ICD-11 Guidelines for Mental and Behavioral Disorders of Children and Adolescents: Reliability and Clinical Utility

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Objective: *ICD-11* clinical guidelines for mental and behavioral disorders must be tested in clinical settings to guarantee their usefulness worldwide. The purpose of this study was to evaluate interrater reliability and clinical utility of the *ICD-11* guidelines for children and adolescents in assessing and diagnosing mood, anxiety, and fear-related disorders; attention-deficit hyperactivity disorder (ADHD); and disruptive behavioral disorder (DBD).

Methods: Children and adolescents ages 6–17 from two specialized settings in Mexico City were interviewed. Each was interviewed by a pair of psychiatrists (interviewer and observer), who independently codified established diagnoses and evaluated the clinical utility of the guidelines with each participant. Kappa values were calculated to determine the level of general diagnostic correlation between the two clinicians.

Results: A total of 25 psychiatrists evaluated 52 children and adolescents. Kappa values between clinicians ranged from 0.46 to 0.53 for mood, anxiety, and fear-related disorders and for ADHD; the kappa value was 0.81 for DBD guidelines. Over 80% of psychiatrists reported that the guidelines, qualifiers, and descriptions of developmental presentations were quite useful.

Conclusions: *ICD-11* guidelines for mental and behavioral disorders of children and adolescents demonstrated mostly moderate interrater reliability and strong interrater reliability in the case of DBD. A large proportion of clinicians regarded the guidelines as quite useful clinical tools.

Psychiatric Services 2022; 73:396-402; doi: 10.1176/appi.ps.202000830

Expert groups developed the World Health Organization diagnostic guidelines for mental and behavioral disorders among children and adolescents (1). After publication, all diagnostic guidelines for mental and behavioral disorders in *ICD-11* must be evaluated in terms of their ability to achieve consistent clinical diagnoses, or interrater reliability, and in terms of their clinical utility (2). Clinical descriptions and diagnostic guidelines for mental and behavioral disorders were published in 2015 (1). The interrater reliability and clinical utility of *ICD-11* diagnostic guidelines for psychotic, mood, and anxiety disorders among adults were published in 2019. In a Mexican sample, all kappa interrater values were above 0.41, and a high proportion of clinicians considered the guidelines to be extremely useful (3).

In the developing world, the use of diagnostic guidelines is important for improving disorder recognition and reducing the large treatment gap (>70%) (4). Results of the

HIGHLIGHTS

- *ICD-11* diagnostic guidelines for mood, anxiety, and fear-related disorders and for attention-deficit hyperactivity disorder demonstrated moderate interrater reliability (κ =0.46-0.53) between clinicians evaluating children and adolescents.
- *ICD-11* diagnostic guidelines for disruptive behavioral disorders in childhood and adolescence showed strong interrater reliability (κ >0.8), particularly for oppositional defiant disorder with chronic irritability-anger.
- On the basis of their professional impressions, clinicians reported that the *ICD-11* guidelines and qualifiers for common mental disorders of childhood and adolescents were quite useful in helping select treatment and determine patients' prognosis.

Mexican Adolescent Mental Health Survey showed that although 9% had a serious mental disorder, 20% had a moderately severe disorder, and 10% had a mild disorder, most did not receive treatment (5). Therefore, the use of reliable, effective diagnostic guidelines could increase the provision of evidence-based care for patients (6).

Diagnostic guidelines for mental and behavioral disorders in *ICD-11* include a section on developmental presentations, which describes the variability of the symptomatic manifestations of mental disorders according to an individual's stage of development. The incorporation of expressions of psychopathology across the lifespan provides a longitudinal view of the manifestations, and the chapter on children and adolescents in which certain clinical characteristics were repeated has been eliminated. Disorders traditionally conceptualized as being present only in childhood that may persist and manifest differently in adult life can be codified at any stage of life (1).

