

UPDATE ARTICLE

Body-focused repetitive behavior disorders in ICD-11

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This article addresses the question of how body-focused repetitive behavior disorders (e.g., trichotillomania and skin-picking disorder) should be characterized in ICD-11. The article reviews the historical nosology of the two disorders and the current approaches in DSM-5 and ICD-10. Although data are limited and mixed regarding the optimal relationship between body-focused repetitive behavior disorders and nosological categories, these conditions should be included within the obsessive-compulsive and related disorders category, as this is how most clinicians see these behaviors, and as this may optimize clinical utility. The descriptions of these disorders should largely mirror those in DSM-5, given the evidence from recent field surveys. The recommendations regarding ICD-11 and body-focused repetitive behavior disorders should promote the global identification and treatment of these conditions in primary care settings.

Keywords: Classification; impulse control disorders; obsessive-compulsive disorder; models/theories of psychiatry; psychiatric diagnosis

Introduction

Trichotillomania is characterized by the repetitive pulling out of one's own hair, whereas skin-picking disorder is defined by recurrent picking of one's skin. ICD-10 categorizes trichotillomania as a habit or impulse disorder, but does not specifically identify skin-picking disorder within this grouping. A version of skin-picking disorder was captured by the ICD-10 diagnosis of factitial dermatitis in the larger category of other disorders of skin and subcutaneous tissue, not elsewhere classified. In contrast, DSM-5 has grouped trichotillomania (hair-pulling disorder) and excoriation (skin picking) disorder within the obsessive-compulsive and related disorders (OCRD). This article addresses the question of how trichotillomania and skin-picking disorder should be characterized in the ICD-11 to maximize clinical utility and global applicability.¹ The historical background to the nosology of these disorders is reviewed, and the approaches of, as well as the problems arising from, ICD-10 and DSM-5 are summarized. This article will also provide options and recommendations regarding their classification in the ICD-11. This article reflects the discussion of the WHO ICD-11 Working Group on the Classification of Obsessive-Compulsive and Related Disorders, appointed by the WHO Department of Mental Health and Substance Abuse and reporting to the International Advisory Group for the Revision of ICD-10 Mental and Behavioural Disorders.

History, prevalence, and clinical features

Trichotillomania

Trichotillomania is characterized by repetitive hair pulling leading to hair loss and resulting in distress or impairment in important areas of functioning (e.g., poor self-esteem, social isolation). Epidemiological studies of trichotillomania are not nationally representative, but small studies examining the prevalence of trichotillomania among college students in the United States, adolescents in Israel, and older adults within the community have found current rates ranging from 0.5 to 2.0%.²⁻⁴

Although the first well-described cases of trichotillomania in the 18th and 19th centuries focused on adolescent and young adult males,^{5,6} it appears that trichotillomania is much more prevalent in females.^{7,8} Hair pulling usually begins at a young age, between 10 and 13 years old,^{9,10} and appears to have a similar presentation across cultures.^{3,11} Any site may be the focus of pulling, but the scalp is the most common (72.8%), followed by the eyebrows (56.4%).^{12,13} Triggers to pull include sensory (i.e., hair thickness, length, and location, physical sensations on scalp), emotional (i.e., feeling anxious, bored, tense, or angry), and cognitive (i.e., thoughts about hair and appearance, rigid thinking, and cognitive errors) cues.⁹ Psychosocial dysfunction, low self-esteem, and social anxiety are all associated with trichotillomania, largely due to an inability to stop pulling and the resulting alopecia.^{13,14} Even though trichotillomania interferes with a person's quality of life, the majority of individuals (about 65%) never seek treatment.¹³

Skin-picking disorder

Skin-picking disorder, also referred to as pathological skin picking, neurotic excoriation, dermatillomania, or

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psychogenic excoriation, is characterized by the repetitive and compulsive picking of skin, leading to tissue damage.¹⁵ Erasmus Wilson, in 1875, first coined the term neurotic excoriation to describe excessive picking behaviors that were extremely difficult, if not impossible, to control in neurotic patients.¹⁶

Community prevalence studies in the United States have found that skin-picking disorder is fairly common. In a study of 354 adult subjects, 19 (5.4%) reported significant picking with associated distress/impact.¹⁷ A second study, comprising 2,513 telephone interviews in a representative sample, found that 1.4% of respondents picked to the point of having noticeable skin damage and reported distress or impairment due to the picking.¹⁸

