# **UPDATE ARTICLE**

# Obsessive-compulsive disorder for ICD-11: proposed changes to the diagnostic guidelines and specifiers

Helen Blair Simpson, 1,2 Y. C. Janardhan Reddy<sup>3</sup>

<sup>1</sup>College of Physicians and Surgeons, Columbia University Medical College, New York, NY, USA. <sup>2</sup>Anxiety Disorders Clinic and the Center for OCD and Related Disorders, New York State Psychiatric Institute, New York, NY, USA. <sup>3</sup>Department of Psychiatry, National Institute of Mental Health & Neurosciences (NIMHANS), Bangalore, India.

Since the approval of the ICD-10 by the World Health Organization (WHO) in 1990, global research on obsessive-compulsive disorder (OCD) has expanded dramatically. This article evaluates what changes may be needed to enhance the scientific validity, clinical utility, and global applicability of OCD diagnostic guidelines in preparation for ICD-11. Existing diagnostic guidelines for OCD were compared. Key issues pertaining to clinical description, differential diagnosis, and specifiers were identified and critically reviewed on the basis of the current literature. Specific modifications to ICD guidelines are recommended, including: clarifying the definition of obsessions (i.e., that obsessions can be thoughts, images, or impulses/urges) and compulsions (i.e., clarifying that these can be behaviors or mental acts and not calling these "stereotyped"); stating that compulsions are often associated with obsessions; and removing the ICD-10 duration requirement of at least 2 weeks. In addition, a diagnosis of OCD should no longer be excluded if comorbid with Tourette syndrome, schizophrenia, or depressive disorders. Moreover, the ICD-10 specifiers (i.e., predominantly obsessional thoughts, compulsive acts, or mixed) should be replaced with a specifier for insight. Based on new research, modifications to the ICD-10 diagnostic guidelines for OCD are recommended for ICD-11.

Keywords: Obsessive-compulsive disorder; ICD-11; nosology; classification

# Introduction

Global research on obsessive-compulsive disorder (OCD) has expanded dramatically since approval of the ICD-10 in 1990 by the World Health Organization (WHO). In preparation for ICD-11, this article evaluates what changes may be needed to enhance the scientific validity, clinical utility, and global applicability of the diagnostic quidelines for OCD. The article briefly summarizes the development of the concept of OCD and the approach taken by ICD-10.1 Then, this approach is compared to that taken by the DSM, focusing on DSM-5 criteria (approved in 2013<sup>2</sup>). Key issues for ICD-11 are raised and specific revisions are recommended. These revisions reflect discussions 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. The revisions also reflect the priorities of the WHO<sup>3</sup>: to develop a classification system that is scientifically valid, clinically useful, and globally applicable.

Correspondence: Helen Blair Simpson, 1051 Riverside Drive, Unit 69, New York, NY, USA, 10032.

E-mail: simpson@nyspi.columbia.edu

# Historical background

OCD was considered a rare disorder until epidemiological studies demonstrated that it was more common than schizophrenia.4,5 However, descriptions of the problem have existed for centuries. For example, in 1691, John Moore, Bishop of Norwich, England, described individuals obsessed by "naughty, and sometimes blasphemous thoughts that start in their minds, while they are exercised in the worship of God, despite all their endeavors to stifle and suppress them... the more they struggle with them, the more they increase..."6 In The anatomy of melancholy, by Robert Burton, published in 1883, an individual is described "who dared not go over a bridge, come near a pool, rock, steep hill, lie in a chamber where cross beams were, for fear he may be tempted to hang, drawn or precipitate himself... he [was] afraid he shall speak aloud... something indecent, unfit to be said" (quoted in Berrios').

The conceptualization of OCD has evolved, and this, in turn, has led to evolution in its treatments. When OCD was understood on religious terms, exorcism and torture were often employed as treatment options. Later, it was debated whether OCD was a disorder of will, intellect, or emotions. In 1838, Esquirol described OCD as a "monomania," a disorder in which the sufferer is "chained to actions that neither reason nor emotion have originated, that conscience rejects, and will cannot suppress." In the later part of the 19th century, Morel

(1860 & 1866) described OCD as a disease of the autonomic nervous system and called it délire émotif, a neurosis. In 1903. Pierre Janet described how obsessions and compulsions develop over three phases: initially characterized by a "psychasthenic" state (indecisiveness, need for perfectionism and orderliness, and restricted emotional expression); followed by a stage of "forced agitations" (need for symmetry, repeating, and checking); and, finally, manifestations of frank obsessions and compulsions (aggressive, religious, and sexual themes) (quoted in Pitman<sup>11</sup>). Around this time, Freud described the famous case of Rat Man and popularized psychoanalytic explanations and therapy for OCD. 12 In the mid-20th century, learning theories became popular and led to behavioral 13,14 and cognitive therapy for OCD. 15 In parallel, neurobiological explanations of OCD were beginning to unfold. For example, clomipramine, a tricyclic antidepressant which has serotonergic properties, was demonstrated to be effective in treating OCD and led to the serotonin hypothesis of OCD.