CHANGES IN ICD-11 CLASSIFICATION OF CHILD AND ADOLESCENT DISORDERS

Some high-priority changes in the conceptualization of the *ICD-11* classification of child and adolescent disorders in terms of their prevalence, service use, and care costs, are described below (7).

Depressive Disorders

The *ICD-11* classification has not been significantly modified. The description of depression in the section on developmental presentations highlights the fact that among children, depressive mood may occur in the form of somatic complaints, increased anxiety, or excessive crying; among children, depressive mood may present as general irritability; among children and adolescents, reduction in the ability to concentrate and sustain attention may be manifested in a decline in academic performance; and decreased appetite may be expressed in a lack of weight gain expected for a given age and level of development, rather than weight loss.

Anxiety and Fear-Related Disorders

Generalized anxiety disorder (GAD), specific phobia, separation anxiety disorder, social anxiety, and selective mutism are the most frequent anxiety disorders among children and adolescents. The GAD description in the section on developmental presentations highlights the fact that among children, expressions of concern may include a particular interest in and adherence to rules, with a strong desire to please others, or seeking others' approval excessively to reassure themselves; and among young people, excessive irritability and somatic and depressive symptoms are common (8).

Disorders Specifically Associated With Stress-Related Disorders

Four disorders are included: posttraumatic stress disorder (PTSD), complex PTSD, prolonged grieving disorder, and adjustment disorder. The PTSD description underlines the

following: among children, both the presence of reexperiencing and active avoidance of internal states and the perception of an intensified current threat are usually expressed through behavioral manifestations; adolescents may be more reluctant to report their reactions to traumatic events, and when reexperiencing occurs, adolescents communicate a lack of affection or other emotions. As for adjustment disorders among children, these tend to be expressed through behavior such as tantrums, bedwetting, and sleep disorders. Somatic symptoms, excessive irritability, or psychoactive substance use may be reported, and adolescents may not explicitly verbalize a connection between stressful events and their own symptoms, meaning that the clinician must consider the relationship between the time of stressor and the attendant symptoms.

Attention-Deficit Hyperactivity Disorder

Hyperkinetic disorder was removed from *ICD-11* and renamed attention-deficit hyperactivity disorder (ADHD). ADHD may present with or without impulsivity and hyperactivity. Inattentive presentation is manifested in a diversity of contexts, with a combination of difficulty concentrating, tendency toward distraction, and organizational problems; losing things frequently; and inattention to details of the task at hand. ADHD combined presentation is diagnosed when both inattention and hyperactivity or impulsivity are present. The detection of ADHD is complicated by the fact that it is often not identified or is attributed to other causes, even though it is a common cause of academic problems (9).

Disruptive Behavioral Disorders

Oppositional defiant disorder and conduct disorder (CD) were incorporated into disruptive behavioral disorders (DBD). Oppositional defiant disorder may be present with or without chronic irritability-anger; the subtype with chronic irritability-anger was incorporated as the *ICD-11* equivalent of disruptive mood dysregulation disorder (DMDD) in *DSM-5* (10, 11). Field studies and secondary analysis of their diagnostic criteria showed that DMDD has limited interrater and temporal reliability, a lack of consensus between psychiatrists, and high comorbidity rates, especially with ADHD and oppositional defiant disorder (12–14). Both oppositional defiant disorder and CD could present as "limited prosocial emotions." This specifier is linked to more severe, persistent violent behavior (15) and could be identified in internalizing and externalizing disorders (16).

Given the need to evaluate whether the diagnostic guidelines work in Mexico, the aims of this research were to establish the interrater reliability and clinical utility of *ICD-11* guidelines for mood, anxiety, and fear-related disorders and ADHD and DBD among children and adolescents.

METHODS

This was a cross-sectional study drawing on a sample of children and adolescents seeking mental health services at two specialized psychiatric care facilities in Mexico City. The research was carried out from March to December 2017. Although the two recruitment centers are specialized hospitals, they accept both first-contact patients and patients referred by other centers. A naturalistic design was used whereby the raters conducted conventional diagnostic interviews based on *ICD-11* diagnostic guidelines to avoid the artificial increase in diagnostic reliability that usually occurs with the use of structured interviews. Details of *ICD-11* field studies have been described elsewhere (17).

