therapy sessions and homework to complete exposures daily (Hirschtritt et al., 2017; Franklin & Foa, 2008).

Case example of exposure and response prevention. Mateo was a 20 year-old, single, Hispanic college student who lived at home with his father. He sought treatment at the university student-counseling center for "strange behaviors." He often doubted that he had completed various tasks such as locking doors and turning off the stove. He reported that he had skipped class several times during the semester because he had to return home to make sure that he had locked the door. He feared that, if he did not re-check the locks, that someone might break in, hurt his father, or steal items. Locking the door to his car posed a similar problem. He had difficulty using computers on campus or at the public library because he feared that he would forget to log out and someone would steal his identity. Given that he did not own his own computer, it was difficult to completely avoid these computers because of papers for his classes. He would repeatedly check that he really did sign out of the computer and sometimes had to return to the computer lab to make sure that he was not still signed in or that he had not left any personal belongings behind. He also took indirect routes to his destinations when driving to avoid streets that had multiple potholes. When he hit a pothole, he would have the thought that he had hit an animal or person and would need to either stop and get out of the car or circle the block (depending on traffic) to make sure that it was indeed only a pothole. He often tried to suppress these checking behaviors and doubting thoughts but was typically unsuccessful. He also took pictures with his cell phone each time he turned off or locked something and repeatedly checked these pictures for reassurance. Moreover, his symptoms were distressing and impairing.

A principal diagnosis of OCD with good insight was assigned. Mateo agreed to sessions twice weekly to work on his OCD. Treatment was guided by the procedures outlined in *Treating*

your OCD with exposure and response (ritual) prevention (Yadin, Foa, & Lichner, 2012) and Overcoming obsessive compulsive disorder: A behavioral and cognitive protocol for the treatment of OCD (Steketee, 2008).

The first two sessions involved psychoeducation about anxiety and the development and maintenance of OCD. The therapist provided a rationale for exposure and response prevention and highlighted the scientific support for these procedures. Mateo collaboratively developed a fear hierarchy with the therapist. His hierarchy included items such as logging off computers, carrying a backpack with books (that could accidentally be left somewhere), locking the door to his house, locking his car, and driving on streets with potholes. He rated his distress for each item using the Subjective Units of Distress Scale (SUDS). A zero SUDS rating indicates no anxiety. A SUDS rating of 100 indicates maximum anxiety. SUDS are also used to assess level of emotional engagement during exposures. Mateo quickly grasped the logic behind exposure and response prevention and appeared to be very motivated.

Session three represented the first exposure session, which was scheduled for an hour and half (as were all exposure sessions). The therapist and client walked to computer lab where the client practiced logging in and out of one computer in each row without checking to make sure that he was truly logged out or taking pictures with his cell phone. They then repeated this procedure another computer lab on campus so that the exposure lasted 60 minutes. For exposures to be beneficial, it is important for clients to not only approach situations that they have been avoiding but also for them to feel anxiety during the situation. Low anxiety ratings often suggest that the client is engaging in avoidance during the exposure (e.g., doing a mental ritual) or that the exposure situation does not adequately fit the client's fear (e.g., driving on a street with no potholes). Mateo was appropriately engaged in the exposures, as reflected by his

SUDS ratings, which were taken every five minutes: 80, 85, 80, 75, 75, 70, 70, 60, 60, 50, 40, 30.

Mateo had been warned prior to the exposure that the therapist would not offer any reassurance during the exposure. Indeed, one perspective on OCD treatment suggests that a fundamental task for the client is to learn to tolerate uncertainty about whether or not their feared outcomes will occur (Grayson, 2014). From this framework, compulsions are viewed as an attempt to attain perfect certainty that the feared outcome has been prevented, which is impossible. Therefore, if Mateo asked "I did log out of that computer, right?" or "You wouldn't let me do this if it wasn't safe, right?" or "No one is going to steal my identity, right?", the therapist would respond with something like "As we discussed, I am not going to offer you reassurance. In fact, this experience is about being unsure about whether you logged off the computer and living your life anyway. As you know, trying to be certain about these things is ruining your life." As part of the treatment rationale, the therapist had pointed out that the client tolerates uncertainty in other areas of life unrelated to his OCD. For example, the client never knows if, when he sees his dad, it will be the last time; however, he, like most people, assumes that his dad will be fine (even though he cannot be certain) and goes about living his life.

Rather than offer reassurance in response to high anxiety, the therapist would instead offer encouragement by saying things like "I know that this is hard, but you are doing exactly what you need to do to overcome your OCD. Keep it up." During the exposure, the therapist would encourage the client to be fully engaged in the moment (e.g., "What are you noticing now?"). The therapist would also make explicit any feared outcomes without offering reassurance (e.g., "We don't know whether or not someone will steal your identity from our work together today. What are you afraid might happen if they did?" or "These exposure give us

the chance to find out what happens when you do something you are afraid of without the rituals. Let's give ourselves the chance to see what happens.").

At the end of session, the therapist asked Mateo what he learned from the exposure. Mateo responded that he was surprised to learn that his anxiety went down over time despite not doing any checking. Although Mateo's habituation (decreasing) pattern of SUDS is quite common during exposures, research shows that habituation within sessions is not necessary. Rather, successful exposure treatment is generally associated with a decrease in SUDS across sessions and not necessarily within sessions (Sripada & Rauch, 2015). Mateo agreed to homework of logging in and out of campus computers for an hour each day until the next session. Mateo and the therapist agreed to meet at the public library for their next session.

Session four was quite similar to session three but involved Mateo logging in and out of various computers at the public library. Mateo also brought his bookbag containing some textbooks because he also feared accidentally leaving some of his things behind when working in a public place. Mateo practiced unloading his books from his backpack, logging into the computer, packing his books back up, logging off the computer, and then walking away without checking or taking pictures with his phone. He repeated the process several times at different computers in other parts of the library. After doing exposure and extinguishing fear to one cue (logging out of a public computer), that cue can be combined in an exposure with a novel feared cue (unloading a backpack in a public place). This strategy of "deepened extinction" has been shown to reduce spontaneous recovery of fear (for a review of strategies to maximize the effectiveness of exposure therapy, see Craske, Treanor, Conway, Zbozinek, & Vervliet, 2014). Additionally, the public library was chosen for this exposure rather than campus computer labs because conducting exposures in multiple contexts decreases context renewal, which is the return

of fear when a feared stimulus is encountered in a context different from the context in which exposure therapy was conducted (Craske at al., 2014).

Mateo had completed his homework of three days of practicing logging in and out of computers at various labs on campus for about an hour each day. He reported that, by the end of the third day, he ended his practice after about 30 minutes because it was "boring" rather than anxiety-provoking. During the 45-minute exposure for session four, his SUDS ratings were: 70, 65, 50, 40, 40, 30, 30, 10, 0. For homework, Mateo agreed to return to the library at least twice and practice doing the same exposure procedure for at least 45 minutes each time. Mateo told the therapist that the first exposure session made him appreciate the importance of not engaging in avoidance and checking behaviors and that he had, on his own, decided to drive the most direct route to places without doing any checking since the last session. He asked whether he should continue this practice since it had not been discussed previously in session. Since it sounded like Mateo was indeed refraining from any compulsions with regard to driving (even when hitting a pothole), the therapist encouraged him to continue this practice. Mateo reported that driving without checking was already becoming easier. When asked what he had learned from this week's exposures, Mateo responded "They are just thoughts. Just because they go through my mind doesn't mean that they are true." For homework, Mateo agreed to go to a friend's house with his backpack, log onto a website on his friend's computer, log back out, and leave the computer without checking. He would also take at least one book out of his backpack and put it away without checking. He also agreed to repeat the exposure at the public library on his own at least once.