OCD is recognized in the diagnostic systems of both the WHO (i.e., ICD) and the American Psychiatric Association (i.e., DSM). This recognition spurred systematic study of this disorder. As a result, it is now established that OCD is a disabling disorder, with a lifetime prevalence of about 2%,<sup>17</sup> moderate to severe symptom severity, onset usually in childhood or adolescence,<sup>18</sup> and a typical chronic waxing and waning course. <sup>19-21</sup> It is also established that people with OCD have reduced quality of life as well as high levels of social and occupational impairment. <sup>22,23</sup> Thus, improving the detection and treatment of OCD can help reduce the global burden of disease.

To improve the detection of OCD, scientifically valid, clinically useful, and globally applicable diagnostic guidelines are needed. Below, the ICD approach to OCD is summarized. Then, ICD and DSM approaches are compared. Several issues are raised, and specific recommendations for revisions to ICD are made to enhance the scientific validity, clinical utility, and global applicability of ICD diagnostic guidelines for OCD in advance of the new edition, ICD-11.

# Summary of the ICD-10 approach to OCD

Approved in 1990, ICD-10 provides a brief description of OCD, specific diagnostic guidelines, rules for differential diagnosis, and specifiers for classifying those with the disorder. The diagnostic guidelines and specifiers are provided in Table 1.

According to the diagnostic guidelines, a diagnosis of OCD requires obsessional symptoms or compulsive acts (or both) that are a source of distress or interference with activities and are present for a minimal duration (i.e., most days for at least 2 weeks). The obsessional symptoms and compulsive acts must have the following characteristics: 1) to be recognized by the individual as their own thoughts or impulses; 2) to be resisted unsuccessfully (at least one thought or act); 3) to not be pleasurable in themselves; and 4) to be "unpleasantly" repetitive.

The rules for differential diagnosis focus on differentiating OCD from major depressive disorder "because these two types of symptoms so frequently occur together." The following decision rule is provided: "in an acute episode of the disorder, precedence should be given to the symptoms that developed first; when both types are present but neither predominates, it is usually best to regard the depression as primary. In chronic disorders the symptoms that most frequently persist in the absence of the other should be given priority." Panic attacks or phobic symptoms "are no bar to the diagnosis." However, if obsessive-compulsive symptoms occur in the presence of schizophrenia or Tourette syndrome, a separate diagnosis of OCD should not be made.

ICD-10 provides several specifiers: those with predominantly obsessional thoughts and rumination; those with predominantly compulsive acts; and those with mixed obsessional thoughts and compulsive acts. It is noted that the relationship between obsessional ruminations and depression is "particularly close" and that a diagnosis of OCD should only be made if "ruminations arise or persist in the absence of a depressive disorder." ICD-10 also allows people to be diagnosed with Other obsessive-compulsive disorders and Obsessive-compulsive disorder, unspecified.

Table 1 Diagnostic guidelines and specifiers for OCD from ICD-10

#### Diagnostic guidelines

For a definite diagnosis, obsessional symptoms or compulsive acts, or both, must be present on most days for at least 2 successive weeks and be a source of distress or interference with activities. The obsessional symptoms should have the following characteristics:

a) they must be recognized as the individuals' own thoughts or impulses;

- b) there must be at least one thought or act that is still resisted unsuccessfully, even though others may be present which the sufferer no longer resists;
- c) the thought of carrying out the act must not in itself be pleasurable (simple relief of anxiety is not regarded as pleasure in this sense);
- d) the thoughts, images, or impulses must be unpleasantly repetitive.

# **Specifiers**

F42.0 Predominantly obsessional thoughts or ruminations

F42.1 Predominantly compulsive acts [obsessional rituals]

F42.2 Mixed obsessional thoughts and acts

F42.8 Other obsessive-compulsive disorders

F42.9 Obsessive-compulsive disorder, unspecified

# Comparing ICD and DSM approaches to OCD

ICD-10 was approved in 1990. In 1994, the fourth revision of the DSM-IV was published. In 2013, the fifth revision (DSM-5) was published. Similarities and differences between the criteria for OCD in ICD-10, DSM-IV, and DSM-5 are outlined in Table 2. Of note, several changes to OCD criteria occurred between DSM-IV and DSM-5. These included: wording changes in how obsessions and compulsions are defined; removal of the requirement that individuals recognize that obsessions and compulsions are excessive or unreasonable; and additional exclusions to delineate OCD so as to distinguish it from other disorders. The specifiers for OCD were also changed. Below, similarities and differences between ICD-10 and DSM-5 are highlighted.

The overall approach to diagnostic classification differs between ICD-10 and DSM-5. ICD-10 begins with a general description of OCD, and then provides diagnostic guidelines and a few rules for differential diagnosis. DSM-5 starts with specific diagnostic criteria that must be met and the text then elaborates on these criteria. If these criteria are not met, then a DSM-5 diagnosis of OCD is not warranted.