Participants

Children and adolescents ages 6–17 participated. In the first consultation, the clinician explained the symptoms of all the disorders to the participant and the family in the two venues that participated. Youngsters with one of their parents received a comprehensive explanation of the nature and aims of the research and agreed to sign the assent/consent forms. Exclusion criteria included the presence of communication difficulties, clinically evident cognitive dysfunctions, and physical disabilities that could interfere with the participation of patients in the diagnostic interview. Patients at imminent risk of selfharm or injury to others were excluded, and these patients were managed in the psychiatric emergency units available at both institutions. All participants, both children and adolescents, were interviewed in the presence of one of the parents.

Clinical Raters

All clinical raters at both institutions were psychiatrists; some were also child and adolescent psychiatrists and others were 6th-year residents in the specialty. All clinical raters received a 4-hour training session on the most important changes in *ICD-11* and the use of diagnostic guidelines. The research thereby emulated what will happen in specialized scenarios once *ICD-11* is implemented. Rater training was provided by a clinical expert in child and adolescent psychiatry (FRP) with over 20 years' experience in the field, who was a member of the *ICD-11* guideline development team. As part of the training, clinician raters practiced applying the diagnostic guidelines to case vignettes and discussed the issues that arose during this process.

Two clinicians participated in each interview, one as an observer and the other as an interviewer, without communicating with each other. In addition to establishing a diagnosis for each participant (a main diagnosis and up to two secondary diagnoses when appropriate), they evaluated the clinical utility of the guidelines as used with each patient. Clinical rater pairs were assigned according to a systematic sampling procedure by using a list of clinicians available daily and considering their most recent participation as an observer or interviewer to maximize the variability of dyads and roles.

Guidelines and Measure of Clinical Utility

The instrument for assessing the clinical utility of the *ICD-11* diagnostic guidelines for mental and behavioral disorders was specifically developed for this purpose (18). It comprises 15 questions on the different domains of the construct and is answered by using a 4-point Likert scale. According to an exploratory and confirmatory factor analysis of data from a study of Mexican clinicians who evaluated the guidelines for common mental and behavioral disorders in adulthood (3), all the items were grouped congruently in two general dimensions: implementation characteristics, and identification and management. Cronbach's alpha coefficients for the subtotals and total scale were 0.90, 0.90, and 0.93, respectively.

Procedures

The ethics review boards at both institutions approved all the procedures used in the research, including the assent/ consent forms for the children and adolescents and their parents. Clinicians responsible for the initial evaluations were asked to refer all participants who met the selection criteria to a research assistant, who oversaw the informed assent/consent process. Only participants and parents who had agreed to participate voluntarily in the research signed the assent/consent form, and all were invited at their convenience to a 2-hour interview with a dyad of clinical raters. After the interviewer had finished the questions, the observer had an opportunity to ask any questions that the observer considered necessary.

At the very least, each clinical interview covered the entire diagnostic evaluation, including symptoms present, history of the current episode, and an examination of mental status and personal, family, medical, and psychiatric history. If studies or other information existed, it was agreed that both raters would have access to it. The main objective of these measures was for clinicians to establish a diagnosis on the basis of exposure to the same information.

After the interview, both clinicians recorded their diagnostic impression of the patient without consulting each other, completed a step-by-step evaluation of the essential *ICD-11* characteristics of the selected diagnoses for each patient, and answered the clinical utility evaluation questionnaire of the *ICD-11* diagnostic guidelines for each case. In addition to the main diagnosis, each clinician could include up to two secondary diagnoses. It was also possible to register a "nondiagnosis," if the clinician considered that the participant failed to present the diagnostic characteristics required to determine the presence of a mental disorder (none of the patients in the sample received a nondiagnosis).