Research suggests that the age of onset for skin-picking disorder varies substantially, and may occur during childhood, adolescence, or adulthood.¹⁹ The clinical characteristics of skin-picking disorder appear the same across age cohorts and across cultures – Europe, Africa, North America, South America, and the Middle East.¹⁹ The phenomenology of skin-picking disorder bears striking similarities to that of trichotillomania. Individuals with skin-picking disorder spend a significant amount of time each day picking their skin, with many reporting that the picking behavior constitutes several hours each day.²⁰ The time spent picking results in dysfunction related to work and social activities.²¹ As in trichotillomania, triggers to pick vary greatly between individuals, and multiple triggers are the norm. Stress, anxiety, time away from scheduled activities, boredom, and feeling tired or angry have all been reported as triggers.¹⁹

History within the ICD and DSM classifications

Trichotillomania made first its appearance in ICD-9 (1975) under the title of other disorders of impulse control. Within that rubric, ICD-9 provided an example of these other disorders with excessive pulling of one's own hair. Trichotillomania was named as a specific disorder in ICD-10, approved in 1990. The term trichotillomania has received considerable criticism from patient groups, which argue that the inclusion of mania mischaracterizes and stigmatizes individuals who pull their hair.

Trichotillomania was originally included in DSM-III-R in 1987 as an impulse control disorder, not classified elsewhere, and trichotillomania remained in that section until DSM-5, when it was moved to the chapter on OCD. Modifications from DSM-III-R to DSM-IV included expansion of criterion B to include tension experienced when attempting to resist hair pulling and the addition of a clinical significance criterion E, which required distress and/or impairment.

In the case of skin-picking disorder, the disorder has not previously been identified as a specific disorder in the mental disorders section of ICD and only recently was included in DSM-5.

Issues unresolved by previous classification schemes

Trichotillomania and skin-picking disorder raise several identical issues that classification systems heretofore

have left unresolved. First, what are the best names for these clinical entities? Second, should these disorders be conceptualized as distinct taxons or simply along a continuum with normality? Third, should these disorders be considered primary or secondary entities? Fourth, what conditions, if any, are related to trichotillomania and skin-picking disorder (e.g., nail biting)?

ICD-10 and DSM-5 approaches

Trichotillomania

In ICD-10, trichotillomania is classified in the section on disorders of adult personality and behavior, as one of the habit and impulse disorders. It is described as “a disorder characterized by noticeable hair-loss due to a recurrent failure to resist impulses to pull out hairs. The hair pulling is usually preceded by mounting tension and is followed by a sense of relief or gratification. This diagnosis should not be made if there is a pre-existing inflammation of the skin, or if the hair pulling is in response to a delusion or a hallucination. Excludes: stereotyped movement disorder with hair-plucking.”

DSM-5 moved trichotillomania to a new chapter on OCD, and made substantial modifications to the criteria for trichotillomania.^{22,23} DSM-5 requires that hair pulling lead to hair loss, but unlike DSM-IV, the new criterion does not require that the hair loss be “noticeable.” In fact, individuals with this disorder may pull hair in a widely distributed pattern (i.e., pulling single hairs from all over one site) such that hair loss may not be clearly visible. Alternately, individuals may attempt to conceal or camouflage hair loss (e.g., by using makeup, scarves, or wigs). In addition, DSM-5 has added a new criterion: namely, that the person has made repeated attempts to decrease or stop hair pulling. Thus criterion was chosen to replace the DSM-IV criterion that “pulling is preceded by tension and there is relief or gratification after pulling,” on the basis of evidence that patients with chronic hair pulling may or may not meet the DSM-IV criteria, but do meet the proposed criterion.²⁴ Those who did and did not meet the DSM-IV criteria referring to increased tension before pulling and relief after pulling did not appear distinguishable on a range of clinical validators.²² The DSM-5 further clarifies that the disorder should not be diagnosed if the hair pulling or hair loss is due to another medical (e.g., inflammation of the skin or other dermatological conditions) or psychiatric condition (e.g., individuals with body dysmorphic disorder may remove body hair they perceive as ugly or abnormal, people with obsessive-compulsive disorder [OCD] may pull out hairs as part of their symmetry rituals, and individuals with a psychosis may remove hair in response to delusions or hallucinations).

Skin-picking disorder

Even with a long history in the medical literature, skin-picking disorder was not explicitly listed in the mental disorders section of ICD-10 or in DSM-IV. Skin picking was finally recognized as a disorder in DSM-5. Given the growing body of data emphasizing that skin-picking disorder is a prevalent and disabling condition, it was considered

appropriate for inclusion in DSM-5 as excoriation (skin picking) disorder in the chapter on OCD.