Although this overall approach to diagnostic classification differs between ICD-10 and DSM-5, the essential features of OCD are the same in both systems: recurrent obsessions and compulsive acts. There are also many similarities in how obsessions and compulsions are described across these two classification systems. For example. ICD-10 describes obsessions as "ideas. images, or impulses" that "enter the individual's mind again and again... and are almost invariably distressing... involuntary and often repugnant"; DSM-5 criteria describe obsessions as "thoughts, urges, or images" that are "recurrent and persistent... intrusive and unwanted... caus[ing] marked anxiety or distress." Likewise, ICD-10 describes compulsive acts ("or rituals") as "stereotyped behaviors that are repeated again and again... are not inherently enjoyable... often view[ed] as preventing some objectively unlikely event..."; DSM-5 criteria describes compulsions as "repetitive... not connected in a realistic way with what they are designed to neutralize or prevent, or are clearly excessive."

There are several important differences in diagnostic guidelines for OCD between ICD-10 and DSM-5. First, DSM-5 emphasizes in the criteria and text that there is usually a functional relationship between obsessions and

	ICD-10	DSM-IV	DSM-5
O&C	Other than defining Os as "thoughts" and Cs as "behaviors," there are shared definitions of Os and Cs	Separate definitions of Os and Cs with functional relationship; Cs can be mental rituals	Same as DSM-IV
Symptom duration	Most days for $\geqslant$ 2 weeks	No criteria	No criteria
Response	Requires at least one O or C to be unsuccessfully resisted; explicitly not pleasurable	Os "cause marked anxiety or distress"; "attempts to ignore, suppress, or to neutralize" Os	Os "in most individuals cause marked anxiety or distress" "attempts to ignore, suppress or to neutralize" Os (i.e., by performing a compulsion)
Impairment	Distress or interference with activities	Marked distress, time-consuming (> 1 hour/day), or significantly interfere	Time-consuming (e.g.,> 1 hour/ day) or cause clinically significant distress or functional impairment
Insight	"They must be recognized as the individual's own thoughts or impulses"	"At some point the person has recognized that the obsessions or compulsions are excessive or unreasonable (except in children)"	Range of insight permitted
Exclusion	Specific rules about diagnosing OCD with depressive disorders; cannot diagnose OCD in those with schizophrenia or Tourette syndrome	Differentiates OCD from some other Axis I disorders, but allows OCD to be diagnosed with depressive disorders, schizophrenia, and Tourette syndrome	Differentiates OCD from even more Axis I disorders, but allows OCD to be diagnosed with depressive disorders, schizophrenia, and Tourette syndrome; specifically, allows OCD to be diagnosed even in the presence of delusional OCD beliefs
Physiological cause	Exclusion: "organic mental disorder"	"Not due to the direct physiological effects of a substance or a general medical condition"	"Not attributable to the direct physiological effects of a substance or another medical condition"
Specifiers	<ol> <li>Predominantly Os</li> <li>Predominantly Cs</li> <li>Mixed Os &amp; Cs</li> </ol>	Poor insight	<ol> <li>Insight (good/fair vs. poor vs. absent-delusional)</li> <li>Tic-related</li> </ol>

 $<sup>\</sup>mbox{O = obsession; C = compulsion; OCD = obsessive-compulsive disorder.} \label{eq:occupation}$ 

compulsions. The ICD-10 diagnostic guidelines do not assume such a functional relationship. Second, DSM-5, like DSM-IV, explicitly notes that compulsions can be behavioral or mental acts. In contrast, ICD-10 does not mention mental rituals; obsessions are thoughts (which can include ideas, images, or impulses), and compulsions are "stereotyped behaviors that are repeated again and again." Third, DSM-5 emphasizes that obsessions "in most individuals cause marked anxiety or distress," and the text elaborates that people with OCD can have a range of affective responses. In ICD-10, the diagnostic guidelines and text description note that both obsessions and compulsions can cause distress and be unpleasant, but specific affects are not enunciated. Finally, DSM-5 has no specific duration for how long obsessive-compulsive symptoms must last to meet diagnostic criteria. In contrast, ICD-10 states that "for a definite diagnosis, obsessional symptoms or compulsive acts, or both, must be present on most days for at least 2 successive weeks."

There also are important differences in how these two diagnostic systems address differential diagnosis. As noted above, ICD-10 states that OCD should not be diagnosed in those with schizophrenia or Tourette syndrome. Moreover, OCD should only be diagnosed in those with a depressive disorder if OCD occurred first or if OCD persists in the absence of a depressive disorder. In contrast, DSM-5 does not exclude a diagnosis of OCD in the presence of schizophrenia, Tourette syndrome, or a depressive disorder.

Finally, ICD-10 and DSM-5 have different specifiers for OCD. As noted above, ICD-10 allows as specifiers: predominantly obsessional thoughts or rumination (noting that the relationship between obsessional ruminations and depression is "particularly close"); predominantly compulsive acts; and mixed obsessional thoughts and acts. Other specifiers include other obsessive-compulsive disorders (but without any clarification as to what this might include) and obsessive-compulsive disorder, unspecified. In contrast, DSM-5 has two specifiers: degree of insight and presence or absence of a comorbid tic disorder.

