

World Journal of *Psychiatry*

World J Psychiatry 2022 December 19; 12(12): 1335-1366



REVIEW

- 1335** Bipolar disorder in the International Classification of Diseases-Eleventh version: A review of the changes, their basis, and usefulness

Chakrabarti S

MINIREVIEWS

- 1356** Morphological changes in Parkinson's disease based on magnetic resonance imaging: A mini-review of subcortical structures segmentation and shape analysis

Deng JH, Zhang HW, Liu XL, Deng HZ, Lin F

ABOUT COVER

Editorial Board Member of *World Journal of Psychiatry*, Haewon Byeon, DSc, PhD, Professor, Department of Digital Anti-aging Healthcare, Inje University, Gimhae 50834, South Korea. bhwpuma@naver.com

AIMS AND SCOPE

The primary aim of *World Journal of Psychiatry (WJP, World J Psychiatry)* is to provide scholars and readers from various fields of psychiatry with a platform to publish high-quality basic and clinical research articles and communicate their research findings online.

WJP mainly publishes articles reporting research results and findings obtained in the field of psychiatry and covering a wide range of topics including adolescent psychiatry, biological psychiatry, child psychiatry, community psychiatry, ethnopsychology, psychoanalysis, psychosomatic medicine, etc.

INDEXING/ABSTRACTING

The *WJP* is now abstracted and indexed in Science Citation Index Expanded (SCIE, also known as SciSearch®), Current Contents/Clinical Medicine, Journal Citation Reports/Science Edition, PubMed, PubMed Central, Reference Citation Analysis, China National Knowledge Infrastructure, China Science and Technology Journal Database, and Superstar Journals Database. The 2022 Edition of Journal Citation Reports® cites the 2021 impact factor (IF) for *WJP* as 3.500; IF without journal self cites: 3.313; 5-year IF: 7.380; Journal Citation Indicator: 0.62; Ranking: 89 among 155 journals in psychiatry; and Quartile category: Q3.

RESPONSIBLE EDITORS FOR THIS ISSUE

Production Editor: *Yu-Xi Chen*; Production Department Director: *Xu Guo*; Editorial Office Director: *Yun-Xiaojiao Wu*.

NAME OF JOURNAL

World Journal of Psychiatry

ISSN

ISSN 2220-3206 (online)

LAUNCH DATE

December 31, 2011

FREQUENCY

Monthly

EDITORS-IN-CHIEF

Rajesh R Tampi, Ting-Shao Zhu, Panteleimon Giannakopoulos

EDITORIAL BOARD MEMBERS

<https://www.wjgnet.com/2220-3206/editorialboard.htm>

PUBLICATION DATE

December 19, 2022

COPYRIGHT

© 2022 Baishideng Publishing Group Inc

INSTRUCTIONS TO AUTHORS

<https://www.wjgnet.com/bpg/gerinfo/204>

GUIDELINES FOR ETHICS DOCUMENTS

<https://www.wjgnet.com/bpg/GerInfo/287>

GUIDELINES FOR NON-NATIVE SPEAKERS OF ENGLISH

<https://www.wjgnet.com/bpg/gerinfo/240>

PUBLICATION ETHICS

<https://www.wjgnet.com/bpg/GerInfo/288>

PUBLICATION MISCONDUCT

<https://www.wjgnet.com/bpg/gerinfo/208>

ARTICLE PROCESSING CHARGE

<https://www.wjgnet.com/bpg/gerinfo/242>

STEPS FOR SUBMITTING MANUSCRIPTS

<https://www.wjgnet.com/bpg/GerInfo/239>

ONLINE SUBMISSION

<https://www.f6publishing.com>

Bipolar disorder in the International Classification of Diseases- Eleventh version: A review of the changes, their basis, and usefulness

Subho Chakrabarti

Specialty type: Psychiatry

Provenance and peer review:

Invited article; Externally peer reviewed.

Peer-review model: Single blind

Peer-review report's scientific quality classification

Grade A (Excellent): A
Grade B (Very good): B, B
Grade C (Good): 0
Grade D (Fair): 0
Grade E (Poor): 0

P-Reviewer: Fan ZG, China; Wan AL, China; Wang DJ, China

Received: August 14, 2022

Peer-review started: August 14, 2022

First decision: September 26, 2022

Revised: October 7, 2022

Accepted: November 21, 2022

Article in press: November 21, 2022

Published online: December 19, 2022



Subho Chakrabarti, Department of Psychiatry, Postgraduate Institute of Medical Education and Research (PGIMER), Chandigarh 160012, UT, India

Corresponding author: Subho Chakrabarti, MD, Professor, Department of Psychiatry, Postgraduate Institute of Medical Education and Research (PGIMER), 12 Sector, Chandigarh 160012, UT, India. subhochd@yahoo.com