Based on significant clinical similarities between skin-picking disorder and trichotillomania, as well as the DSM-5 field trials, the DSM-5 diagnostic criteria for skin-picking disorder were chosen to mirror those of trichotillomania.²⁵ Because some picking behavior is probably experienced by most people at some time in their lives, the DSM-5 requires that the picking be recurrent and result in skin lesions, thereby reflecting the frequency and intensity of picking seen in skin-picking disorder. As in the case of trichotillomania, the DSM-5 also requires that the person have tried on several occasions to decrease or stop the picking. This criterion reflects the intense drive motivating the behavior, and data suggest that people with skin-picking disorder have a greater intensity of urgency than people who do not pick. As with trichotillomania, DSM-5 has two criteria that exclude other possible reasons for the picking behavior. Stimulant drugs such as cocaine and amphetamines can lead to skin-picking behavior and should be ruled out as the cause. In addition, there are many dermatological conditions that result in scratching or picking – scabies, atopic dermatitis, psoriasis, and blistering skin disorders, to name only a few. Skin-picking disorder may be misdiagnosed as either OCD or body dysmorphic disorder. The repetitive motor symptoms of skin-picking disorder resemble compulsive rituals in OCD. Individuals with skin-picking disorder are less likely to report obsessive thoughts about their skin, and may even be unaware of their picking behavior due to its automatic nature. Individuals with body dysmorphic disorder pick at their skin to improve their appearance, and these individuals would not meet criteria for skin-picking disorder if skin picking is secondary to body dysmorphic disorder.

In DSM-5, trichotillomania and skin-picking disorder are grouped together in a new chapter, OCD. The chapter represents a departure from DSM-IV-TR, but shows continuity with the approach taken by the DSM-5 Task Force to group related disorders together. Evidence has since accumulated showing both disorders' relatedness to OCD in terms of shared phenomenology, patterns of familial aggregation, and data on etiologic mechanisms.¹⁹ In grouping these disorders together, clinicians will be encouraged to evaluate patients for these conditions and consider their overlap. Despite the similarities and data on familial aggregation between trichotillomania, skin-picking disorder, and OCD, there remains considerable phenotypic variation in these disorders. Although these disorders may generate a similar assessment and treatment approach, there are important differences among these conditions that require specific assessment and treatment approaches depending on whether the major symptoms are obsessions/preoccupations/compulsions or body-focused repetitive behaviors.

Problems arising from ICD-10 and DSM-5

Trichotillomania

Several issues arise from the current diagnostic schemes. First, the name trichotillomania continues to

be problematic. Input from individuals and advocacy groups has suggested that the term is stigmatizing due to the mania suffix, which suggests a relationship to bipolar disorder, a relationship not supported by the scientific literature. Some publications have suggested traction alopecia, hair-pulling disorder, or trichotillia. These different terms reflect a longstanding debate about how to best conceptualize the disorder in a neutral fashion.

A second issue concerns the diagnostic criteria for trichotillomania and their clinical utility. Although DSM-5 recently changed the criteria as detailed above, the question remains whether the diagnostic criteria for trichotillomania are suitable cross-culturally, from a developmental perspective, and for both genders. Because some data suggest that there are differences between focused and automatic hair pulling, and between early-onset and late-onset trichotillomania, the question arises as to whether subtypes should be included in the diagnosis.

ICD-10 viewed trichotillomania as a habit and impulse disorder, whereas DSM-5 has included it within the OCD. Retaining trichotillomania among the impulse disorders may make it more likely that clinicians will ignore the problem or assume it is similar to other impulse disorders, such as kleptomania and pyromania. The change in the DSM-5 to include it with OCD may have the advantage of alerting clinicians that the differential diagnosis of patients presenting with compulsive behaviors should include trichotillomania. On the other hand, individuals with trichotillomania rarely present with pre-occupations or obsessions, and the interventions used to treat trichotillomania differ from those that are effective for OCD.

Skin-picking disorder

Similar issues seen in trichotillomania arise in the case of skin-picking disorder. The first issue concerns the name of the disorder. Should dermatillomania, neurotic excoriation, excoriation disorder, or skin-picking disorder be the preferred term? Dermatillomania brings with it the same issues of stigma seen in trichotillomania. DSM-5 developed a compromise position by using both excoriation and skin-picking disorder.

The second issue concerns whether skin picking should be classified as a separate disorder in ICD-11, given its fairly high prevalence and associated morbidity (e.g., severe systemic infection, blood loss, etc.).^{18,26} One could argue that, in a classification system used globally in primary care contexts, skin picking and trichotillomania could be combined into a single pathological grooming disorder. Although there is evidence for a possible shared biology between skin-picking disorder and trichotillomania,²⁷ there are also important differences between these disorders, including different gender ratios, different ages of onset, cognitive differences, and possible unique genetic contributions.^{28,29} DSM-5 included skin-picking disorder as a separate disorder because of evidence for its unique biology and clinical presentation.