# Issues to consider for ICD-11

The essential features of OCD remain the same: the presence of recurrent obsessional thoughts and compulsive acts that cause distress and/or interfere with activities. However, since 1990, research from around the globe has refined the clinical phenotype of OCD and investigated its relationship to other disorders. In addition, new OCD subtypes have been proposed to address the heterogeneous ways OCD can present, with the goal that recognizing these subtypes might lead to improved treatment outcomes and to the identification of underlying biological mechanisms.<sup>24</sup> Thus, one issue for ICD-11 is how to revise diagnostic guidelines, rules for differential diagnosis, and specifiers to reflect this new research so that ICD-11 is scientifically valid. Another issue is how much to harmonize the somewhat different approaches

between ICD-10 and DSM-5 described above. That ICD-11 will follow a format different from that of ICD-10 should facilitate revisions. At the same time, the primary reason that the WHO is revising ICD-10 criteria for mental and behavioral disorders is to improve clinical utility, global applicability, and applicability outside specialty mental health settings. Thus, changes must be considered in light of these WHO priorities.

# Specific recommendations for ICD-11 and rationale

Specific recommendations for ICD-11 are directed at the diagnostic guidelines, rules of differential diagnosis, and specifiers for OCD. These recommendations are motivated by new research and WHO priorities: to have a classification system that is scientifically valid, clinically useful, and globally applicable. For each proposed revision, a brief background of the issue is provided, followed by the recommendation for ICD-11.

Diagnostic guidelines

# 1) How obsessions are defined

Background. ICD-10 (clinical description and diagnostic guideline) states that obsessional thoughts are "ideas, images, or impulses" - ICD-10 criteria for research are more restrictive, only allowing obsessions to be thoughts, ideas or images (e.g., cognitive events). DSM-IV also described obsessions as "thoughts, impulses, or images." However, DSM-5 replaced the word "impulse" in the criteria with the word "urge." The rationale for this change<sup>25</sup> was primarily clinical: to differentiate OCD from impulse control disorders. At the same time, this change was made recognizing that it might introduce new problems. For example, the word "urge" might create less differentiation from tic disorders<sup>25</sup> and from other disorders featuring urges (e.g., an urge to consume alcohol or substances in addictive disorders). Furthermore, in the English language, the word "urge" connotes a positive desire, whereas the word "impulse" is more neutral; how these words are translated and used in other languages is also of great relevance to ICD-11, since the goal is for diagnostic guidelines to have global applicability. Thus, one question for ICD-11 is whether to follow DSM-5, and to replace the word "impulse" in the diagnostic guidelines with the word "urge." There are no data at this point to determine the clinical utility of this change.

Potentially informing and also complicating this issue is recent research on what have been called "sensory phenomena" in OCD, specifically the non-cognitive or subjective experiences that precede compulsions. Initially described in patients with Tourette syndrome, these sensory phenomena were found to be common in OCD patients; initially they were thought to be more common in tic-related OCD and in the early-onset OCD subtypes. Since then, researchers developed the University of São Paulo Sensory Phenomena Scale (USP-SPS). The semi-structured scale assesses the past and present

occurrence of different types of sensory phenomena that precede or occur in conjunction with repetitive behaviors, including: 1) physical (tactile or muscle-joint) sensations that include uncomfortable sensations localized in a specific region of the body; 2) "just-right" perceptions triggered by tactile, visual, or auditory input, creating a desire for things to feel, look, or sound just right; 3) "just-right" perceptions triggered by internal feelings of incompleteness, provoking a perception of inner discomfort ("not just right" feeling); 4) "energy release" sensations, defined as generalized inner tension or energy that builds up and needs to be released by making a movement or engaging in an activity; and 5) an "urge only" phenomenon, which is just an urge to perform a repetitive behavior.

Using this scale, Ferrao et al.<sup>28</sup> assessed 1.001 consecutive OCD patients seeking outpatient treatment at seven university hospitals across Brazil. They found that 65% of these OCD patients reported at least one type of sensory phenomena preceding their repetitive behaviors: 57% had musculoskeletal sensations, 80% had externally triggered just-right perceptions, 27% had internally triggered just-right perceptions, 22% had an energy release, and 37% had an urge-only phenomenon. Individuals with sensory phenomena tended to have a higher frequency and severity of the symmetry/ordering/ arranging and contamination/cleaning symptom dimensions. They also had higher comorbidity with Tourette syndrome (but not other tic disorders) and a family history of tic disorders. In another study of 813 OCD patients from this same research consortium, 29 OCD patients with tic disorders (including Tourette syndrome) had a higher rate of sensory phenomena than OCD patients without tic disorders (80% versus 67%), but the rate of sensory phenomena was very high in both groups. The guestion then becomes: does the word "urge" cover these sensory phenomena or should they be separately described?