Clinicians were not allowed to discuss the case with each other until they had independently entered their diagnostic evaluation into the database. In addition, the electronic data collection system allowed the two clinicians to complete the same patient's information independently to ensure that they were blind to their peer's opinions. Data were collected by using the Qualtrics online survey platform, making it possible to ensure the confidentiality and security of information.

Statistical Analyses

A statistical analysis was conducted with SPSS, version 20. General characteristics were described based on means and

 TABLE 1. Characteristics of 25 psychiatrists who conducted child and adolescent evaluations

Characteristic	Ν	%
Age (M±SD)	51.3±11.6	
Years of professional experience ($M\pm$ SD)	13.3 ± 11.3	
Gender		
Male	8	32
Female	17	68

standard deviations or frequencies and percentages and were compared by using Student's t tests of independent samples or chi-square tests. The frequencies and percentages of each of the diagnoses assigned by both the rater and the observer were also calculated. Each specific diagnosis was subsequently grouped into one of five general categories: mood disorders, anxiety and fear-related disorders, disorders specifically related to stress, ADHD, and DBD. The corresponding kappa values were calculated to determine the level of general diagnostic agreement between both clinicians. In all cases, the preestablished level of significance was $p \leq 0.05$. Finally, to summarize information on the clinical utility of the guidelines, the frequencies and percentages of responses to each item in the corresponding questionnaire were calculated for both the interviewers and the observers.

RESULTS

Twenty-five clinicians (ten interviewers and 15 observers) participated in the research. Their demographic characteristics and professional experience are summarized in Table 1. The clinical sample comprised 52 participants, 21 (40%) of whom were children (ages 6–11) and 31 (60%) of whom were adolescents (ages 12–17). In the clinical sample, 19 (37%) were females (four children and 15 adolescents) and 33 (63%) were males (17 children and 16 adolescents). The mean \pm SD age of the clinical sample was 11.9 \pm 3.2.

TABLE 2. Diagnoses most frequently assigned to 52 children and adolescents, by rater^a

	Interv	viewer	Observer	
Specific diagnosis	Ν	%	Ν	%
Dysthymic disorder	7	14	6	12
Generalized anxiety disorder	7	14	5	10
Specific phobia	8	15	4	8
Separation anxiety disorder	7	14	6	12
Posttraumatic stress disorder	5	10	4	8
Adjustment disorder	5	10	2	4
Attention-deficit hyperactivity disorder, combined presentation	28	54	31	60
Oppositional defiant disorder with chronic irritability-anger	9	17	9	17

^a Two clinicians conducted each interview, one as an interviewer and the other as an observer, and recorded their diagnoses independently. The data indicate that, for example, dysthymic disorder was the diagnosis given by interviewers to seven interviewees and by observers to six interviewees (not necessarily the same children). Proportions were compared by chi-square tests, and no statistically significant differences were found.

TABLE 3. Assignment of 52 children and adolescents to five diagnostic groups, by rater^a

	Interv	viewer	Observer		
Diagnostic group	Ν	%	Ν	%	
Depressive disorders	29	56	26	50	
Anxiety and fear-related disorders	26	50	19	37	
Disorders specifically associated with stress	14	27	11	21	
Attention-deficit hyperactivity disorders	35	67	37	71	
Disruptive behavioral disorders	26	50	25	48	

^a Two clinicians conducted each interview, one as an interviewer and the other as an observer, and recorded their diagnoses independently. Each interviewee was given a main diagnosis and up to two secondary diagnoses. Proportions were compared by chi-square tests, and no statistically significant differences were found.

Assigned Individual Diagnoses

Eight diagnoses were the most frequently assigned main diagnoses (Table 2). ADHD combined presentation and oppositional defiant disorder with chronic irritability-anger were the most frequent disorders identified by interviewers and observers.