Abstract

The World Health Organization's 11th revision of the International Classification of Diseases (ICD-11) including the chapter on mental disorders has come into effect this year. This review focuses on the "Bipolar or Related Disorders" section of the ICD-11 draft. It describes the benchmarks for the new version, particularly the foremost principle of clinical utility. The alterations made to the diagnosis of bipolar disorder (BD) are evaluated on their scientific basis and clinical utility. The change in the diagnostic requirements for manic and hypomanic episodes has been much debated. Whether the current criteria have achieved an optimum balance between sensitivity and specificity is still not clear. The ICD-11 definition of depressive episodes is substantially different, but the lack of empirical support for the changes has meant that the reliability and utility of bipolar depression are relatively low. Unlike the Diagnostic and Statistical Manual of Mental Disorders, 5th edition (DSM-5), the ICD-11 has retained the category of mixed episodes. Although the concept of mixed episodes in the ICD-11 is not perfect, it appears to be more inclusive than the DSM-5 approach. Additionally, there are some uncertainties about the guidelines for the subtypes of BD and cyclothymic disorder. The initial results on the reliability and clinical utility of BD are promising, but the newly created diagnostic categories also appear to have some limitations. Although further improvement and research are needed, the focus should now be on facing the challenges of implementation, dissemination, and education and training in the use of these guidelines.

Key Words: ICD-11 guidelines; Bipolar disorder; Utility; Reliability

©The Author(s) 2022. Published by Baishideng Publishing Group Inc. All rights reserved.

Core Tip: This review evaluates the clinical utility and the scientific basis for the changes made to the section on bipolar disorders in the 11th version of the International Classification of Diseases. The diagnostic requirements for many categories have changed. However, some of these alterations are still controversial based on the existing evidence. The examination of the reliability and utility of the newly created categories has yielded encouraging results, but certain limitations are evident. Thus, there is scope for further improvement, but the greater challenge will be to implement and disseminate the new guidelines and train the potential users of these guidelines.

Citation: Chakrabarti S. Bipolar disorder in the International Classification of Diseases-Eleventh version: A review of the changes, their basis, and usefulness. *World J Psychiatry* 2022; 12(12): 1335-1355

URL: <https://www.wjgnet.com/2220-3206/full/v12/i12/1335.htm>

DOI: <https://dx.doi.org/10.5498/wjp.v12.i12.1335>

INTRODUCTION

Bipolar disorder (BD) is a complex condition with several facets that influence its diagnosis and treatment[1,2]. Some of these aspects include early onset, a lifelong course characterized by frequent relapses and recurrences, inter-episodic morbidity consisting of residual symptoms, cognitive dysfunction, and functional impairment, high rates of psychiatric and medical comorbidity, and high risks for self-harm or violence. There is a predominance of depression, from the onset of the illness and throughout its course including the inter-episodic periods. Therefore, distinguishing BD from unipolar depression is difficult. The full spectrum of BD commonly includes milder and subthreshold disorders that overlap with normal variations of mood, personality, and other non-mood disorders. In contrast, the more severe forms such as psychotic BD are often indistinguishable from schizophrenia. These complexities mean that the accurate diagnosis and initiation of treatment are often delayed by several years.

In the absence of laboratory tests, the diagnostic process in psychiatry relies on signs, symptoms, and the course of psychiatric disorders[3-5]. Psychiatric classifications utilize these features to frame operational definitions that enhance the diagnostic accuracy of the disorders. Apart from naming and providing explicit descriptions of the disorders, psychiatric classifications also determine their place in the organizational structure. This provides a theoretical perspective that aids research regarding their scientific basis. The creation of classificatory systems in psychiatry has a long history and much effort is spent on revising them to keep pace with the recent advancements in the field.

The principal psychiatric classifications are the Diagnostic and Statistical Manual of Mental Disorders (DSM) of the American Psychiatric Association and the International Classification of Diseases (ICD) of the World Health Organization (WHO). The fifth version of the DSM (DSM-5) has been published in 2013[6]. The WHO's 11th revision of the ICD (ICD-11) including the chapter on mental, behavioural, or neurodevelopmental disorders has come into effect from January 2022[7]. The draft versions of the ICD-11 guidelines including the one on mood disorders are available on the Global Clinical Practice Network (GCPN) website[8].

Revising the ICD is a part of the core responsibility of the WHO. Its Department of Mental Health and Substance Abuse was responsible for developing the ICD-11 guidelines for the chapter on mental, behavioural, or neurodevelopmental disorders[9-13]. The benchmarks for the revision of this ICD-11 chapter included attention to several guiding principles and priorities. These are summarized in Table 1.

This review focuses on the "Bipolar or Related disorders" section of the ICD-11, Clinical Descriptions and Diagnostic Requirements (CDDR) on mood disorders. It summarizes the changes that have been made in this section and attempts to evaluate the scientific basis and the usefulness of these changes.

SUMMARY OF THE CHANGES MADE

New nomenclature and revised organizational structure

The name of the section has been changed from mood (affective) disorders in the tenth revision of the ICD (ICD-10)[14] to mood disorders in the ICD-11 version. Consequently, the term "bipolar affective disorder" has become "bipolar disorder". This is appropriate since the word "affective" was redundant, while the label BD is more precise[15]. Additionally, the part on BD is now labelled "Bipolar or Related Disorders" which is similar to the DSM-5.