At session five, Mateo reported good compliance with his homework assignments, which was praised by the therapist. Mateo's third exposure involved driving (with the therapist as a

passenger) the route involving the most potholes to a series of stores (i.e., a convenience store, a supermarket, the mall). At each location, Mateo locked his car door one time only and walked into the store without doing any checking. Mateo and the therapist stayed in the store where the car could not been seen for a length of time long enough that Mateo believed that someone would have the chance to break into and/or steal his car if it were not locked (about 5 - 10 minutes). For this 60-minute exposure, Mateo's SUDS were: 95, 70, 50, 85, 50, 50, 75, 40, 40, 50, 40, 30. Mateo's daily homework was to drive somewhere a minimum of 4 times and to follow the procedures practiced in session with the therapist. Mateo was to also practice the same procedure when locking the door when leaving his home. He would lock the door once and walk away without checking. Indeed, the procedure applied to any lock he might encounter (e.g., filing cabinets, a bathroom door).

At session six, Mateo reported good compliance with homework and was praised by his therapist. Session seven was similar to session six but involved driving to different stores in a different part of town. His SUDs ratings were much lower for this 60-minute exposure: 50, 40, 40, 35, 30, 30, 20, 20, 10, 10, 5, 0. At this point in therapy, Mateo had ceased his checking behaviors. His homework was to continue to "avoid avoidance" in all areas addressed in therapy. Mateo rarely cooked, as his father did most of the cooking or he ate out. Nevertheless, Mateo was instructed to intentionally cook with the stove daily until the next session without doing any checking of the stove when he was finished cooking. It was agreed that, if everything continued to go well, the following session would serve as the termination session.

At session eight, Mateo reported that he had little difficulty with the assignment of using the stove, which he did for three out of four days since the last session. He reported that being busy, rather than anxiety, interfered with his ability to cook on one of the days. Mateo and the

therapist reviewed the things that Mateo had learned. The importance of continuing to avoid avoidance and refrain from rituals was discussed as being key to maintenance of gains. Mateo rerated his hierarchy, and he rated no item higher than 20 in terms of fear, which represented a significant improvement. The therapist told Mateo not to hesitate to contact the clinic if new problems arose or if he needed booster sessions to get back on track.

Body Dysmorphic Disorder

Case

Jessica is a 20-year-old college student who presented for therapy due to thoughts of suicide related to her concerns about her skin. She reports constantly thinking about her acne and how greasy her face looks. She says that she cannot stand people looking at her or touching her face. For example, she avoids hugging family members because "if anyone accidentally touches my face, my acne gets worse, and there is no way to fix it." When Jessica comes to therapy, she appears to wear a thick layer of makeup and often talks with her hands covering her cheeks or other parts of her face. She makes comments like "You don't understand. You would be scared if you saw me without my makeup." and "It really stresses me out that you keep looking at my face." She indicates that she has never had a specific plan or intention to act on her suicidal thoughts, but that she feels hopeless and thinks about dying several times per week due to fears that her skin will never get better. According to Jessica, she began worrying about her skin when she started getting pimples around age 12. She describes spending several hours throughout the day putting on and reapplying her makeup. She also spends her free time searching for tips on the internet for hiding or treating acne and greasy skin. During classes and when with her friends, she will often check her skin using her cell phone camera. At home, she frequently checks her skin in the bathroom mirror. Jessica indicated that these worries have gotten in the way of her

schoolwork and social life as she avoids participating in classes, meeting new people, and attending clubs because she does not want people to look at her. She will also get into conflicts with friends and family members who accidentally touch her face, look at her the wrong way, or make comments about her concerns. Jessica is currently on prescription medication to treat her acne, which seems to be within the normal range for someone of her age.

Characteristics and Symptoms

People with body dysmorphic disorder are excessively preoccupied with one or more flaws in their physical appearance that are slight or not even observable to others (APA, 2013). Common areas of concern are the hair, skin, stomach, breasts, and nose, although some may be worried about their appearance more generally (Margues et al., 2011; Schieber, Kollei, de Zwaan, & Martin, 2015). It is also common for people with body dysmorphic disorder to have multiple concerns about their body (Schieber et al., 2015). Those with body dysmorphic disorder may be concerned about their weight, but these concerns should not be better explained by an eating disorder (APA, 2013). The preoccupations about one's appearance are distressing and intrusive. To combat these preoccupations, those with body dysmorphic disorder also engage in repetitive behaviors or mental actions, such as reassurance seeking, skin-picking, or grooming (APA, 2013). Sometime the behaviors are intended to hide perceived flaws (e.g., covering flaws with makeup or clothing) or fix flaws (e.g., exercising or seeking cosmetic procedures). These symptoms can be time consuming, with about a third of people spending over an hour per day performing repetitive behaviors related to their appearance (Schieber et al., 2015). The concerns and behaviors of body dysmorphic disorder are severely disproportionate to the situation and must cause significant distress or impairment (APA, 2013).

Other symptoms reported by some people with body dysmorphic disorder impact how they relate to others and to their own body, although these symptoms are not included in the diagnostic criteria of the disorder (APA, 2013). Some people describe beliefs or delusions that others are noticing or mocking their perceived flaws. These beliefs or fears may be associated with social isolation, anxiety, or low self-esteem. Body dysmorphic disorder may also impact feelings of incompleteness or "not just right" experiences (Summers, Matheny, & Cougle, 2016).

Excessive preoccupations with appearance exists cross-culturally, although the presentation of symptoms often reflects cultural beliefs of attractiveness. Within the United States, Asians and Asian Americans reported fewer concerns about body shape and greater concerns with straight hair and dark skin than White Americans (Marques et al., 2011). In contrast, the concerns of White, Black, and Latinx Americans with body dysmorphic disorder are similar (Marques et al., 2011). Shubo-kyofu, the Japanese term describing a phobia of having a deformed body, is a variant of taijin kyofusho (Fang & Hofmann, 2010). Although similar to body dysmorphic disorder, shubo-kyofy is experienced as the fear of offending others with one's appearance (Fang & Hofmann, 2010). There are also some differences in how body dysmorphic disorder presents across genders. Women are more likely to have comorbid eating disorders, and men are more likely to be concerned about their genitals or muscle mass (APA, 2013).

Insight specifier. Body dysmorphic disorder can be specified with absent insight/ delusional beliefs, poor insight, and good or fair insight (APA, 2013). Level of insight describes the extent to which the person accepts their beliefs about their appearance as true (e.g., I am ugly, unattractive, or deformed).

With muscle dysmorphia specifier. The muscle dysmorphia specifier describes people who are concerned with being too small or not muscular enough (APA, 2013). This specifier

should be given even if the person is also concerned with other areas of the body – which is often the case (APA, 2013; Cunningham et al., 2017). Most people with muscle dysmorphia diet, exercise, take supplements, use anabolic-androgenic steroids, or life weights as a means of coping with their thoughts (Cunningham et al., 2017). Other repetitive behaviors are similar to those with body dysmorphic disorder generally, such as mirror checking, checking weight, seeking reassurance, or hiding body with loose clothing. In addition to being distressing and time consuming, these behaviors may lead to health issues (Cunningham et al., 2017). This form of body dysmorphic disorder is experienced primarily – but not exclusively – by men (APA, 2013; Cunningham et al., 2017).