Assigned Group Diagnoses and Kappa Values

Table 3 shows the frequencies and percentages of participants included in each diagnostic group. No significant

TABLE 4. Agreement and kappa values between raters who evaluated 52 children and adolescents, by diagnosis group^a

Diagnosis group and	Interv		
observer agreement	Yes	No	κ^{b}
Depressive disorders			
Observer			.50
Yes	21	8	
No	5	18	
Anxiety and fear-related disorders			
Observer			.50
Yes	16	10	
No	3	23	
Disorders specifically associated with stress			
Observer			.53
Yes	8	6	
No	3	35	
Attention-deficit hyperactivity disorders			
Observer			.46
Yes	30	5	
No	7	10	
Disruptive behavioral disorders			
Observer			.81
Yes	23	3	
No	2	24	

^a Two clinicians conducted each interview, one as an observer and the other as an interviewer. For example, for depressive disorders (DD), there were 21 patients for whom both the interviewer and the observer recognized any DD and 18 for whom both did not recognize any DD. For five patients, the observer did not recognize but the interviewer recognized DD. For eight patients, the observer recognized but the interviewer did not recognize DD.

^b $p \le .001$ for all comparisons.

TABLE 5. Clinician responses on an instrument assessing the clinical utility of the *ICD-11* guidelines for evaluating 52 children and adolescents, by rater^a

	Interviewer		Observer		Total	
Item and answer option ^b	Ν	%	Ν	%	Ν	%
1. Please rate the overall ease of use of the diagnostic guidelines.						
Somewhat easy	2	4	3	6	5	15
Quite easy	45	87	38	73	83	5
Extremely easy	5	10	11	21	16	80
2. Please rate the overall goodness of fit or						
Somewhat accurate	z	6	7	1/	10	10
	44	85	40	77	84	R1
Extremely accurate	5	10	-0	10	10	10
3 Please rate the extent to which the diagnostic	5	10	5	10	10	10
guidelines were clear and understandable						
Somewhat	1	2	2	4	3	3
Quite	47	90	41	79	88	85
Extremely	4	8	9	17	13	13
4. Which of these statements best describes the						
level of detail and specificity?						
Insufficient	2	4	2	4	4	4
About the right amount	50	96	46	89	96	92
Too much	_	_	4	8	4	4
5. Please rate the extent to which the guidelines						
imposed requirements that were difficult to assess.						
Somewhat difficult to apply	9	17	6	12	15	14
Quite easy to apply	38	73	40	77	78	75
Extremely easy to apply	5	10	6	12	11	11
6. Please describe the amount of time that it took						
you to apply all the essential features.	2	4	1	2	7	7
Much longer than my usual clinical practice	2	4		2 1.4	5 15	5 1 /
About the same as or less than my usual clinical	42	10 Q1	11	14 07	15	14 07
practice	42	01	44	04	00	05
7 Please rate the description of the boundary						
between disorder and normality						
Somewhat useful	5	10	8	15	13	13
Quite useful	45	87	37	71	82	79
Extremely useful	2	4	7	14	9	9
8. Please rate the boundary between this patient's						
disorder and other disorders.						
Somewhat useful	4	8	3	6	7	7
Quite useful	46	88.5	43	83	89	86
Extremely useful	2	3.8	6	12	8	8
9. How useful were the guidelines in helping you						
to select a treatment?						
Somewhat	2	3.8	2	4	4	4
Quite	46	88.5	43	83	89	86
10 How useful were the guidelines in helping you	4	1.1	/	14	11	11
to assess a progressic?						
Somewhat	2	3 8	Д	8	6	6
Quite	47	90.4	40	77	87	84
Extremely	.3	5.8	8	15	11	11
11. How useful were the guidelines in helping you	-		-			
to communicate?						
Somewhat	3	5.8	2	4	5	5
Quite	42	80.8	43	83	85	82
Extremely	7	13.5	7	14	14	14
12. How useful were the guidelines in helping you to						
educate this patient or family?						
Somewhat	2	3.8	4	8	6	6
					con	tinued

differences between the interviewer and the observer were found in the diagnostic assignments for any group. Kappa values between raters were subsequently calculated, taking into account the number of interviewees whom they both assigned to the same diagnostic group (Table 4).