During their development, efforts were made to forge a comparable organizational structure for both the DSM-5 and the ICD-11 CDDR[16,17]. Reviews regarding the placement of BD concluded that considering the available evidence, the best possible solution would be an independent cluster for BD

Table 1 Benchmarks for the revisions of the new classifications[9-13]

Principles and priorities	ICD-11-CDDR	DSM-5 ¹
Guiding principles		
Public health imperative	The guidelines should be useful in alleviating the global mental health burden, especially the burden in the low-and middle-income countries	The manual is meant to be used as a tool for collecting and communicating accurate public health statistics on mental disorders
Clinical imperative	Clinical and public health utility were accorded the greatest priority followed by scientific validity	Clinical utility was accorded the highest priority followed by the scientific evidence
Stakeholders	The guidelines are meant for use in all countries, for all professionals, and for all service users	The manual is meant for all professionals and service users
Multiple uses	The guidelines are meant for clinical, research, teaching, and training purposes, and for collecting data	The manual is meant for clinical, research, teaching, and training purposes, and for collecting data
Settings	The guidelines are meant for all settings including specialist and primary-care settings, with special emphasis on primary-care settings in low-and middle-income countries	The manual should be applicable to all settings including specialist, primary-care, community, and forensic settings
Cross-cultural applicability	The revision should be relevant and acceptable to clinicians from all cultures	Cultural aspects relevant to the diagnosis was a key consideration
Priorities		
Global applicability	Global and universal applicability: The guidelines should be relevant for all countries, all stakeholders, and in all settings	Professionals from 39 countries were involved in developing the scientific basis of the diagnostic criteria
Clinical utility	Clinical and public-health utility was accorded the highest priority during the process of revision	The manual is primarily intended for clinical use and should be feasible for clinical practice
Scientific validity	The scientific basis should be based on best available evidence. Compromises for the sake of utility should be avoided	The revision was guided by a thorough review of the best scientific evidence
Harmonization	Efforts to harmonize the ICD-11 revision with the DSM-5 involved enhancing similarities and minimizing arbitrary differences between the two systems	The APA collaborated with the WHO to develop a common and globally applicable research base for the DSM-5 and the ICD-11 disorders

¹The priorities of the DSM-5 classification were quite similar to those of the ICD-11.

APA: American Psychiatric Association; DSM-5: Diagnostic and Statistical Manual of Mental Disorders, 5th edition[6]; ICD-11-CDDR: International Classification of Diseases, 11th version, Clinical Descriptions and Diagnostic Requirements[8]; WHO: World Health Organization.

[18,19]. The DSM-5 thus created a separate chapter for BD. The ICD-11 organization was also influenced by these efforts and its structure is largely similar to that of the DSM-5[13,20]. However, the ICD-11 configuration was also determined by surveys of mental health professionals and studies examining their conception of a more clinically useful structure[13,21-24]. The structure of mood disorders in the ICD-11 was changed based on these studies. The "Mood Disorders" section was retained to refer to a "superordinate" grouping of bipolar and depressive disorders. This avoided cutting the cord between BD and depressive disorders, which belong to the same spectrum[25,26]. Following the spectrum approach, the ICD-11 has grouped cyclothymia with BD. The "Mood Disorders" section opens with the definitions of mood episodes. The longitudinal pattern of mood episodes determines the diagnosis of either depression or BD[13]. This simpler and more clinically useful "building blocks" approach to diagnosing mood disorders[27] is in line with the DSM-5.

Manic and hypomanic episodes

The descriptions of manic and hypomanic episodes in the ICD-11 guidelines differ substantially from the ones in the ICD-10 but are analogous to those in the DSM-5[6,28]. This is depicted in **Table 2**.

There are only minor differences between the two classifications. Nevertheless, the ICD-11 definitions are somewhat broader than the DSM-5 ones. This is the result of a flexible diagnostic approach used by the ICD-11 CDDR, which avoids rigid and often arbitrary cut-offs imposed in the DSM-5[29]. The requirements for a minimum number of accessory symptoms for mania and hypomania and a minimum duration of symptoms for hypomania have been avoided. This circumvents many difficulties associated with these diagnoses[30]. Moreover, it places greater emphasis on exercising clinical judgment and therefore resembles the diagnostic process in everyday practice[31,32]. The differences in the two diagnostic approaches also reflect the differences between the prototype-based methods followed by the ICD-11 guidelines in contrast to the operational diagnostic criteria used by the DSM-5[33-37]. Although prototype-based methods are not infallible, they are often more congruent with the clinician's diagnostic practices and therefore preferred by them. They are less complex and cumbersome than the operational criteria, but equally reliable and useful in diagnosing mood disorders. The ICD-11 guidelines attempted