Recommendation. The issues outlined above were discussed with the WHO ICD-11 Working Group on the Classification of Obsessive-Compulsive and Related Disorders at its meeting in Madrid, Spain (June 2013). The group consensus was to recommend changing "impulse" to "impulse/urge." The intent was to maintain some consistency with the description of obsessions in DSM-5 (which replaced "impulse" with "urge"), to introduce a word like "urge" that captures some of these sensory phenomena that are common in OCD, and to ensure that there is an option for clinicians to use either of the words ("impulse" or "urge") depending upon the language and the context. In some languages, both words are used interchangeably because they convey similar, if not always identical, meanings. However, in other languages, their meanings do differ, and one or the other may be more accurate. In addition, it is also recommended that ICD-11 clearly specify that compulsive behaviors can be preceded by various different types of obsessions that can include thoughts, images, and impulses/urges, and that sensory phenomena be described in the text.

2) How compulsions are defined

**Background.** ICD-10 defines compulsions as "stereotyped behaviors that are repeated again and again." Two issues to consider for ICD-11: the use of the word "stereotyped" and whether compulsions are only behaviors.

Defining compulsions as stereotyped behaviors is potentially confusing, since there is a separate literature on stereotypies and stereotypic movement disorder; moreover, a diagnosis of stereotypic movement disorder in ICD-10 is excluded if the behavior can be better accounted for as a compulsion in OCD. Stereotypies are "involuntary, patterned, repetitive, coordinated, rhythmic, and non-reflexive behaviors that are suppressible by sensory stimuli or distraction."30 Humans sometimes engage in stereotyped repetitive behavior (e.g., tapping of feet or rocking to music), and this behavior varies across individuals and cultures. In some, these stereotypes are unusually intense, prolonged, or interfere with functioning, and are then considered a stereotyped movement disorder.31 For example, stereotyped movement disorder may involve prolonged bouts of handflapping or pacing that last up to many minutes. This is quite different from the compulsions in OCD, which are generally more complex and are usually performed in relation to an obsession or according to certain rules.

The ICD-10 requirement that compulsions are only behavioral acts is inconsistent with the literature. Specifically, the DSM-IV field trial demonstrated that the vast majority of OCD patients have mental rituals as well as behavioral rituals.<sup>32</sup> Using ICD-10 guidelines, these mental rituals might be misdiagnosed as obsessions, in which obsessions are thoughts (i.e., cognitive events) and compulsions are behaviors. Categorizing mental rituals as obsessions can lead erroneously to diagnosing a "pure obsessional" type of OCD,33 can undermine the reliability of rating scales that separately assess the severity of obsessions and of compulsions, and can interfere with treatment. Specifically, cognitive-behavioral therapy (CBT) consisting of exposure and response prevention, a first-line treatment for OCD, relies upon the therapist's and patient's ability to distinguish obsessions (which the patient is asked to trigger via exposures and tolerate) from compulsions (which the patient is asked to stop voluntarily).

**Recommendation.** The diagnostic guidelines for ICD-11 should not use the word "stereotyped" when describing compulsions, and should clarify that compulsions can be either repetitive behaviors or mental acts.

3) Whether to propose a relationship between obsessions and compulsions

**Background.** ICD-10 emphasizes that obsessions and compulsions share features: they are both repetitive, unpleasant, and resisted by the individual. No relationship is implied between them in the diagnostic guidelines or descriptive text. In contrast, like DSM-IV, DSM-5 indicates that there is often a functional relationship between obsessions and compulsions: as stated in the criteria, obsessions are intrusive (i.e., involuntary) and "in most

individuals cause marked anxiety or distress," whereas compulsions are "repetitive behaviors... that the individual feels driven to perform in response to an obsession or according to rules..."

Identifying this association between obsessions and compulsions has clinical utility because it can help differentiate OCD from other disorders that feature repetitive unpleasant thoughts, but not compulsions (e.g., ruminations of depression or worries of generalized anxiety disorder), and from other disorders with repetitive behaviors that are not triggered by obsessions (e.g., skin picking); this association also provides a basis for CBT for OCD, which involves exposing oneself to the situations that trigger obsessions while refraining from the associated compulsions.

**Recommendation.** We recommend stating in the text that compulsions are often performed in relationship to an obsession. We would use the language "in relationship to" (versus "in response to") to reflect the fact that some have hypothesized that compulsions may precede obsessions.<sup>34</sup>

# 4) Whether to clarify what distress means

**Background.** ICD-10 focuses on the fact that obsessions and compulsions generate "distress," and are not "inherently pleasurable." The text also specifies that autonomic anxiety symptoms are often present, but notes that feelings of "internal or psychic tension" without autonomic arousal are also common.

In fact, individuals with OCD experience a range of affective responses when confronted with situations that trigger obsessions and compulsions. For example, many individuals experience marked anxiety that can include recurrent panic attacks. Others report strong feelings of disgust. Some individuals report a distressing sense of "incompleteness" or uneasiness until things look, feel, or sound "just right." 26,28

**Recommendation.** For clinical utility, it is recommended that the text describe a wider range of affects that people with OCD can experience. This would include the fact that some people experience anxiety or panic attacks when confronted with one of their OCD triggers, whereas others can experience disgust or a feeling of incompleteness. The global applicability of these English words to describe this greater range of responses needs careful consideration.