Clinical Utility of Guidelines

Clinicians' responses to the questions on the instrument assessing clinical utility of the guidelines are shown in Table 5. Over 80% of clinicians reported that the guidelines were clear, easy to use, and accurate; that the guidelines and qualifiers were useful in helping to communicate with patients, select treatment, and determine patients' prognosis; and that descriptions of developmental presentations were useful as applied to the patient.

DISCUSSION

ICD-11 diagnostic guidelines for depressive disorders, anxiety and fear-related disorders, disorders specifically associated with stress, and ADHD demonstrated moderate interrater reliability, and those for DBD showed a strong level of agreement between clinicians (19). Additionally, most clinicians considered the diagnostic guidelines useful. These ICD-11 guidelines cover diagnoses that are among those with the highest prevalence among children and adolescents in Mexico City and the surrounding metropolitan area (20); mood, impulsive, and anxiety disorders are the most frequent and thus the main reasons for seeking some form of mental health treatment (21).

ADHD combined presentation and oppositional defiant disorder were the most frequent specific diagnoses, and interviewers and observers recognized both. This is a frequent pediatric mental health comorbidity, not only in clinical populations but also in general populations (22-26). Thus it was not surprising that these diagnoses were frequently applied by clinicians to our clinical sample, and the fact that the percentages of both disorders were very similar between interviewers and observers is consistent with the adequate levels of interrater reliability observed for the diagnostic groups of which each disorder is part (i.e., ADHDs and DBDs, respectively). Because research on comorbid and noncomorbid ADHD has been a priority for clinicians in Mexico and Latin

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	Inte	Interviewer		Observer		Total	
Item and answer option ^b	Ν	%	Ν	%	Ν	%	
Quite	43	82.7	38	73	81	78	
Extremely	7	13.5	10	19	17	16	
13. How helpful were the qualifiers in helping you							
to select a treatment?							
Somewhat	6	11.5	6	12	12	12	
Quite	27	52.0	25	48	52	50	
Extremely	19	36.5	21	40	40	39	
14. How useful would the qualifiers be in helping							
you to determine a prognosis?							
Somewhat	2	3.8	4	8	6	6	
Quite	32	61.5	26	50	56	54	
Extremely	18	34.6	22	42	40	39	
15. Please rate the extent to which developmental							
presentations were useful.							
Not at all	_	_	1	2	1	1	
Somewhat	8	15.4	10	19	18	17	
Quite	28	53.8	24	46	52	50	
Extremely	16	30.8	17	35	33	32	

^a Two clinicians conducted each interview, one as an interviewer and the other as an observer. After each interview, both clinicians completed the clinical utility measure as it applied to that patient.

^b If no respondent selected an answer option, it was eliminated from the table (i.e., not at all easy to use; not at all accurate, clear, useful).

America (24), *ICD-11* guidelines may serve as an important tool for identifying these diagnoses and should thus be incorporated into clinical practice in the region.

Interrater Reliability Values

More specifically, interrater reliability based on *ICD-11* guidelines was strong for DBD, particularly for oppositional defiant disorder with chronic irritability-anger. This finding is especially relevant, because one of the most important debates regarding the classification of mental disorders in childhood and adolescence focuses precisely on the evaluation, diagnosis, and treatment of children with severe chronic irritability and anger. In the past, classification systems have found it difficult to identify this phenomenon, which has delayed its diagnosis and treatment. Fortunately, the formulation of irritability and oppositionality put forth in *ICD-11* may more accurately identify chronic irritability than do the *ICD-10* or *DSM-5* proposals (11, 27).

Conversely, when contrasting our kappa values with those of *ICD-11* adult guidelines for internalizing disorders (3), we found similar moderate values, perhaps because of the high comorbidity of the anxiety-depression dimension. The high comorbidity of anxiety and depressive disorders may also account for the fact that not all disorders or groups of disorders obtained strong interrater values.