Table 2 Comparison of diagnostic criteria for manic and hypomanic episodes

	ICD-11-CDDR	DSM-5
Manic episode		
Gate/entry level criteria	Both extreme and persistent mood changes (euphoria, irritability, expansiveness, mood lability) and abnormally increased activity or subjective experience of increased energy	Both abnormal and persistent mood changes (elevated, expansive, or irritable) and abnormal and persistent increase in goal-directed activity or energy ¹
Accessory criteria	Significant changes in several of the following seven areas: talkativeness/pressured speech, flight of ideas/racing thoughts, increased self-esteem/grandiosity, decreased need for sleep, distractibility, impulsive/reckless behaviour, increased sexual or social drive/increased goal directed activity	Significant and noticeable changes in three of the seven accessory symptoms; four if mood is only irritable; accessory criteria almost identical to the ICD-11 definition
Persistence and duration	Symptoms present most of the day, nearly every day for a minimum of one week unless shortened by treatment	Symptoms present most of the day, nearly every day for a minimum of one week unless shortened by hospitalization
Functional impairment	Significant impairment in all the areas of functioning; the patient may require intensive treatment/hospitalization to prevent self-harm or violence; the episode may be accompanied by psychotic symptoms	Significant impairment in all the areas of functioning; the patient may require hospitalization to prevent self-harm or violence; the episode may be accompanied by psychotic symptoms
Exclusions	Mania secondary to medical conditions or substance use; mixed episodes excluded	Mania secondary to medical conditions or substance use; manic episodes with mixed features allowed
Effects of antidepressant treatment	The episode should be considered a manic one if all the criteria are met even after the effects of treatment have diminished	The episode should be considered a manic one if all the criteria are met even after the effects of treatment have diminished
Grading of severity	Severity not graded	Severity graded as mild, moderate, or severe based on the number of symptoms, their intensity, and functional impairment
Psychotic symptoms	No distinction between mood-congruent and incongruent symptoms	Mood-congruent and incongruent symptoms distinguished
Hypomanic episode		
Gate/entry criteria	Both persistent mood changes (elevation, irritability, mood lability) and abnormally increased activity or subjective experience of increased energy that are significantly different from the usual mood state; changes are apparent to others and do not include changes that are appropriate to the circumstances ²	Both abnormal and persistent mood changes (elevated, expansive, or irritable) and abnormal and persistent increase in activity or energy; changes in mood differ significantly from the usual state and are apparent to others
Accessory criteria	Significant changes in several of the seven accessory symptoms that are identical to the definition of mania; these changes are apparent to others	Significant and noticeable changes in three of the seven accessory symptoms, four if mood is only irritable; accessory criteria are the same as those for mania and almost identical to the ICD-11 definition
Persistence and duration	Symptoms present most of the day, nearly every day for at least several days	Symptoms present most of the day, nearly every day for a minimum of four consecutive days
Functional impairment, hospitalization, and psychotic symptoms	Socio-occupational functioning is not markedly impaired; the patient does not require intensive treatment or hospitalization to prevent self-harm or violence; the episode is not accompanied by psychotic symptoms	Clear change in socio-occupational functioning from the usual state apparent to others, but functioning is not markedly impaired; the patient does not require hospitalization to prevent self-harm or violence; the episode is not accompanied by psychotic symptoms
Exclusions	Hypomania secondary to medical conditions or substance use; mixed episodes are excluded	Hypomania secondary to substance use ³ ; hypomanic episodes with mixed features allowed
Effects of antidepressant treatment	The episode should be considered a hypomanic one if all the criteria are met even after effects of treatment have diminished	The episode should be considered a hypomanic one if all the criteria are met even after effects of treatment have diminished; however, full syndromal manifestation of hypomania is necessary

¹Updated in 2015 to persistent increase in activity or energy (“goal-directed” removed)[28].

²In the ICD-11 CDDR, the word “extreme” is not used to describe the mood change in hypomania as in manic episodes, possibly denoting a reduced severity of mood alterations; no such distinction is present in the DSM-5.

³Updated in 2015 to include hypomania secondary to medical conditions[28].

DSM-5: Diagnostic and Statistical Manual of Mental Disorders, 5th edition[6]; ICD-11-CDDR: International Classification of Diseases, 11th version, Clinical Descriptions and Diagnostic Requirements[8].

to enhance the utility of the prototype approach by using a standardized content form that contained systematic and consistent diagnostic information for all disorders[10,13].

The expanded gate criterion is the most important alteration in the definitions of mania and hypomania both in the ICD-11 CDDR and the DSM-5. It was not present in the earlier versions of both these classifications including the ICD-10 guidelines. Changes in both mood and activity or energy are mandatory for the diagnosis now. This change was made to improve the diagnostic accuracy, specificity, and reliability of mania and hypomania[13,38-40]. It was also meant to differentiate the diagnoses from normal mood fluctuations, particularly in the case of hypomania. The intention was to prevent the overdiagnosis of manic or hypomanic episodes as well as BD. Simultaneously, this change aimed to facilitate earlier detection of BD by minimizing the under-reporting of hypomania in those with major depression.

Adding overactivity to mood symptoms is evidence-based and considered to be a well-founded change[30,38,41-43]. The empirical support for including hyperactivity as a core criterion derives from factor-analytic investigations of mania and large-scale community studies of BD. Recent reviews of the factor-analytic studies of mania have indicated that overactivity is the most prevalent symptom of this condition[44,45]. It is more common than mood changes and is associated with several other key symptoms of mania. Although community-based studies have also shown that any of the three criteria, euphoria, irritability, and overactivity, are sufficient for diagnosing mania or hypomania, overactivity is the foremost diagnostic criterion with the maximum sensitivity[46-50]. In contrast, there is less evidence for irritability being an entry-level criterion for mania or hypomania. Irritability is common in many other disorders and is not specifically associated with mania or hypomania. Moreover, it is rarely associated with overactivity[30,40,41]. The ICD-11 draft also includes lability of mood as a symptom of mania and hypomania, but its diagnostic role is not clear. Although there is a high prevalence of mood lability during manic episodes[51], very few factor-analytic studies have found it to be an important constituent of mania[45].