Impairment and Distress

People with body dysmorphic disorder report significant functional impairment and lower quality of life. In clinical settings, over a third of those with the disorder do not work consistently due to symptoms, and about one in five receive disability pay (Didie, Menard, Stern, & Phillips, 2008). It is common for people with body dysmorphic disorder to avoid interacting with others due to their shame, embarrassment, or concerns about their appearance. These social fears and avoidance symptoms predict greater impairment (Kelly, Walters, & Phillips, 2010). People with this disorder may avoid romantic relationships, friendships, or sexual interactions due to the shame, embarrassment, and anxiety associated with their flaws being seen (Cunningham et al., 2017). About 72% of people reported they have avoided going to work or school for more than one week straight, and, on average, about 70 days are taken off work per year due to symptoms (Didie et al., 2008). Maintaining consistent work seems to be particularly difficult for those with more chronic symptoms, comorbid disorders, suicidality, or severe depressive symptoms (Didie et al., 2008). Approximately 30% of people with body dysmorphic disorder experience self-

harming or suicidal ideation (Schieber et al., 2015). Men with muscle dysmorphia may be at higher risk of suicidal ideation and attempting suicide (Cunningham et al., 2017). Feelings of shame in body dysmorphic disorder are associated with a higher risk of functional impairment and suicidal ideation (Weingarden, Renshaw, Wilhelm, Tangney, & DiMauro, 2016).

Differences in DSM-5

In addition to moving to the newly created OCDRs chapter of the DSM-5, there were changes to the criteria for body dysmorphic disorder (APA, 2000; 2013). The biggest change is that, at some point, the person must have engaged in repetitive behaviors or mental actions in response to their appearance concerns (APA, 2013). Including behavioral symptoms as a requirement of the diagnosis reflects the conceptualization of OCRDs as disorders in which people manage distress through repetitive and compulsive behaviors. The DSM-5 criteria also added specifiers for level of insight and muscle dysmorphia (APA, 2013).

Prevalence

The prevalence of the disorder does not seem to have changed between the DSM-IV-TR and DSM-5 (Schieber et al., 2015). The prevalence of body dysmorphic disorder is not well studied, but estimates range from 0.7% to 3% in the general population of the United States (Fornaro et al., 2009; Schieber et al., 2015). The disorder is slightly more common in women than men (Schieber et al., 2015). According to one systematic review, the estimated prevalence of body dysmorphic disorder varies significantly by setting (Veale, Gledhill, Christodoulou, & Hodsoll, 2016). Prevalence rates of the disorder range from 3.3% for adults to 7.4% for adolescents in inpatient settings and approximately 7.4% in adult outpatient settings. The rates of the disorder are typically higher in cosmetic medical settings, ranging from 5% to up to 20% in dermatology, orthodontic, and rhinoplasty settings. Detection and diagnosis of body dysmorphic

disorder is low due to shame and underreporting from those with the disorder as well as lack of awareness from health professionals (Veale et al., 2016).

Course of the Disorder

Most people with body dysmorphic disorder develop symptoms in early adolescence, and symptoms typically become chronic without treatment (Bjornsson et al., 2013). The average age of onset is about 17 years old (Bjornsson et al., 2013). Earlier onset seems to be associated with a greater chance of suicidal ideation, history of violence, partial hospitalization, comorbid diagnoses, and eating disorder diagnosis (Bjornsson et al., 2013). Body dysmorphic disorder is usually chronic, with a 9% probability of achieving full remission within a year; for those that do remit, the probability of relapse is about 15% (Phillips, Pagano, Menard, & Stout, 2006).

Remission of body dysmorphic disorder is more likely when comorbid disorders such as OCD or depression improve (Phillips & Stout, 2005).

Comorbid Disorders

Depressive, anxiety, OCRDs, substance-use, and eating disorders are commonly comorbid with body dysmorphic disorder. Over their lifetime, as many as 76% to 87% of people with body dysmorphic disorder meet criteria for a mood disorder, 71% for an anxiety disorder, 7% to 20% for an eating disorder, and 16% to 59% for a substance use disorder (Bjornssona et al., 2013; Didie et al., 2008). Of the mood disorders, major depressive disorder seems to be the most common with comorbidity rates of 72% to 83%; bipolar disorders are much less prevalent, occurring in less than 10% of cases (Bjornssona et al., 2013). About a third of people with body dysmorphic disorder will also have social anxiety disorder, although it seems that the social anxiety may develop first (Bjornssona et al., 2013; Coles et al., 2006). Panic disorder and specific phobia are also common (Bjornssona et al., 2013). Consistently with the shared

diagnostic and etiological features of the disorders, about one third of people with body dysmorphic disorder also meet criteria for OCD.

Developing a substance use disorder seems to be more widespread in those who develop body dysmorphic disorder before age 18 (experienced by 39% to 59% of body dysmorphic disorder cases), compared to those who develop the disorder after age 18 (29% to 32% of cases; Bjornssona et al., 2013). Alcohol use disorder is slightly more common than non-alcohol substance use disorders.

Eating disorders may be more common when body dysmorphic disorder is developed in childhood or adolescence (Bjornssona et al., 2013). Almost all people with an eating disorder report beliefs that their body is ugly or unattractive, but less than half will screen positive for possibly having body dysmorphic disorder (Dingemans, van Rood, de Groot, & van Furth, 2012). Symptoms of body dysmorphic disorder appear prevalent across the different eating disorders, not just in anorexia nervosa (Dingemans et al., 2012).

Differential Diagnostic Issues

Repetitive thoughts and behaviors may be seen across the OCRDs. However, with body dysmorphic disorder, the preoccupations are focused on perceived flaws in the person's appearance (APA, 2013). Additionally, body dysmorphic disorder can be distinguished from OCD because the repetitive behaviors are performed to check, hide, or correct the perceived flaws in appearance (Fang & Wilhelm, 2015).

Eating disorders and body dysmorphic disorder can be difficult to differentiate as both can present with appearance related concerns or excessive dieting and exercise (APA, 2013; Fang & Wilhelm, 2015). These two types of disorders can be diagnosed at the same time if there are additional appearance concerns and repetitive behaviors beyond those captured by an eating

disorder alone. However, if symptoms are restricted to disordered eating behaviors and concerns about weight, then an eating disorder diagnosis like anorexia nervosa might be more appropriate (APA, 2013).

Social anxiety symptoms are reported by the majority of people with body dysmorphic disorder (66%), but often these symptoms are better accounted for by the body dysmorphic symptoms (Kelly et al., 2010). In social anxiety disorder, the fears are focused on being negatively evaluated or embarrassed (APA, 2013). These social fears are typically more generalized than the specific concerns related to appearance seen in body dysmorphic disorder (Fang & Wilhelm, 2015). Additionally, those with social anxiety disorder typically try to cope with their fears through avoidance behaviors whereas those with body dysmorphic disorder actively engage in repetitive behaviors like grooming, mirror checking, or skin-picking (APA, 2013).