# 5) Whether to maintain the duration requirement

**Background.** ICD-10 requires that obsessional symptoms or compulsive acts (or both) be present on most days for at least 2 successive weeks. In contrast, DSM-5 does not require any minimum duration of symptoms; it only requires that the symptoms be time-consuming (e.g., take more than 1 hour a day). Having a duration criterion may prevent patients with obsessional ruminations who have other psychiatric disorders (e.g., depression, early phases of psychosis) from being misdiagnosed as OCD. For example, of over 800 new cases of OCD presenting for treatment since 2004 at a specialty outpatient unit in

India, only 3% had OCD of less than 6 months duration, and only two patients (out of 802) had OCD of less than 1 month duration (Reddy, personal communication). On the other hand, we are unaware of any data that validate the 2-week duration requirement used in ICD-10. In addition, the acute onset of obsessive-compulsive behaviors has been described in children.

**Recommendation.** The duration requirement in ICD-10 should be removed. Instead, the text can mention that a diagnosis of OCD should be made cautiously in patients who present with a very short duration of illness (e.g., <1 month), and that an acute and fulminant onset of OCD in a child should prompt a careful evaluation to exclude other illnesses.  $^{36,37}$ 

# Differential diagnosis

With regard to differentiating OCD from other disorders, ICD-10 guidelines are not consistent with the current literature, nor, arguably, with good clinical practice. Specifically, ICD-10 states that differentiating OCD and a depressive disorder can be difficult because these two types of symptoms occur frequently together. As noted above, precedence is given to that which occurs first, to depression if both disorders are present, and to whichever persists in the absence of the other.

The rationale for these guidelines is not clear. First, the essential features of OCD (i.e., recurrent obsessional thoughts and compulsive acts) are quite distinct from the essential features of depressive disorders (i.e., depressed mood and loss of interest, in both ICD-10 and DSM-5).

Second, epidemiological studies<sup>17</sup> indicate that OCD often precedes a depressive disorder; ICD-10 would then suggest that OCD should always take precedence. Moreover, because OCD is more likely to be chronic than episodic, <sup>19,38</sup> OCD would likely persist beyond a depressive disorder as well. Thus, following ICD-10 rules could lead to serious underdiagnosis and undertreatment of a depressive disorder in those with OCD. Although OCD is commonly comorbid with major depressive disorder in patients seeking treatment (lifetime prevalence of MDD, 53-67% <sup>39-41</sup>; current prevalence of MDD, 32-37% <sup>41,42</sup>), the prevalence of comorbid MDD in community samples of individuals with OCD is much lower (lifetime prevalence of MDD in OCD: 27% in the Epidemiological Catchment Area study <sup>43</sup>).

The fact that ICD-10 does not permit a diagnosis of OCD in the presence of schizophrenia or Tourette syndrome is also surprising. The prevalence of OCD in schizophrenia is estimated to be around 12%<sup>44</sup> and has been associated with poor outcome.<sup>45,46</sup> Therefore, its recognition and treatment is important. Similarly, OCD and Tourette syndrome have high rates of bidirectional comorbidity,<sup>47,48</sup> and presence of tics in OCD has been associated with poor outcome.<sup>49</sup> Not identifying OCD in those with Tourette syndrome may contribute to poor treatment outcomes, since OCD does not respond to medications that are used to treat tics in Tourette syndrome. Similarly, when tics co-occur with OCD, use of selective serotonin

# Table 3 Potential specifiers for OCD

#### Degree of insight

**Pro:** As reviewed, <sup>25</sup> data show that people with OCD display a range of insight into the reality of their obsessive-compulsive beliefs. A small subset of people show no insight, and are completely convinced that their obsessive-compulsive beliefs are true. The addition of such a specifier would help clinicians recognize this range of insight in OCD patients and potentially prevent some patients from being incorrectly diagnosed as having a psychotic disorder that would be erroneously treated with antipsychotic monotherapy.

Con: The ability of clinicians across diverse settings to reliably use such an insight specifier is unknown. The global applicability of the concept of insight needs to be studied.

#### Tic-related OCD

**Pro:** As reviewed, 25 some forms of OCD have been associated with chronic tic disorders, including Tourette syndrome, and may be etiologically linked. Data suggest that those with comorbid tic disorders may respond better to antipsychotic augmentation of a serotonin reuptake inhibitor than those without a personal history of tic disorder. 50 Finally, some children with comorbid tic disorders may have an increased likelihood of remission. 52

Con: Not all OCD patients with comorbid tic disorders differ from those without comorbid tic disorders; thus, differentiating which tic disorders are "related" to OCD and which are not is not necessarily obvious. Moreover, if a comorbid diagnosis of tic disorder is separately made (as the diagnostic guideline intends that it should be), then having this specifier for OCD is redundant.