Additionally, the inclusion of antidepressant treatment-induced prolonged manic or hypomanic switches is also reasonable because such switches occur mainly in those predisposed to bipolarity[41,49,52]. In contrast, the exclusion of mood episodes secondary to medical conditions or substance use is considered faulty because it is based on causal attributions[53]. Lastly, the ICD-11 guidelines have added functional impairment to the definition of mania to bring it more in line with the DSM-5. The ICD-10 had avoided using functional impairment as a diagnostic requirement because cultural factors were thought to confound socio-occupational performance. However, the ICD-11 has included impaired functioning as a part of the diagnosis because it helps in distinguishing mood disorders from normal mood changes, determining their severity, and improving their clinical utility[5,9,10].

The change that has generated the maximum debate is the diagnostic requirement of combined mood changes and overactivity for mania and hypomania. Proponents of this change have insisted that the combination provides an optimal balance between diagnostic specificity and sensitivity[42,43]. Moreover, the higher diagnostic threshold reduces the chances of a false positive diagnosis of BD. They argue that an incorrect diagnosis of BD may be more harmful than being falsely diagnosed with major depression. However, the majority of the other researchers feel that this requirement is too restrictive [31,39,41,53,54]. They believe that the dyadic criterion decreases the chances of diagnosing mania and hypomania. Consequently, the prevalence of type I BD (BP-I) or type II BD (BP-II) will decline because many patients will be relegated to the categories of subthreshold BD or major depression. They point out that community studies of BD have demonstrated that either mood change or overactivity is sufficient for the diagnosis. Thus, using either mood change or overactivity as entry-level criteria could increase the sensitivity of the manic and hypomanic diagnoses without affecting the prevalence of BD [29,40,53]. These contrasting propositions have been examined in some studies on the prevalence of BD using the DSM-5 and ICD-11 criteria. These are included in Table 3.

This table shows that prevalence studies using the DSM-5 criteria are far more common. Only one study has considered the ICD-11 guidelines. Angst *et al*[31] (2020) used the ICD-10, DSM-5, and the ICD-11 criteria to re-analyse the prevalence of mania and hypomania according to the Zurich cohort study. They proposed that the rate of hypomania will be doubled with the ICD-11 criteria compared to the ICD-10 and the DSM-5. This was presumably because of the broader definition of hypomania in the ICD-11 and the inclusion of patients with antidepressant-induced prolonged hypomanic switches. The lifetime prevalence of DSM-5 defined BD appears to be unchanged[55-58]. In contrast, several DSM-5-based studies have found about a 20%-60% reduction in the point prevalence of manic and hypomanic episodes or BD[38,59-61]. In these studies, patients diagnosed according to the DSM-5 criteria had more severe manic symptoms[40,59,61] than those diagnosed with DSM-IV criteria[62,63]. Moreover, these studies suggested that the prevalence with DSM-5 criteria was lowest early in the course of BD and increased with time[38,58,59]. This was confirmed by the study of newly diagnosed patients with BD, in which the rate of DSM-5 BD was reduced by 62% at the baseline, but only by 50% on long-term follow-up[61]. This is because newly diagnosed patients are a more heterogeneous group and are less likely to meet the stricter DSM-5 definitions than those with more chronic illnesses[40]. Thus, the reduction in the prevalence of BD attenuated with time and there were no differences in the lifetime rates or clinical characteristics of mania, hypomania, and BD diagnosed with DSM-5 or DSM-IV criteria[39,40,61]. These findings imply that although the DSM-5 criteria may prevent overdiagnosis of BD as intended, patients with less severe and recent-onset BD may be missed[40]. Extrapolating from these results, it appears that although the short-term prevalence of BD may be reduced, the long-term prevalence of BD is likely

Table 3 Prevalence of bipolar disorder according to the International Classification of Diseases, 11th version and the Diagnostic and Statistical Manual of Mental Disorder, 5th edition criteria

Ref.	Criteria sets	Patients	Bipolar types	Type of prevalence	Results regarding the prevalence of BD
No change in the prevalence of bipolar disorder					
Fassassi <i>et al</i> [55], 2014	DSM-5	Community-based	BP-I, BP-II, Other BD ¹	12-mo and lifetime	Prevalence similar to earlier studies of BD
Calvó-Perxas <i>et al</i> [56], 2015	DSM-5	Community-based	BP-I, BP-II, Other BD	Lifetime	Prevalence was within the range of previous reports of BD
Blanco <i>et al</i> [57], 2017	DSM-5	Community-based	BP-I	Lifetime	Prevalence was within the range of previous reports of BD
Gordon-Smith <i>et al</i> [58], 2017	DSM-IV and DSM-5	Community-based and outpatients	BP-I, BP-II	Lifetime	Up to 94% of the patients with DSM-IV BD also met the DSM-5 criteria
Decrease in the prevalence of bipolar disorder					
Angst <i>et al</i> [53], 2013 ²	DSM-5	Analysis based on a previous community study (BRIDGE)	BD	Lifetime	About 22% reduction in prevalence
Machado-Vieira <i>et al</i> [38], 2017	DSM-IV and DSM-5	Outpatients	Mania and hypomania	Point prevalence	The prevalence of mania and hypomania according to the DSM-5 criteria was reduced by about 50%
Fredskild <i>et al</i> [59], 2019	DSM-IV TR and DSM-5	Outpatients	Mania and hypomania	Point prevalence	A reduction of 35% in the prevalence of mania and hypomania with the DSM-5 criteria was noted
Faurholt-Jepsen <i>et al</i> [60], 2020	DSM-5	Patients taking part in trials	Mania and hypomania	Smartphone-based activity assessments over 6-9 mo	The prevalence of hypomania according to the DSM-5 criteria was substantially less (0.12%) than patients not meeting these criteria (24%)
Fredskild <i>et al</i> [61], 2021	DSM-IV and DSM-5	Outpatients	Mania and hypomania	Assessments at baseline and at 3-year follow-up	The prevalence of mania and hypomania according to the DSM-5 criteria was reduced by 62% at baseline and by 50% on follow-up
Increase in the prevalence of type II bipolar disorder					
Angst <i>et al</i> [53], 2013 ³	DSM-5	Analysis based on a previous community study (BRIDGE)	BP-II	Lifetime	Prevalence of BP-II disorder will be twice as much with the DSM-5 than earlier
Angst <i>et al</i> [31], 2020 ⁴	ICD-10, DSM-5, and ICD-11	Analysis based on an earlier community study (Zurich cohort study)	Mania (BP-I) and hypomania (BP-II)	Lifetime	Prevalence of hypomania (BP-II) will be doubled with the ICD-11 criteria compared to the ICD-10 and the DSM-5 criteria; no change in the prevalence of mania (BP-I) is likely