Treatment

Despite the chronic course of body dysmorphic disorder, there is evidence that treatments can be effective (Phillipou, Rossell, Wilding, & Castle, 2016). However, not all treatments seem to be equally effective, as the even people seeking therapy and psychopharmacological treatments have low remission rates. There is evidence from randomized controlled trials that CBT, metacognitive therapy, and some medications such as fluoxetine and clomipramine may be helpful. The treatment of body dysmorphic disorder, particularly with muscle dysmorphia, is under researched and, thus, recommendations should be taken with caution.

CBT for body dysmorphic disorder typically includes exposure and ritual prevention, cognitive restructuring, and mindfulness or perceptual retraining (Phillipou et al., 2016). There is growing support for the use of CBT to treat body dysmorphic disorder, with evidence that CBT

is more effective than supportive therapy or anxiety management (Enander et al., 2016; Mohajerin, Bakhtiyar, Olesnycky, Dolatshahi, & Motabi, 2019; Veale et al., 2014). With body dysmorphic disorder, there is an interpretation bias for appearance flaws (Fang & Wilhelm, 2015). Even though people with the disorder are typically averaging looking, they over interpret and become preoccupied with perceived flaws. These distressing thoughts lead to anxiety, depressed mood, and ritualistic behavior intended to manage these concerns (Fang & Wilhelm, 2015). Thus, CBT focuses on modifying these maladaptive patterns of thinking and acting.

Cognitive interventions are used to alter the way people with body dysmorphic disorder respond to their thoughts (Fang & Wilhelm, 2015; Mohajerin et al., 2019). Maladaptive thoughts related to appearance might range from catastrophic thinking (e.g., "no one could love me because I look hideous") to perfectionistic or all-or-nothing thinking (e.g., "I look hideous because my nose it too big"). The goal of cognitive interventions is to change the thinking pattern from narrow and rigid to flexible and adaptive (Fang & Wilhelm, 2015; Mohajerin et al., 2019). Clients practice identifying these negative interpretative biases in their thoughts (e.g., "I have to hide my scar because it makes me look deformed") and considering alternative or more realistic interpretations (e.g., "Other people say they don't notice my scar unless I point it out"). Thoughts about the importance of one's appearance may be tied to deeply held beliefs about selfworth and relationships (Fang & Wilhelm, 2015). Subsequently, therapy may involve developing other areas of self-worth and increasing client's awareness of these strengths to challenge maladaptive beliefs.

Exposure interventions address issues with visual processing, problematic behaviors, and distress tolerance in body dysmorphic disorder (Beilharz, Castle, Grace, & Rossell, 2017; Fang & Wilhelm, 2015; Mohajerin et al., 2019). Exposures to one's own image might involve looking

into a mirror, focusing on the part of the appearance that causes the most distress, and then avoiding engaging in ritual behaviors like touching, picking, or covering the area (Beilharz et al., 2017; Fang & Wilhelm, 2015). Clients may also wear mismatched jewelry, avoid makeup, or do other things that they typically avoid. Exposures may also include interacting with others without engaging in ritual behaviors like seeking reassurance or checking their images in the mirror. The goal of exposures is to experience and tolerate distressing emotions and thoughts through repeatedly facing avoided situations without engaging in ritualistic behaviors. Exposures help clients learn that what they fear happening (e.g., people will stare at my thinning hair if I do not cover it up) are unlikely to happen – and that if it does happen, they learn that they are able handle it (Fang & Wilhelm, 2015). Together with cognitive interventions, behavioral interventions like exposures work to change the pattern of repetitive negative thoughts about appearance as well as the accompanying ritualistic behaviors.

Although many (up to 76%) with body dysmorphic disorder may seek cosmetic treatment, these treatments are associated with poor outcomes for the majority of people (Bowyer, Krebs, Mataix-Cols, Veale, & Monzani, 2016). Cosmetic treatments may include rhinoplasty, Botox or collagen injections, implants, breast augmentation, mole removal, dental interventions, and other plastic surgeries. After having surgery or other cosmetic procedures, people with body dysmorphic disorder often do not notice any difference in their appearance, they may continue to be unsatisfied with the treated area, they may worry that the area will become ugly in the future, or they may develop new concerns about their appearance (Bowyer et al., 2016). The limited research in support for cosmetic procedures has only found positive outcomes for some people with mild or highly localized concerns (Bowyer et al., 2016). In contrast, there are significant potential negative outcomes to cosmetic procedures beyond the

poorer symptom outcomes for most clients, including self-mutilation to rectify surgeries, increased suicidality, and violent or legal threats towards clinicians (APA, 2013; Bowyer et al., 2016; Fang & Wilhelm, 2015). Because there is little evidence that cosmetic procedures are helpful in treating body dysmorphic disorder, these treatments are not recommended (Bowyer et al., 2016).

Hoarding Disorder

Case

John is a 63-year-old retired construction worker. His primary care physician referred him for therapy because he was concerned about John's increasingly poor hygiene and his history of family conflict related to John's living conditions at home. According to John, his wife and adult son complain that the house is unlivable due to how cluttered and messy it is. John agrees that his tendency to "keep everything" has gotten out of hand in recent years, but that the things he keeps are "still good" or important. John says he has enjoyed collecting things from flea markets for years, including books, household items, and tools. He also reports that he keeps all "important mail" (e.g., bills, bank statements) and that he likely has mail from the last 25 years. Although John agrees that the house would be more usable if there was less stuff, he describes significant anxiety about clearing out the house. He says it is difficult to sort or discard his possessions and that he gets angry when he finds outs that his wife or son have done so. John reports that the clutter fills most of the rooms in the house, except his wife's bedroom where she spends most of her time when at home. He says he makes "routes" through the house and piles items to keep small sections of the couch and kitchen counter clear. According to John, his wife visits their son's house daily in order to cook and take showers. John says he is able to shower if he wants to by moving the stuff in his tub into another room. Other issues that seem to impact

John's ability to maintain appropriate hygiene and safety at home include finding rotting food in unexpected places, a mouse infestation, blocked windows, and little space to sleep in his bedroom. John appears ambivalent about treatment but says he is willing to try therapy to appease his family and to prevent his living situation from becoming worse.

Characteristics and Symptoms

Hoarding disorder is defined by the urge to keep saving items and distress related to parting with items, which leads to difficulty discarding possessions that accumulate in the household (APA, 2013). The unrelenting need to save items, regardless of the uselessness or value of these items, causes the living spaces of those with hoarding disorder to become cluttered. The reasons given for refusing to throw away, recycle, or give away items include fears of losing important information, the sentimental value of items, or beliefs that the items might be useful in the future. Old newspapers, magazines, books, clothing, and paperwork are commonly hoarded items.

To meet criteria for hoarding disorder, the active living spaces of the person must become so cluttered with accumulated items that it significantly interferes with the use of these spaces (APA, 2013). Piles of unrelated objects stacked on top of each other in a disorganized manner fill the active living areas of the home, such as the kitchen, bedrooms, living room, and bathrooms. The floors, tables, and other furniture might be unusable due to the amount of items on them. If the accumulation is limited to periphery areas like the garage, basement, attic, yard, or barn, then a diagnosis of hoarding disorder would not be appropriate because the hoarding behaviors do not interfere with active living spaces. The exception to this criterion is cases in which the only reason these living spaces are uncluttered is because other people have stepped in to clear out the

space. For example, family members, government officials, cleaners, and social services might intervene to clean out – or force the person to clean out – the home (Weiss & Khan, 2015).