# Early-onset OCD (i.e., onset before puberty)

**Pro:** As reviewed elsewhere, <sup>25</sup> early-onset OCD has been found in some studies to present with a higher rate of OCD among relatives, to differ in comorbidity and course, and to occur more commonly in males.

**Con:** Studies have confounded tic-related and early-onset OCD, as well as used varying definitions of early-onset OCD. Given the variation in developmental trajectory, choosing a specific age by which OCD-onset is deemed early is pseudo-precise. At the same time, using "onset prior to puberty" has the problem that studies of early-onset OCD did not typically measure puberty; moreover, it raises the issue of how clinicians will determine puberty. Finally, it is not clear that early-onset OCD necessitates different treatment decisions. <sup>53</sup>

#### Symptom dimensions

**Pro:** As reviewed elsewhere,<sup>25</sup> a dimensional approach to OCD symptoms may have value in genetic, biological, and treatment studies. These dimensions include either four factors (i.e., hoarding, symmetry/ordering, contamination/cleaning, forbidden thoughts) or five factors (i.e., the first three factors [hoarding, symmetry/ordering, contamination/clearing] with forbidden thoughts divided into aggressive/sexual/religious obsessions and harm obsessions with checking compulsions).

**Con:** Dimensions are complex, and using them as a specifier places a burden on clinicians. Moreover, the strongest evidence is for the hoarding dimension; however, individuals with predominant hoarding symptoms will now be given a separate diagnosis of Hoarding Disorder. Importantly, most individuals with OCD have symptoms in multiple dimensions, and the symptom dimensions are not necessarily stable over time. Finally, other than for Hoarding Disorder itself, different treatment choices are not currently made for the different dimensions.

# Pediatric autoimmune neuropsychiatric disorders associated with streptococcal infections (PANDAS)

**Pro:** As reviewed elsewhere, <sup>25</sup> it has been hypothesized that some susceptible individuals develop an abrupt and dramatic onset of OCD symptoms and tic disorders as the result of an autoimmune process following group A beta-hemolytic streptococcal infection. This syndrome has been called pediatric autoimmune neuropsychiatric disorders associated with streptococcal infections (PANDAS), and may identify a subgroup of children who might benefit from treatments other than standard medications and cognitive-behavioral therapy for OCD.

Con: To date, strong support for alternative treatments for suspected cases of PANDAS is lacking. <sup>56</sup> Also, it is unclear whether PANDAS is better conceptualized as a specifier of OCD (e.g., identifying a subset of OCD patients with a shared etiology) or a separate disorder (and therefore an exclusion). Finally, streptococcal infection may be only one of multiple causes for the abrupt and dramatic onset of OCD symptoms, which is now being called pediatric acute-onset neuropsychiatric syndrome (PANS<sup>56</sup>) or childhood acute neuropsychiatric symptoms (CANS<sup>37</sup>).

# Incomplete versus harm-avoidant

**Pro:** Two core dimensions of OCD have been proposed: harm avoidance (those with anxious apprehension and exaggerated avoidance of potential harm) and incompleteness (those with sensations of things being incomplete or not "just right"). 57-59 These two dimensions have been associated with different emotional responses (i.e., anxiety/nervousness and a desire to prevent harm versus tension/discomfort and a desire to perform tasks until they are just right), different age of onset (later onset versus earlier onset), different comorbidity patterns (e.g., other anxiety disorders versus comorbid tic disorders and obsessive-compulsive personality disorder), and, possibly, different treatment outcome (reviewed in Pietrefesa & Coles<sup>57</sup>).

**Con:** OCD patients can exhibit both harm avoidance and incompleteness. For date, strong evidence supporting different treatments for these dimensions is lacking.

#### Course

**Pro:** For many individuals, the course of OCD is chronic, often with waxing and waning symptoms; at the same time, a subset of individuals may have an episodic or a deteriorating course. <sup>19,38</sup> Without treatment, recovery rates in adults are usually low (e.g., 20% for those evaluated 40 years later <sup>19</sup>). With treatment, remission rates vary widely across studies, as do rates of relapse. <sup>17,20,51,60-64</sup> In children and adolescents, 40% may remit by early adulthood. <sup>65</sup> Thus, a course specifier (e.g., single episode in remission, episodic, and chronic course) may have some treatment implications. For example, in those with a single episode of OCD who remit, an attempt to taper and stop medications may be appropriate; in those with chronic symptoms, treatment may have to be continued for a much longer period or indefinitely.

Con: The course of OCD can vary substantially, depending not only on the natural history of the illness and the type of samples studied, <sup>51,62,63</sup> but also on the presence of comorbidity, the nature of the treatment received, and the length of follow-up. <sup>66</sup> Definitions of course (e.g., response, remission, relapse) have also varied across studies. <sup>67,68</sup> Given these complexities, it is hard to generalize about course in OCD. In addition, there are little data to support different treatment recommendations for those with different courses. As a result, it not clear that a course specifier has clinical utility or can be used reliably.