¹The Other BD group refers to the “Other Specified Bipolar and Related Disorders” category of the DSM-5.

²This reduction is proposed to be a consequence of the mandatory requirement for both mood changes and overactivity.

³The increase in prevalence is proposed to be a consequence of inclusion of patients with antidepressant-induced prolonged hypomanic switches.

⁴The increase in prevalence is proposed to be a consequence of a somewhat broader definition of hypomania in the ICD-11 and the inclusion of patients with antidepressant-induced prolonged hypomanic switches.

BD: Bipolar disorder; BP-I: Type I bipolar disorder; BP-II: Type II bipolar disorder; BRIDGE: Bipolar disorders: Improving diagnosis, Guidance, and Education [49]; DSM-IV/DSM-IV TR: Diagnostic and Statistical Manual of Mental Disorders, 4th edition/Text revision [62,63]; DSM-5: Diagnostic and Statistical Manual of Mental Disorders, 5th edition [6]; ICD-10: International Classification of Diseases, 10th version [14]; ICD-11: International Classification of Diseases, 11th version [8].

to remain unchanged despite the use of the new definitions in the ICD-11 CDDR [39,40,61].

The description of hypomanic episodes in the ICD-11 draft brings it closer to the DSM-5 definition in several aspects. Both distinguish mania from hypomania based on the lack of marked functional impairment, no requirement for hospitalization, and the absence of psychotic symptoms in hypomania. However, these distinguishing features of hypomania are not without their problems. For example, the lack of marked impairment in functioning is often difficult to make out with certainty [64-66]. There are no clear criteria to determine the level of impairment and it is often a subjective judgement on the part of the clinician. Moreover, many patients with hypomania report an improvement in their functioning. Similarly, the decision to hospitalize someone with hypomania is often determined by several cultural, socioeconomic, or health-service-related factors than simply by the lesser clinical severity of the episode [31,65,67]. In some instances, those with hypomania are more likely to be hospitalized than those with mania [65]. Lastly, there is some evidence of an association between psychosis and hypomania, particularly from longitudinal community-based studies [68,69]. Then again, other studies have shown that

patients with hypomania/BP-II disorder are much less likely to experience psychotic episodes or be hospitalized because of psychosis than those with BP-I disorder[66].

Finally, the issue that has been the bone of contention for a long time is the requirement for a minimum duration of 4 d for hypomania in the DSM-5. The existing evidence derived mainly from large community studies shows that there is no difference between hypomanic episodes lasting less or more than 4 d in terms of prevalence, clinical features, and associated impairment[29,53,54,65,66]. However, the proposal to include short-lasting hypomanic episodes was not accepted by the DSM-5 because of concerns about the overdiagnosis of BD[29]. Nevertheless, the DSM-5 has included some of these short-lasting presentations in the category of “Other Specified Bipolar and Related Disorders” and its section three as a condition for further study. By defining the minimum duration as “several days”, the ICD-11 guidelines seem to have avoided this controversy, but they are likely to have the same limitations as the DSM-5 in the other criteria for hypomania[65]. It is also unclear whether the lack of clear thresholds will hamper the clinical utility of the ICD-11 diagnosis[70].

Depressive episodes and bipolar depression

The ICD-11 CDDR has made many changes to the definition of the ICD-10 depressive episode so that the ICD-11 description corresponds to the DSM-5 definition[13,29,30]. These changes are shown in Table 4.

There are certain minor differences between the ICD-11 and DSM-5 definitions, but the major difference is the inclusion of the “bereavement exclusion” criterion while diagnosing depression in the ICD-11 draft[29,30]. The DSM-5 has been widely criticized for removing the (operationally defined) “bereavement exclusion” criterion and supplanting it with the application of clinical judgement. The ICD-11 has followed the DSM-IV approach in setting a higher threshold in terms of duration and severity while diagnosing depression in the context of bereavement. Nevertheless, the subject of “bereavement exclusion” remains controversial, with some justifying its removal[71,72] and others claiming its retention to be more in agreement with the evidence[73,74].