The hoarding behaviors must cause significant distress or impairment (APA, 2013). Impairment would include difficulty maintaining relationships, employment, personal health, or other important areas of functioning. The hoarding behaviors may also create an unsafe living situation for the person with the disorder or for other people. The symptoms, distress, and impairment should not be accounted for by another mental or medical condition.

Persistent hoarding that go beyond culturally acceptable behavior has been documented cross-culturally, although it is unclear how prevalent the disorder is outside of the West due to the lack of research (Fernandez, Nordsletten, Mataix-Cols, 2016). It is important to consider the hoarding behavior within the individual's cultural context. For example, values of thriftiness and not being wasteful in combination with socially sanctioned saving can lead to the accumulation of objects that others may perceive are excessive (Fernandez de la Cruz, 2016). However, even in these cultural contexts such as China, hoarding disorder can be recognized as the hoarding will be excessive to what is culturally acceptable and will be associated with significant distress or impairment (Wang, Wang, Zhai, & Jiang, 2016).

Insight specifier. People with hoarding disorder have different levels of insight into how problematic their hoarding behaviors and beliefs are (APA, 2013). Hoarding disorder can be specified with absent insight/ delusional beliefs if the person completely believes that their hoarding is not causing problems even when faced with evidence against this belief. Hoarding disorder with poor insight describes those who mostly believe that their hoarding is not problematic. People who have hoarding disorder with good or fair insight are aware that their hoarding is problematic.

Excessive acquisition specifier. While hoarding disorder describes people who have difficulty discarding their possessions, most with the disorder also actively acquire new possessions (APA, 2013; Timpano et al., 2011). Those who have hoarding disorder with excessive acquisition often feel distressed when they are stopped from buying or acquiring more possessions. Excessive acquisition may include unnecessarily buying new things, collecting free objects, or, in rare cases, stealing.

Impairment and Distress

Hoarding disorder is associated with lower quality of life and difficulty functioning. Broadly, excessive acquisition and older age appear to predict greater levels of impairment and distress (Cath, Nizar, Boomsma, & Mathews, 2017; Timpano et al., 2011). Compared to clients with OCD in hospital settings, those with hoarding disorder reported poorer living conditions and lower levels of safety, including higher rates of being the victims of crime and feeling unsafe in their neighborhoods (Saxena et al., 2011). Hoarding may lead to unhygienic conditions due to difficulty accessing bathrooms or kitchens, fire hazards due to stacks of newspapers placed by heaters, or dangers of being unable to leave the house due to blocked exits (Timpano et al., 2011; Weiss & Khan, 2015). Older adults with hoarding disorder may also have increase risk of falling, poor hygiene, poor nutrition, medication mismanagement, and health issues (Ayers, Najmi, Mayes, & Dozier, 2014).

People with hoarding disorder can also face legal problems, health code sanctions, and housing troubles (Weiss & Khan, 2015). Eviction, landlord-tenant disputes, charges of child abuse, health code violations, and homelessness are examples of the significant potential consequences of hoarding behaviors (Ayers, et al., 2014; Weiss & Khan, 2015). Low levels of financial security is common for those with hoarding disorder (Saxena et al., 2011).

Hoarding disorder is associated with social impairments (Buscher, Dyson, & Cowdell, 2014; Timpano et al., 2011). Spouses, caregivers, and children of the person with hoarding disorder may become socially isolated and embarrassed about the conditions at home (Buscher et al., 2014). Conflict about hoarding behaviors, denial that a problem exists, fights for control, and resentment impact both the client and their family; however, themes of hope, loyalty, and caretaking are also reported.

Differences in DSM-5

Hoarding behaviors were previously considered a form of OCD before being recognized as a separate disorder in the DSM-5 (APA, 2000; 2013). The newly developed diagnostic criteria do not limit the diagnosis based on the actual value of the hoarded items nor whether or not the person actively acquires new possessions. Consistent with the development of a separate diagnosis for hoarding disorder from OCD, hoarding behaviors no longer need to be associated with compulsions or obsessions in order to be diagnosed (APA, 2013).

Prevalence

Prevalence rates of hoarding disorder range from 2% to 6% (Cath et al., 2017; Timpano et al., 2011). Hoarding disorder occurs at similar rates across gender groups, although some studies suggest that older men might develop more severe symptoms (Cath et al., 2017; Timpano et al., 2011). Prevalence rates across non-White and non-Western populations are understudied (Fernandez de la Cruz et al., 2016). Older adults are more likely to experience hoarding disorder and more severe forms of the disorder (Cath et al., 2017).

Course of the Disorder

Although most people experience symptoms before adulthood, age of onset could range from early childhood to middle adulthood (Morris et al., 2016; Zaboskietal et al., 2019). It can be

difficult to recognize hoarding symptoms in childhood because caregivers control how much children are able to accumulate and because collecting behaviors are developmentally appropriate for young children (Morris, Jaffee, Goodwin, & Franklin, 2016). Symptoms may develop years before the person experiences significant impairment or distress related to their hoarding (Zaboskietal et al., 2019). Hoarding may cause increasing problems over time for two reasons: symptoms appear to worsen with age and the total number of accumulated objects grows larger each year without intervention (Cath et al., 2017; Zaboskietal et al., 2019). Thus, clients who present with hoarding disorder may be more likely to be in middle or late adulthood.

Comorbid Disorders

The majority of people with hoarding disorder experience comorbid emotional disorders (Ayers et al., 2014; Frost, Steketee, & Tolin, 2012). About half of people with hoarding disorder also have major depressive disorder, 24% have generalized anxiety disorder, 23% have social anxiety disorder, 18% have OCD, 14% have a specific phobia, and 7% have PTSD (Ayers et al., 2014; Frost et al., 2012). Symptoms of impulsivity, inattention, and hyperactivity seem to occur at higher rates with hoarding disorder. About a third of people with hoarding disorder will meet criteria for ADHD, 5% meet criteria for hair-pulling disorder, 6% report difficulties with gambling, and 10% meet criteria for kleptomania – although stealing behaviors may be better accounted for by the hoarding symptoms with excessive acquisition (Frost et al., 2012; Morris et al., 2016). Substance use disorders, eating disorders, bipolar disorders, and panic disorder are much less common, with a less than 2% comorbidity rate (Frost et al., 2012).

Differential Diagnostic Issues

Neurological damage, particularly to the cingulated and anterior ventromedial prefrontal cortices, can lead to hoarding and accumulating behaviors (APA, 2013; Ayes et al., 2014; Tolin,

2011). Traumatic brain injury, brain surgery to remove tumors or treat seizures, strokes, brain infections, and other causes of central nervous system damage can cause symptoms of hoarding disorders (APA, 2013; Tolin, 2011). Neurocognitive disorders, including frontotemporal dementia, Alzheimer's disease, and other dementias, can also lead to the hoarding behaviors or the gradual accumulation of objects that interfere with living spaces – particularly in cases of neglect (APA, 2013; Ayers, et al., 2014). The easiest way to discern if symptoms may be better accounted for by a neurological or neurocognitive disorder is to consider when symptoms developed relative to the neurological damage. For those who develop hoarding behaviors due to neurological disease or another medical condition, the symptoms should not be present before the onset of the medical condition.

Autism spectrum disorder, intellectual developmental disorder, and other neurodevelopmental disorders may also share features with hoarding disorder. Specifically, some people with neurodevelopmental disorders may collect or accumulate certain types of objects or they may become distressed when forced to part with certain possessions (APA, 2013; Morris et al., 2016). Disorganized and cluttered homes may be a consequence of neurodevelopmental symptoms. If the hoarding behaviors seem to be directly related to the person's neurodevelopmental disorder or other symptoms, then hoarding disorder would not be diagnosed.