Continued on next page

# Table 3 Continued

#### Severity

Pro: Some studies have shown that greater symptom severity is associated with poorer treatment response and outcome. 20,64,69

Classifying OCD into mild, moderate, and severe subtypes may have treatment and prognostic implications.

Con: Not all treatment studies find that severity predicts outcome. Thus, the clinical utility of severity is not clear. Moreover, poor outcome may be related to a particular symptom dimension, such as washing or hoarding. Whether severity of OCD irrespective of the principal symptom dimension predicts outcome of OCD is unclear. Finally, categorizing OCD severity into mild, moderate, and severe requires giving clinicians simple and reliable tools for doing so. Studies that examined the relation between OCD severity and outcome used validated measures like the Yale-Brown Obsessive Compulsive Scale, 75 which is a continuous variable. However, most clinicians do not use structured scales such as this one before initiating treatment.

reuptake inhibitors alone may not result in a good treatment response, and the addition of an antipsychotic may be warranted.<sup>50</sup> Therefore, it is clinically important to identify and diagnose both OCD and Tourette syndrome, which are highly comorbid with each other.

**Recommendation.** The recommendation is to replace ICD-10 guidelines for differential diagnosis with a more detailed description of disorders that share some symptoms with OCD (e.g., anxiety disorders, depressive disorders, other obsessive-compulsive and related disorders, tic disorders, eating disorders, psychotic disorders). To enhance clinical utility, disorders that commonly co-occur with OCD should also be outlined in the text of ICD-11.

# Specifiers

OCD is a clinically heterogeneous condition.<sup>24</sup> This heterogeneity can obscure our understanding of what causes OCD and how best to treat it. As a result, there have been multiple attempts to identify more homogeneous groupings of patients to facilitate treatment planning and studies of pathophysiological mechanisms.

In line with this tradition, ICD-10 recommended that individuals with OCD be classified into those with predominantly obsessional thoughts, predominantly compulsive acts, or mixed obsessional thoughts and acts. However, as noted above, it has since been recognized that most people with OCD have both obsessions and compulsions.32 Moreover, it is not clear that this classification is clinically useful. For example, a recent follow-up study of those with obsessions (and without mental rituals) versus those with both obsessions and compulsions did not find clear differences in outcome.51

In the meantime, there have been many other proposals for how to subdivide OCD in the literature. These include specifying people with OCD based on their degree of insight, presence of comorbid tic disorder, age of onset, symptom dimensions, course, severity, or other features (e.g., harm avoidance versus incompleteness). The pros and cons of these different potential specifiers are outlined in Table 3. DSM-5 has two specifiers for OCD: degree of insight (i.e., good or fair insight, poor insight, absent insight) and tic-related (i.e., noting whether the individual has a current or past history of a tic disorder). The clinical utility of the insight specifier is to help clinicians diagnose OCD (and not a psychotic disorder) in an OCD patient with poor or

absent insight; such patients should be treated for OCD (e.g., serotonin reuptake inhibitors) and not with antipsychotic monotherapy. The clinical utility of the DSM-5 tic-related specifier is to help clinicians remember to evaluate patients for tic disorders; these OCD patients may be more responsive to antipsychotic augmentation.50

**Recommendation.** The recommendation is to remove ICD-10 specifiers (predominantly obsessional thoughts, predominantly compulsive acts, mixed obsessional thoughts and acts). In ICD-11, unlike in DSM-5, Tic Disorders and Tourette's Syndrome will be listed in the same chapter as OCD. Thus, a tic specifier for OCD seems redundant. The clinical utility and global applicability of introducing a specifier for insight is worth considering. Data supporting the reliability of such a specifier in non-specialty settings would be useful.

# Conclusion

In summary, ICD-10, approved in 1990, is being revised by the WHO. This is an opportunity to revise the diagnostic guidelines for OCD to improve their clinical utility, global applicability, and applicability outside specialty mental health settings. Based on research conducted since 1990, the following changes are recommended: 1) clarifying the definition of obsessions (i.e., that obsessions can be thoughts, images, or impulses/urges); 2) updating the definition of compulsions (i.e., not calling these "stereotyped" and clarifying that these can be behaviors or mental acts); 3) clarifying in the text that compulsions are often performed in relation to an obsession; 4) describing in the text that the "distress" generated by obsessions and compulsions can include a range of affective states (e.g., anxiety, disgust, feeling of incompleteness); and 5) removing the ICD-10 duration requirement (i.e., symptoms for at least 2 weeks), but mentioning in the text that a diagnosis of OCD should be made cautiously in patients who present with a very short duration of illness (e.g., <1 month) and that an acute or fulminant onset of OCD should prompt a careful evaluation to exclude other illnesses. Regarding the differential diagnosis section, it is recommended that a diagnosis of OCD no longer be excluded if comorbid with Tourette syndrome, schizophrenia, or depressive disorders. Finally, it is also recommended to remove ICD-10 specifiers (i.e., predominantly obsessional thoughts, compulsive acts, or mixed) and to consider the clinical utility and global applicability of introducing a new

specifier for insight. Data supporting the reliability of such a specifier in non-specialty settings would be useful.

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