Clinical Utility

In general terms, good clinical utility was the most frequently chosen answer by both interviewers and observers for almost all the questions. Moreover, the clinical utility of qualifiers, as well as the usefulness of the description of developmental presentations in the guidelines (developmental presentations section), was good to extremely good, which could facilitate the dissemination of guidelines among child and adolescent psychiatrists.

In other words, clinicians perceived that these guidelines improve communication with patients, are detailed enough, and constitute a useful tool for clinical management decisions (2), suggesting that they might be helpful in reducing the global burden of such diseases through early identification and treatment. This could be particularly relevant for countries with a shortage of economic and specialized human resources.

Limitations

The study had some limitations. The group of raters was diverse and included clinicians with several years' experience and others with fewer years of practice. Moreover, it should be emphasized that kappa values and clinical utility perceptions were obtained from clinicians who had received a 4-hour training session that sought to harmonize criteria and decision making when disorders were diagnosed, highlighting the changes proposed in the diagnostic guidelines for each category. This process may have sensitized clinicians to the diagnostic criteria and rationale of the guidelines, specifically in the developmental presentation sections, which constitutes an innovative way to identify mental disorders across the lifespan (28).

Additionally, the sample was relatively small in that we did not have enough children (ages 6–11) to determine whether interrater reliability indices for clinicians evaluating children are different from those for evaluating adolescents. Moreover, the use of a convenience sampling strategy at specialized centers limited the generalization of results, particularly to patients in other health care settings (such as primary care centers).

CONCLUSIONS

Use of *ICD-11*-based diagnostic guidelines for assessments of mood disorders, anxiety and fear-related disorders, ADHD, and DBD among children and adolescents had moderate interrater reliability in this study. Definitions of these disorders were perceived as useful for selecting treatment and determining patients' prognosis when applied to children and adolescents.

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This work was supported by project grant 234473 from the National Council of Science and Technology (CONACyT) of Mexico. The authors thank Verónica Pérez Barrón, B.A., Lucía Arciniega Buenrostro, B.A., Víctor Manuel Ávila Rodríguez, B.A., Alejandra González, B.A., Nadja Monroy, M.Sc., Omar Hernández, M.Psychol., and Carolina Muñoz, M. Psychol., for their important work as translators of the study materials (including the diagnostic guidelines) or as clinicians or research assistants.

The authors report no financial relationships with commercial interests.

Received November 13, 2020; revisions received April 16 and May 13, 2021; accepted May 27, 2021; published online August 26, 2021.

REFERENCES

- 1. First MB, Reed GM, Hyman SE, et al: The development of the ICD-11 clinical descriptions and diagnostic guidelines for mental and behavioural disorders. World Psychiatry 2015; 14:82–90
- Reed GM: Toward ICD-11: improving the clinical utility of WHO's international classification of mental disorders. Prof Psychol Res Pr 2010; 41:457–464
- 3. Medina-Mora ME, Robles R, Rebello TJ, et al: ICD-11 guidelines for psychotic, mood, anxiety and stress-related disorders in Mexico: clinical utility and reliability. Int J Clin Health Psychol 2019; 19:1–11
- Health Status of the Population: Mental Health in the Americas. Washington, DC, Pan American Health Organization, World Health Organization, 2013. https://www.paho.org/salud-en-lasamericas-2017/ro-mental.html
- 5. Benjet C, Borges G, Medina-Mora ME, et al: Youth mental health in a populous city of the developing world: results from the Mexican Adolescent Mental Health Survey. J Child Psychol Psychiatry 2009; 50:386–395
- Craddock N, Mynors-Wallis L: Psychiatric diagnosis: impersonal, imperfect and important. Br J Psychiatry 2014; 204:93–95
- International Classification of Diseases and Related Health Problems, 11th Ed. Geneva, World Health Organization, 2019. http:// www.who.int/classifications/icd/revision/en/