Where to include skin-picking disorder in ICD-11 is also potentially problematic. On the one hand, grouping skin-picking disorder with OCRD has the potential to make clinicians more aware of a range of disorders with compulsive behaviors and body-focused repetitive behaviors. On the other hand, skin-picking disorder differs from OCD in terms of clinical presentation (e.g., less likely to have obsessive thoughts), neurocognition (e.g., tends to be more impulsive), and in terms of treatment approaches (e.g., serotonin reuptake inhibitors may be less effective).^{23,30}

A final concern is about the clinical utility of the ICD-10 descriptions of skin-picking disorder. Field trials for the DSM-5 criteria found that most clinicians felt the criteria were helpful and easy to implement.^{24,25} Nevertheless, could the criteria be improved to prevent misdiagnosis as OCD or body dysmorphic disorder?

Recommendations and rationale for ICD-11

WHO has indicated that the revision of ICD-10 should pay attention to issues of clinical utility, use in a range of cultures and in a variety of countries, and use in primary medical settings.¹

The first issue for ICD-11 concerns the names for these two disorders. Trichotillomania has a long history in the literature and has been used by researchers and clinicians around the globe. Although patient response suggested that there was some objection to the term trichotillomania, these responses were not universal. To change the name of a disorder when there is already a long history of using that name would potentially jeopardize recognition of the disorder and the ability to have primary physicians screen for the disorder. Additionally, trichotillomania is currently used in DSM-5 and, therefore, keeping the term results in consistency and use of a globally common language to describe this behavior. The addition of hair-pulling disorder parenthetically in DSM-5 acknowledges the patient groups who objected to the continued use of the suffix mania to describe the disorder. The problem with the sole use of the term hair-pulling disorder is that it may make this serious disorder appear trivial. In the case of skin-picking disorder, the term is also incorporated into DSM-5; therefore, to continue its use in ICD-11 allows for global consistency for a behavior that clinicians will start screening for and treating. The term excoriation also serves to link skin-picking disorder to an older literature on neurotic excoriation and, potentially, to prevent trivialization of this condition, and so may be useful to include in parentheses.¹⁹

A second issue is where to classify these disorders. ICD-10 currently lists trichotillomania as a habit and impulse disorder whereas DSM-5 includes both disorders under the chapter on OCRD. Based on what is known about neurobiology, clinical presentation, comorbidity, and family history, the options include OCRD, impulse disorders, or possibly creation of a new section on grooming disorders, or a new section on body-focused repetitive behavior disorders. There is an argument to be

made for the inclusion of these disorders within the impulse disorders category. First, there are phenomenological similarities between the symptoms of trichotillomania and skin-picking disorder and those of other impulse control disorders. Many individuals with these disorders endorse pleasure, gratification, or relief when performing the behavior. Second, impulsive traits and symptoms may be more common in trichotillomania and skin-picking disorder than in other psychiatric disorders, such as OCD. Third, one family history study of trichotillomania that included a control group found that the first-degree relatives of subjects with trichotillomania were significantly more likely to have substance use disorders (21.6% alcohol and 14.7% drug use disorders) than relatives of non-ill comparison subjects (7.7% alcohol use disorders and 2.2% drug use disorders).³¹ At the same time, there is evidence against this classification. First, the majority of people with trichotillomania and skin-picking disorder do not describe a hedonic quality associated with the pulling or picking.⁹ Second, research on other impulse control disorders (e.g., kleptomania, gambling, intermittent explosive disorder) has found little if any co-occurrence with trichotillomania or skin-picking disorder. Third, the clinical utility of this classification can be questioned. A first-line psychotherapy intervention for trichotillomania and skin-picking disorder is habit reversal, a set of techniques which are not used in the treatment of other impulse control disorders. Similarly, there may be specific pharmacotherapy interventions for trichotillomania and skin-picking disorder, such as dopamine antagonists and glutamate modulators, which have not been widely studied in the impulse control disorders.