Depressive symptoms may impact a person's ability to clean, organize, and throw away unneeded possessions. Symptoms of depressive episodes, such as fatigue, psychomotor retardation, hopelessness, and apathy could lead to the accumulation of objects as well as cluttered or messy living spaces (APA, 2013). If the accumulation of objects in the household is

restricted to depressive episodes or directly related to depressive symptoms, then hoarding disorder would not be diagnosed.

OCD and hoarding disorder share symptoms, such as repetitive problematic behaviors and beliefs (APA, 2013). Some with OCD may collect or refuse to discard objects due to obsessions or compulsions related to fears of contamination, fears of harm, or beliefs that they would be incomplete without the objects (APA, 2013). Alternatively, someone with OCD may accumulate objects as a side effect of avoiding other unrelated rituals. Instead of continually engaging in rituals related to these objects, the person might avoid the rituals by storing these objects. If the hoarding behaviors are totally captured by the obsessions or compulsions, then hoarding disorder would not diagnosed. However, it can be difficult to discern if the hoarding beliefs and behaviors are a consequence of OCD symptoms. Typically, those with hoarding disorder get satisfaction from the hoarding and perceive the hoarded objects as helpful, useful, or otherwise good. In contrast, if the hoarding is distressing and anxiety or fear driven, these behaviors may be due to OCD (APA, 2013). Hoarded objects in OCD may also be more specialized or bizarre, such as human waste, fingernails, hair, or garbage.

Treatment

There are a number of difficulties with treating hoarding disorder. People with hoarding disorder rarely seek therapy, are more likely to drop out, and typically have low motivation for change (Williams & Viscusi, 2016). One reason for these challenges is that hoarding is typically not experienced as inherently distressing, unlike the symptoms of OCD or other emotional disorders. Instead, treatment seeking may be motivated by family pressure, the impairment associated with hoarding, or comorbid disorders like major depressive disorder.

For those that do seek treatment, CBT in individual and group settings appear helpful for reducing symptoms and impairment (Bodryzlova, Audet, Bergeron, & O'Connor, 2019; Tolin, Frost, Steketee, & Muroff, 2015). Two meta-analyses demonstrate moderate or large effect sizes for the effect of CBT treatment for hoarding disorder compared to baseline distress (Bodryzlova et al., 2019; Tolin et al., 2015). CBT also appears superior compared to control conditions (Tolin et al., 2015). Limitations to the current research on the treatment of hoarding disorder are the lack of diverse samples, small sample sizes, and that the majority of studies use pre-DSM-5 conceptualizations of hoarding disorder as a type of OCD (Williams & Viscusi, 2016).

CBT for hoarding typically includes motivational interviewing, exposure interventions, behavioral training to practice discarding or organization, and cognitive restructuring (Bodryzlova et al., 2019; Tolin et al., 2015). Starting with motivation interviewing is important to address avoidance, increase adherence, and prevent drop out (Tolin et al., 2015; Williams & Viscusi, 2016). Motivational interviewing would include building the client's awareness that their hoarding has become a problem, the impact of these symptoms on their ability to meet life goals, and developing the client's confidence in their ability to change. Once clients are motivated to work towards change with the clinician, treatment can focus on interventions to change problematic patterns of thinking and behaving.

Hoarding disorder is associated with strong beliefs about the importance and necessity of hoarded objects, which makes it difficult to discard possessions (APA, 2013). People with hoarding disorder might think that letting go of possessions might lead to forgetting about important life events associated with the item, that they might be in dire need of the object in the future, or that discarding possessions in just generally wasteful (Williams & Viscusi, 2016). Identifying these fears and other thoughts related to the client's hoarding behaviors provides an

opportunity to test and challenge these thoughts. In addition to cognitive restructuring, behavioral experiments can be used to test the evidence for and against the client's hoarding beliefs. For example, a client whose hoarding is motivated by fears of forgetting about important events may test this by seeing what happens when they give something away. Exposures can also be helpful for testing out and challenging maladaptive beliefs about hoarding.

Exposure interventions would include gradually practicing resisting the urge to buy or acquire new items and practicing discarding items. To build client's motivation and self-efficacy, exposures are gradual, starting with the easiest situations. For those with excessive acquisition, exposures might include visiting a store, holding objects, and then putting them back (Williams & Viscusi, 2016). For hoarding, exposures would include sorting, organization, and discarding items. Clients may be encouraged to make decisions quickly or to meet a specific goal for discarding (e.g., clear the table, donate 10 items). Through exposures, clients learn to tolerate the distress of discarding and not acquiring items (Williams & Viscusi, 2016). Exposures also teach clients that their fears about discarding items (e.g., "I will need this later") are often not true and that if these fears do come true, that the client is able to handle it (e.g., "I can get more toilet paper when I need it in the future").

With hoarding disorder, it is particularly important to consider treatment outside of the traditional therapy office. Home visits are recommended and associated with better outcomes (Tolin et al., 2015). One review found that home visits in the treatment of hoarding disorder are common, with an average of about six home visits per client (Tolin et al., 2015). Clinicians are better able to help clients practice skills at the client's home or other places where symptoms are difficult to manage, such as stores or flea markets (Tolin et al., 2015; Williams & Viscusi, 2016).

Clients with hoarding disorder can benefit from therapy, but it is important for clinicians to meet clients at the level at which they are able to engage in therapy.

Trichotillomania (Hair-Pulling) Disorder

Case

Alisha is 17-year-old high school student presenting for therapy due to difficulty managing anxiety and repeated episodes of pulling out the hair on her eyelashes, eyebrows, and around the hairline by her ears. Alisha reported that several times per week, when she is by herself for hours at a time, she would fidget with and pull out the hair in these areas. She describes these behaviors as calming, but that she is embarrassed by the hair loss. Alisha said she typically wears makeup to hide the hair loss on her eyelashes and eyebrows but that sometimes she will refuse to go to school for up to a week at a time due to her embarrassment. She described feeling lonely and isolated because of the hair-pulling, which she tries to keep a secret. According to Alisha, she has tried unsuccessfully to stop pulling out her hair, but that it is difficult to stay motivated when she is feeling anxious and has the urge to hair-pull. She said these behaviors started when she was in middle school and have worsened since she started preparing college applications this year.

Characteristics and Symptoms

Hair-pulling disorder is defined by repeatedly pulling out one's own hair to the point of hair loss (APA, 2013). The hair-pulling can take place anywhere on the body, including the scalp, eyelashes, eyebrows, and less commonly, other areas of the face, arms, or pubic region (APA, 2013; Jones, Keuthen, & Greenberg, 2018). People with hair-pulling disorder might be embarrassed about and try to hide their hair loss with makeup, scarves, or wigs. They also tend to pull out their hair when alone or try to hide these behaviors in public. Episodes of hair-pulling

can range from multiple moments throughout the day to episodes that last for hours (APA, 2013). Although not required for diagnosis, hair-pulling is often associated with particular emotional states like stress, anxiety, boredom, or tension that is relieved by pulling out hair (APA, 2013; Jones et al., 2018). People also differ in their awareness of performing the behavior. For some, it is purposeful, and they may even seek out certain types of hair to pull. For others, it is done more automatically, with little awareness of what they are doing (APA, 2013). To be diagnosed, the person must have tried multiple times to stop or lessen their hair-pulling behaviors. Additionally, the hair-pulling must be associated with significant distress or impairment, such as social difficulties or damage to their hair growth. Hair-pulling disorder should not be diagnosed if the hair-pulling is due to another mental or medical condition.