- Kogan CS, Stein DJ, Maj M, et al: The classification of anxiety and fear-related disorders in the ICD-11. Depress Anxiety 2016; 33:1141–1154
- 9. Taylor E, Sonuga-Barke E: Disorders of attention and activity; in Rutter's Child and Adolescent Psychiatry, 6th ed. Edited by Thapar A, Pine DS, Leckman JF, et al. Oxford, Blackwell, 2008
- Lochman JE, Evans SC, Burke JD, et al: An empirically based alternative to DSM-5's disruptive mood dysregulation disorder for ICD-11. World Psychiatry 2015; 14:30–33
- Evans SC, Burke JD, Roberts MC, et al: Irritability in child and adolescent psychopathology: an integrative review for ICD-11. Clin Psychol Rev 2017; 53:29–45
- Axelson D, Findling RL, Fristad MA, et al: Examining the proposed disruptive mood dysregulation disorder diagnosis in children in the Longitudinal Assessment of Manic Symptoms study. J Clin Psychiatry 2012; 73:1342–1350
- Margulies DM, Weintraub S, Basile J, et al: Will disruptive mood dysregulation disorder reduce false diagnosis of bipolar disorder in children? Bipolar Disord 2012; 14:488–496
- Regier DA, Narrow WE, Clarke DE, et al: DSM-5 field trials in the United States and Canada: part II. test-retest reliability of selected categorical diagnoses. Am J Psychiatry 2013; 170:59–70
- Frick PJ, White SF: Research review: the importance of callousunemotional traits for developmental models of aggressive and antisocial behavior. J Child Psychol Psychiatry 2008; 49:359–375
- Herpers PCM, Rommelse NN, Bons DMA, et al: Callousunemotional traits as a cross-disorders construct. Soc Psychiatry Psychiatr Epidemiol 2012; 47:2045–2064
- 17. Reed GM, Sharan P, Rebello TJ, et al: The ICD-11 developmental field study of reliability of diagnoses of high-burden mental disorders: results among adult patients in mental health settings of 13 countries. World Psychiatry 2018; 17:174–186
- Reed GM, First MB, Kogan CS, et al: Innovations and changes in the ICD-11 classification of mental, behavioural and neurodevelopmental disorders. World Psychiatry 2019; 18:3–19
- Cohen J: A coefficient of agreement for nominal scales. Educ Psychol Meas 1960; 20:37–46
- Benjet C, Borges G, Medina-Mora ME, et al: Sex differences in the prevalence and severity of psychiatric disorders in adolescents in Mexico City [in Spanish]. Salud Ment 2009; 32:155–163
- Borges G, Benjet C, Medina-Mora M, et al: Treatment of mental disorders for adolescents in Mexico City. Bull World Health Organ 2008; 86:757–764
- Kadesjö B, Gillberg C: The comorbidity of ADHD in the general population of Swedish school-age children. J Child Psychol Psychiatry 2001; 42:487–492
- Tuvblad C, Zheng M, Raine A, et al: A common genetic factor explains the covariation among ADHD ODD and CD symptoms in 9-10 year old boys and girls. J Abnorm Child Psychol 2009; 37:153–167
- 24. de la Peña FR, Palacio JD: Attention deficit hyperactivity disorder in Latin America. Salud Ment 2018; 41:247–248
- 25. Frick PJ, Moffitt TE: A Proposal to the DSM-V Childhood Disorders and the ADHD and Disruptive Behavior Disorders Work Groups to Include a Specifier to the Diagnosis of Conduct Disorder Based on the Presence of Callous-Unemotional Traits. Arlington, VA, American Psychiatric Association, 2010
- Blanco C, Wall MM, He JP, et al: The space of common psychiatric disorders in adolescents: comorbidity structure and individual latent liabilities. J Am Acad Child Adolesc Psychiatry 2015; 54:45–52
- 27. Evans SC, Roberts MC, Keeley JW, et al: Diagnostic classification of irritability and oppositionality in youth: a global field study comparing ICD-11 with ICD-10 and DSM-5. J Child Psychol Psychiatry 2021; 62:303–312
- Rutter M: Research review: child psychiatric diagnosis and classification: concepts, findings, challenges and potential. J Child Psychol Psychiatry 2011; 52:647–660