Perhaps a stronger case could be made for including trichotillomania and skin-picking disorder with OCD as OCD spectrum disorders. There are similarities between the phenomenology of hair pulling and skin picking and the compulsions of OCD insofar as the behavior is in response to urges, can be anxiety-relieving, is driven and repetitive, and is sometimes symmetrical in nature. On the other hand, there are rarely preceding obsessions (as currently defined) in trichotillomania or skin picking. Second, there are some similarities in the underlying psychobiology of trichotillomania, skin picking, and OCD. Early research suggested that clomipramine was more effective than desipramine for both OCD and trichotillomania. In addition, there is, arguably, some evidence from brain imaging studies for involvement of frontostriatal circuitry in both disorders. Furthermore, family history data indicate that trichotillomania and skin-picking occur more frequently than expected in probands with OCD and their relatives. Even this categorization, however, is not without its problems. Trichotillomania and skin-picking disorder are predominantly seen in females, whereas OCD is more equally distributed in gender. Some research suggests that occurrence rates of trichotillomania and skin-picking disorder are not higher in OCD than in other anxiety disorders, although some studies may have suffered due to being statistically underpowered. Furthermore, in contrast to OCD,

trichotillomania and skin-picking disorder demonstrate relatively less response to selective serotonin reuptake inhibitors. There are only a few brain imaging studies of trichotillomania and skin-picking disorder, and findings have not always consistently implicated frontostriatal circuits, or have pointed to other regions, such as the cerebellum. Finally, neurocognitive research indicates that OCD, skin-picking disorder, and trichotillomania all show impaired inhibition of motor responses (e.g., on the stop-signal task). For trichotillomania and skin-picking disorder, however, the deficit was worse than for OCD, and OCD patients showed additional deficits in cognitive flexibility and executive planning.

A third option would be to create a new category wherein trichotillomania and skin-picking would be characterized as body-focused repetitive behavior disorders or grooming disorders within the OCRD. Hair pulling and skin picking have similar phenomenology, with symptoms that are ritualistic, but with no preceding obsessions. Similar cues may trigger these symptoms, and it has been suggested that they play a role in arousal modulation. There is a high degree of comorbidity between trichotillomania, skin-picking, and other body-focused repetitive behaviors such as nail biting, lip biting, and cheek-chewing, with an increased number of "habits" (e.g., nail biting, acne, scab and nose picking, thumb sucking, knuckle cracking) in patients with trichotillomania and skin picking. However, there has been relatively little research on the underlying neurobiology of body-focused repetitive behavior disorders other than trichotillomania and skin-picking disorder in humans.

Given the relative paucity of data on both trichotillomania and skin-picking disorder, there is an argument to be made for a conservative approach that is not premised on premature nosological conclusions. Therefore, the recommendation of the Working Group would be to place both of these disorders together in the OCRD section, under the rubric of body-focused repetitive behavior disorders. This is in keeping with DSM-5, and although not a perfect "fit," it reflects the current state of phenomenological and psychobiological knowledge on these behaviors. In addition, there may be clinical utility in conceptualizing trichotillomania and skin-picking disorder as related, and as part of the OCD spectrum, insofar as it reminds clinicians to inquire about comorbidity of these disorders and insofar as treatment approaches to trichotillomania and skin picking have been influenced by work on OCD.

The final question concerns the optimal description of both disorders in ICD-11. Although not included in the larger field trials for DSM-5, the criteria for trichotillomania and skin-picking disorder were examined in smaller field surveys. The field surveys demonstrated that the DSM-5 diagnostic criteria sufficiently differentiate these disorders from other diagnoses, that the criteria have clinical face validity, reliability, and adequate sensitivity and specificity, and can be easily implemented in a typical clinical interview.^{22,24,25} Therefore, we recommend that ICD-11 descriptions generally mirror those used in DSM-5. One proposed change, however, would be to note in the

descriptions of these disorders that many individuals with trichotillomania and skin-picking disorder feel that the compulsion is so strong that they feel it is futile to try to stop it. The Working Group recommends that the descriptions for the two disorders parallel each other, and that clinical threshold is decided primarily on the basis of clinical significance, rather than on the basis of the extent of skin picking, hair pulling, or dermatological sequelae. Alternative approaches, such as specifying the time spent on skin picking or hair pulling or the extent of observable skin damage or alopecia, seem problematic insofar as they entail arbitrary or difficult-to-operationalize cutoffs, and insofar as some patients may have clinically significant skin picking or hair pulling, but may perform most of their skin picking or hair pulling in a short amount of time each day or may pick their skin or pull their hair in a way that damage is limited to a small or hidden part of the body.

Conclusions

Research supports the inclusion of trichotillomania and skin-picking disorder as unique disorders in ICD-11. Although data are limited and mixed regarding the optimal relationship between these disorders and nosological categories, the more conservative approach would be to include these two body-focused repetitive behavior disorders within the OCRD category, as this is how most clinicians see these behaviors, and as this may optimize clinical utility.³² The descriptions of these disorders should largely mirror those in DSM-5, given the evidence from the global literature and from the recent field surveys.

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