Impairment and Distress

Hair-pulling disorder is associated with significant emotional distress, difficulty functioning, and, occasionally, medical problems. Avoidance is common, with 22% to 63% of people with hair-pulling disorder reporting avoidance of social interactions, work, housework, and school (Duke et al., 2010). Specific activities that might be avoided include dating, sexual activity, getting haircuts, having medical exams, swimming, and other activities that threaten to expose the person's hair loss. The majority of those seeking treatment for hair-pulling disorder also experience strong emotional states such as anxiety, depressed mood, irritability, and shame as well as negative beliefs about one's attractiveness and self-worth. Some with hair-pulling disorder also eat or chew their hair, which, in rare cases, can cause gastrointestinal problems such as bleeding, weight loss, and death. Other medical problems caused by hair-pulling include scalp bleeding, infections, permanent hair loss, and carpel tunnel syndrome (Duke et al., 2010).

Differences in DSM-5

Hair-pulling disorder was previously categorized in the DSM-IV-TR as trichotillomania under impulse-control disorders not classified elsewhere. The criteria for hair-pulling disorder have undergone a few changes. The characteristic hair-pulling behaviors still have to result in hair loss, but this hair loss no longer needs to be noticeable (APA, 2000; 2013). In the DSM-5, the person must also have tried multiple times to stop or decrease their hair-pulling (APA, 2013). Two criteria that have been dropped from the DSM-5 diagnosis are the requirements that the hair-pulling must be associated with a feeling of tension and that the behavior is pleasurable, rewarding, or relieving (APA, 2000; 2013).

Prevalence

About 1% to 5% of the general population experience hair-pulling disorder (Jones et al., 2018). Women are more likely to be affected by the disorder than men, although this difference may be due to gendered cultural expectations and thus may differ cross-culturally (Duke et al., 2010). These gender differences are also more salient for adults than children. Overall, children seem to be more likely to report or seek treatment for hair-pulling disorder. Unfortunately, there is little research describing patterns of the disorder across different racial and cultural groups; however, clinicians should be aware that hair-pulling behaviors might be due to cultural rituals or norms.

Course of the Disorder

Hair-pulling disorder typically develops in early adolescence (Jones et al., 2018; Snorrason, Belleau, & Woods, 2012). For many, symptoms worsen until late adolescence and then taper off in severity over time (Duke et al., 2010). The intensity of hair-pulling behaviors generally seem to wax and wane episodically. Although hair-pulling seems to be more common

in children than adults, there is some evidence that hair-pulling in early childhood may resolve without intervention (Duke et al., 2010; Snorrason et al., 2012).

Comorbid Disorders

The majority of people with hair-pulling disorder experience another mental disorder at some point in their lives (Duke et al., 2010). Although research is needed to better understand comorbidity patterns, hair-pulling disorder is associated with a higher risk of anxiety, mood, substance use, obsessive-compulsive, and eating disorders. Hair-pulling disorder is also commonly comorbid with other body-focused repetitive behaviors, such as skin-picking, hair-eating, and nail-biting.

Differential Diagnostic Issues

Hair-pulling disorder should not be diagnosed if the hair-pulling behaviors are culturally acceptable or better accounted for by another mental or medical condition. Hair removal and pulling may done for cosmetic or cultural reasons. In these cases, the hair-pulling would not cause distress or impairment, and the person would be able to stop themselves from pulling out their hair. Hair biting, twisting, or fidgeting would not be diagnosed as hair-pulling disorder. Hair-pulling is sometimes due to specific distorted beliefs about the purpose of the hair-pulling, such as attempting to rectify a perceived flaw in body dysmorphic disorder, symmetry compulsions in OCD, or in reaction to delusions or hallucinations in a psychotic disorder (APA, 2013). Additionally, some medications and medical conditions, such as alopecia, may result in hair loss without hair-pulling.

Treatment

Hair-pulling disorder can be difficult to treat, and therapy may focus on harm and symptom reduction rather than achieving full remission of the disorder (Jones et al., 2018). Habit

reversal and stimulus control training appear to be the most effective treatments, although there is evidence that these treatments can be supplemented with acceptance and commitment therapy (ACT) or dialectical behavioral therapy (DBT). Habit reversal and stimulus control training focus on changing the behavioral responses of hair-pulling, rather than the potential emotional triggers for these behaviors.

For habit reversal training, the clinician works with clients to develop their awareness of their hair-pulling behaviors, including when they tend to hair-pull and what emotions are associated with hair-pulling (Jones et al., 2018). Once clients can identify when they are about to hair-pull, they can work towards practicing an alternative behavior that is incompatible with hair-pulling. This competing response, such as making a fist or using a fidget toy, is practiced repeatedly for 60 to 90 seconds at a time. Social support and other reinforcements are used to prompt and praise clients for practicing the alternative behaviors rather than pulling their hair.

Stimulus control training refers to strategies to change the environment to decreases hair-pulling behaviors (Jones et al., 2018). It is typically used in combination with habit reversal training. Once clients become more aware of what situations and emotions are associated with their hair-pulling, then they can avoid these triggers or find alternative ways of coping. Stimulus control training might include removing triggers like mirrors, making it difficult to hair pull by wearing gloves, bringing attention to hair-pulling by wearing noisy bracelets, or learning alternative ways to cope with stress. Together with habit reversal training, stimulus control training is an effective way to disrupt the client's pattern of compulsive hair-pulling.

Other treatments can be useful for supplementing habit reversal and stimulus control training, especially when clients do not respond well to a purely behavioral approach (Jones et al., 2018). ACT and DBT interventions to improve emotion regulation, distress tolerance, and

mindfulness appear to increase self-awareness and help manage the emotional triggers of hair-pulling. Subsequently, combining behavioral training with ACT or DBT may be useful when the hair-pulling behaviors are strongly associated with specific emotional triggers or when the client has comorbid emotional disorder. Unfortunately, pharmacological treatments for hair-pulling disorder are not well researched. There is some support for treating hair-pulling disorder with *N*-acetylcysteine and minimal to no support for the use of SSRIs. Overall, habit reversal and stimulus control training are the most often recommended approach for treating hair-pulling disorder, but alternative approaches may be useful to consider depending on client response and presentation.

Excoriation (Skin-Picking) Disorder

Case

Felicia is a 37-year-old woman who was referred to therapy by her primary physician because of her habit of picking at her face and arms until they bleed. When she presented for therapy, she appeared to have scars and sores at varying stages of healing on her left forearm and around her chin. According to Felicia, she feels the urge to pick at her skin throughout the day, particularly when she is feeling stressed or under pressure at work. Typically, she picks her skin with her nails, but sometimes she uses paperclips or sewing needles. She said she has tried to stop picking at her skin, but that the urge is too overwhelming and that she often picks without being aware of what she is doing. Felicia reported that her symptoms started when she would pick at her acne as a teenager, but that she continued to pick her skin after her acne disappeared. Her symptoms have gotten worse since she started her new job, and she spends up to an hour each day picking at her skin at work. Felicia described being ashamed of her skin-picking and said she is seeking therapy to avoid further scarring on her face and arm.