Another problem is that the definitions of depressive episodes in the ICD-11 and the DSM-5 lack empirical support[29,75,76]. These definitions arbitrarily impose a categorical threshold on what is essentially a dimensional concept. Accordingly, the distinction between major depression and normality, minor depression, and severe melancholic depression is unclear. The functional impairment criterion does not resolve this threshold problem. Therefore, major depression is a heterogeneous category both in terms of the diagnostic criteria and the patients meeting these criteria. Moreover, it has been shown that the current definitions do not include the most important symptoms and that simpler definitions of major depression may be more appropriate. All these limitations lead to poor reliability and clinical utility of the current category.

The definitions of unipolar depression and bipolar depression are identical in both the ICD-11 and the DSM-5[29,54]. This is primarily because the existing evidence indicates that there are no characteristic features that could distinguish the two categories[77-79]. However, certain symptoms, course characteristics, and family history are more common in either unipolar or bipolar depression and in those with unipolar depression who convert to BD. These features could be used to distinguish between unipolar or bipolar depression[77]. Although this “probabilistic” approach might have reasonable predictive power[80,81], there are obvious difficulties in incorporating such a scheme in the current classifications. Nevertheless, the lack of distinction between unipolar and bipolar depression is problematic, because one of the reasons that the diagnosis of BD is often missed is the inability to distinguish between the two types of depression[82].

Mixed episodes

Mixed states consist of an admixture of the usual manic and depressive symptoms along with certain characteristic features such as agitation, irritability, and hostility[83-87]. More than a third (30%-70%) of the patients with BD present with mixed mania or mixed depression. Mixed states are associated with a more severe form of BD, higher comorbidity, poorer course and outcome, inadequate treatment response, higher disability, and greater risk of suicide.

The DSM-IV TR definition of mixed episodes was thought to be too restrictive because it required the concurrent presence of full manic and depressive syndromes. Since the most common presentation of mixed episodes is subsyndromal with a few symptoms of the opposite polarity, the DSM-5 replaced mixed episodes with a “mixed features” specifier[83]. This was defined by the presence of a full mood episode of one polarity accompanied by at least three contrapolar symptoms, excluding those common to both kinds of episodes (overlapping symptoms). The DSM-5 also made it possible to use the specifier for major depressive episodes because of the high rates of subthreshold bipolarity in unipolar depression. It was anticipated that this definition would be better at capturing the subsyndromal manifestations of mixed presentations in BD[82,83]. Indeed, studies showed that with the use of the new DSM-5 specifier, mixed presentations were about three times more common than those with the DSM-IV TR[85,87]. However, several problems with the new specifier have gradually become apparent. The DSM-5 decision to leave out overlapping symptoms has often led to the exclusion of symptoms that are considered to be central to the presentation of mixed states. Several reviews on the subject have pointed out that psychomotor agitation is the principal component of these core features, followed by irritability

Table 4 Changes to the diagnostic guidelines for bipolar depression in the International Classification of Diseases, 11th version

	ICD-11-CDDR	DSM-5	ICD-10
Core symptoms	One of the following: Depressed mood or diminished interest or pleasure Reported or observed changes Change from usual functioning	One of the following: Depressed mood or loss of interest or pleasure Reported or observed changes Change from usual functioning	Two of the following: Depressed mood, loss of interest and enjoyment, and reduced energy leading to increased fatigability, diminished activity, and marked tiredness
Accessory symptoms	Eight symptoms including the new symptoms of hopelessness, fatigue, and agitation/retardation Other symptoms (unchanged) are inattentiveness, changes in sleep and appetite, low self-worth or guilt, and suicidal ideation	Seven symptoms: Hopelessness is not included, but fatigue and psychomotor changes are included Other symptoms are the same as in the ICD-11	Seven symptoms: Bleak and pessimistic views of future instead of hopelessness, no psychomotor changes or fatigue that are part of the core symptoms Other symptoms are the same as in the ICD-11
Persistence and duration	Symptoms occur most of the day, nearly every day during a minimum period of two weeks	Symptoms occur most of the day, nearly every day during a minimum period of two weeks	Minimum duration of two weeks usually required but shorter periods suffice if symptoms are unusually severe and of rapid onset
Diagnostic threshold	Five out of ten symptoms	Five out of nine symptoms	Four out of ten symptoms
Functional impairment	Part of the diagnostic criteria	Part of the diagnostic criteria	Used to rate severity
Exclusions	Depression secondary to medical conditions or substance use and mixed episodes; mixed episodes excluded	Depression secondary to medical conditions or substance use; diagnosis of depressive episodes with mixed features possible	No clear exclusions
Bereavement exclusion	Operationalized definition present	Only an explanatory note that advises the use of clinical judgement in such instances	Not mentioned as a part of the diagnostic guidelines
Severity ratings	Mild, moderate and severe depressive episodes based on symptom-severity and functional impairment; no requirement for a minimum number of symptoms	Grading similar to the ICD-11; no requirement for a minimum number of symptoms	Grading similar to the ICD-11, but a minimum number of symptoms required for grading different levels of severity; clinical judgement also advised
Psychotic symptoms	Moderate depression with psychotic symptoms is a new category	Mood congruent and incongruent symptoms distinguished	Mood congruent and incongruent symptoms distinguished
Description of melancholia	Descriptions similar to the ICD-10, but no requirement for a minimum number of symptoms	Description more elaborate; a minimum of four symptoms required	Descriptions similar to the ICD-11; a minimum of four symptoms required
Additional specifiers	With prominent anxiety, panic attacks, chronicity, seasonal pattern, puerperal onset	Similar to the ICD-11; additionally mixed features, atypical features, and catatonia	No other specifiers