Characteristics and Symptoms

Excoriation or skin-picking disorder is characterized by repeatedly picking at one's own skin to the point where skin lesions develop (APA, 2013). People with the disorder may pick the skin on different parts of the body and may focus on healthy skin, scabs, pimples, moles, or other skin irregularities (Jones et al., 2018). The face, cuticles, nails, arms, scalp, hands, and feet are often the focus of skin-picking (Hayes, Storch, & Berlanga, 2009). Like hair-pulling disorder, skin-picking might be triggered by emotional states like anxiety, stress, boredom, or tension, which are relieved by skin-picking (APA, 2013; Tucker, Woods, Flessner, Franklin, & Franklin, 2011). People with the disorder might be embarrassed by their symptoms and try to hide their skin-picking behaviors and lesions. In addition to skin-picking that results in lesions, the diagnosis of excoriation requires that the person has tried multiple times to stop or lessen their skin-picking (APA, 2013). The skin-picking must also be accompanied by significant distress or impairment, such as missing work, avoiding social interactions, physical scarring, or spending hours per day skin-picking. Excoriation or skin-picking disorder should not be diagnosed if the behaviors are due to another mental or medical condition.

Impairment and Distress

Skin-picking can lead to significant emotional distress and impairments in functioning (Jones et al., 2018). Those with the disorder may experience shame, anxiety, and depressed mood due to their skin-picking. Embarrassment about their skin-picking often leads to time spent trying to cover up skin lesions or avoidance of social interactions, which translates to missing or being late to work, school, or social events. Skin-picking can also result in infections and permanent scarring. The emotional, functional, and physical consequences of skin-picking highlight the importance of proper diagnosis and treatment of this disorder.

Differences in DSM-5

Skin-picking disorder is defined in the DSM-5 for the first time as a formal disorder (APA, 2013). Evidence that compulsive skin-picking causes significant impairment and occurs independent of other mental health disorder led to its inclusion as a distinct disorder in the DSM-5 (Tucker et al., 2011). Symptom criteria for skin-picking disorder mirror the criteria for hair-pulling disorder (APA, 2013).

Prevalence

Although a little over half of the general population reports some level of skin-picking, only about 1% to 5% experience skin-picking disorder (Hayes et al., 2009; Jones et al., 2018). Women make up about 75% of those with the disorder in the United States (Hayes et al., 2009; Snorrason et al., 2012). There is little known about the cross-cultural presentation of skin-picking disorder, but prevalence rates appear similar across United States, European, and Israeli populations (Leibovici et al., 2015). Skin-picking disorder also seems to occur at similar rates across age groups (Hayes et al., 2009).

Course of the Disorder

Symptoms of skin-picking tend to begin in adolescence and may develop in response to skin conditions such as acne or eczema (Jones et al., 2018; Snorrason et al., 2012). Most people report an onset of around 12 to 16 years old (Snorrason et al., 212). There is limited research describing the course of skin-picking disorder, but symptoms appear to be chronic, improving and worsening episodically (Snorrason et al., 2012).

Comorbid Disorders

Skin-picking disorder is associated with impulsivity, obsessive-compulsivity, anxiety, and depression (Hayes et al., 2009; Leibovici et al., 2015). People with skin-picking disorder

may have a greater risk of developing OCD, major depressive disorder, anxiety disorders, eating disorders, hair-pulling disorder, and other specified obsessive-compulsive and related disorder symptoms like compulsive nail-biting (APA, 2013; Jones et al., 2018; Tucker et al., 2011). Additionally, skin-picking disorder is experienced by about 13% of people with Tourette syndrome, with higher comorbidity in women and severe cases (Greenberg et al., 2018).

Differential Diagnostic Issues

When the skin-picking is due to the symptoms of another disorder, skin-picking disorder should not be diagnosed. With body dysmorphic disorder, the person might repeatedly pick at their skin because of concerns about their appearance (APA, 2013). OCD and psychotic disorders might present with distorted beliefs related to the skin, such as contamination obsessions or parasite delusions. These beliefs can lead to skin-picking or compulsions like hand washing or rubbing that can also cause skin lesions. Additionally, medical conditions, medication side effects, and substance use may lead to repeated skin-picking. For example, scabies, acne, cocaine, and methamphetamine are associated with persistent itching, scratching, and picking that can create or worsen sores. Differential diagnosis can be difficult as dermatological conditions often trigger the onset of skin-picking disorder and skin-picking disorder may be comorbid with other mental health concerns like OCD. Skin-picking disorder would be diagnosed if the skin-picking behaviors go beyond what could be explained by another disorder or substance.

Treatment

Like hair-pulling disorder, skin-picking disorder can be difficult to treat, and there is limited research guiding treatment recommendations (Jones et al., 2018; Lochner, Roos, & Stein, 2017). Only about half of those with skin-picking disorder seek treatment, and only a quarter of

people with the disorder receive a diagnosis for their skin-picking behaviors (Tucker et al., 2011). Thus, assessing for skin-picking disorder symptoms and proper diagnosis are needed in clinical settings. When seeking treatment, clients are just as likely to first discuss their symptoms with their primary care physician or dermatologist as they are to discuss it with a therapist or psychiatrist (Tucker et al., 2011). Effective treatments include habit reversal training, stimulus control training, and, to a lesser extent, pharmacological therapies such as *N*-acetylcysteine or SSRIs (Jones et al., 2018; Lochner et al., 2017). General CBT and ACT also have some limited support as effective therapies for skin-picking disorder (Jones et al., 2018; Lochner et al., 2017). Behavioral therapies like habit reversal and stimulus control training are most often recommended for changing clients' pattern of skin-picking.

Habit reversal and stimulus control training are behavioral therapies that focus on interrupting the client's pattern of skin-picking by changing aspects of the client's environment and reinforcing alternative behaviors (Tucker et al., 2011). Habit reversal training starts with increasing the client's awareness of their skin-picking behaviors through self-monitoring exercises (Jones et al., 2018; Lochner et al., 2017). Skin-picking is then replaced with an alternative behavior that is incompatible with skin-picking, such as making a fist or using a fidget toy. Stimulus control training is used in conjuncture with habit reversal training and may include changing the environment to make it more difficult to skin-pick, removing reminders of skin-picking, bringing attention to skin-picking by wearing a band aid on the index finger, or learning alternative ways to cope with emotional triggers (Jones et al., 2018; Lochner et al., 2017). For example, stimulus control might involve removing tweezers, keeping nails short, or covering the area of skin-picking with a band aid. It might also be helpful to make the skin-picking less reinforcing by numbing the area with capsaicin cream to change the sensation

produced by picking (Jones et al., 2018). These behavioral strategies work by decreasing the antecedents or triggers to skin-picking, increasing awareness of skin-picking, decreasing the rewarding aspects of skin-picking, and disrupting the pattern of skin-picking by increasing use of alternative behaviors.

Conclusions

Understanding recent advances in the diagnosis and treatment of OCD and other OCDRs is essential for working with clients experiencing these disorders. Given the shame and stigma associated with obsessive and compulsive symptoms, clients are often reluctant to talk about these problems. Without treatment, clients with OCRDs often experience chronic difficulty managing symptoms (Fornaro et al., 2009). We hope this article helps clinicians to become more competent in their ability to diagnose and serve clients presenting with OCRDs.

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