DSM-5: Diagnostic and Statistical Manual of Mental Disorders, 5th edition[6]; ICD-10: International Classification of Diseases, 10th version[14]; ICD-11-CDDR: International Classification of Diseases, 11th version, Clinical Descriptions and Diagnostic Requirements[8].

or hostility (dysphoric mood), mood lability, and distractibility[86-90]. Although these features are more prominent in mixed manic episodes, they are present in both mania/BD and depression/unipolar disorder. Accordingly, the DSM-5 definition of mania or hypomania with mixed features is consistent with the existing evidence[29]. However, the category of major depression with mixed features has been criticized because it leaves out many of these key symptoms while including relatively rare ones such as euphoria and grandiosity[85,88-90]. Leaving out the characteristic symptoms means that a considerable proportion of those with mixed depression will be missed by the DSM-5 criteria. Moreover, it has been demonstrated that patients with major depression and mixed features often convert to BD and therefore should be included with the bipolar spectrum disorders[84,91,92]. Additionally, the minimum number of contrapolar symptoms required for the specifier is unclear[84,87,93]. Lastly, the specifier is likely to have poor clinical utility because of its poor predictive validity and uncertain treatment implications of the symptoms included[91,94].

Therefore, it was suggested that the ICD-11 should retain the mixed episode category rather than adopt the DSM-5 approach[95,96]. Retaining the category allows for further research examining its usefulness and treatment requirements. It also ensures that information about mixed states is properly captured because the category is coded. The ICD-10 definition of mixed episodes only required the

rapid alternation of prominent manic, hypomanic, and depressive symptoms for 2 wk. Although it was less restrictive and more in tune with the existing concepts, it was neither too detailed nor precise. Additionally, the 2-wk duration was considered to be excessive. Consequently, a departure from the ICD-10 approach was also proposed[95,97]. The need to include the core symptoms of agitation, irritability, lability, and distractibility was endorsed, as was the retention of the rapid alternating pattern of symptoms[95,96]. Nevertheless, the ICD-11 draft has essentially followed the ICD-10 approach by including the concurrent presence or rapid alternations of manic or depressive symptoms for 2 wk or less if treatment is initiated[13,29]. Unlike the ICD-10, it has included all the core contrapolar symptoms mentioned above. However, no threshold has been set for the number of such symptoms required for diagnosis. The episodes should cause significant functional impairment. The diagnosis of a mixed episode will automatically signify a diagnosis of BP-I disorder. Therefore, the ICD-11 does not have a category equivalent to major depression with mixed features in the DSM-5. The exclusion of mixed episodes from the BP-II diagnosis is also debatable because of their high prevalence in this subtype[98, 99]. Although the concept of mixed episodes in the ICD-11 is not perfect, it may still turn out to be more inclusive than the DSM-5 approach, but this can only be established by further research.

Bipolar I disorder

A history of at least one manic or mixed episode will be sufficient to make a diagnosis of BP-I disorder in the ICD-11 CDDR, unlike the ICD-10 which required the presence of at least two episodes. The reliance on a single episode of mania to define BP-I disorder is based on the current evidence, which demonstrates that the occurrence of mania predicts the typical course of BDs, and separates it from other mood and psychotic disorders[30]. Consequently, an independent diagnosis of a manic episode is no longer possible as it was in the ICD-10. However, like the ICD-10, the ICD-11 draft consigns the illnesses characterized by recurrent manic or hypomanic episodes without depression to the “Other Specified Bipolar or Related Disorders” category. Recently, Angst *et al*[31,53,100] have presented evidence that contradicts the traditional view of recurrent mania as a rare condition indistinguishable from BD[27]. Rather, epidemiological studies have found recurrent mania to be common[101] and clinical studies indicate that about 15%-20% of the patients with BD have this condition[102]. The rates are considerably higher in Asian studies coupled with the predominantly manic course of BD in these countries[103]. Moreover, recurrent mania can be reliably distinguished from BP-I disorder in terms of its diagnostic stability, lifetime course, familial-genetic features, and treatment response[31,53,100,102, 104]. Therefore, reviving the recurrent mania diagnosis has been proposed.

Bipolar II disorder

The most noticeable change in the ICD-11 CDDR distinguishing it from the ICD-10, is the inclusion of the BP-II subtype. Similar to the DSM-5, a diagnosis of BP-II disorder will require a history of at least one hypomanic episode and one depressive episode. The BP-II subtype was officially recognized in the DSM-IV, based on its diagnostic stability and familial-genetic links with BD[105]. Although historically perceived to be a milder form of BD, it is now clear that BP-II disorder is a chronic and highly recurrent condition that is equally, if not more disabling than, the BP-I subtype. A predominance of depressive pathology during the acute episodes, subthreshold depression in the inter-episodic periods, and suicidal behavior are more common in BP-II disorder[29,106]. The initial evidence suggested that BP-II disorder could be distinguished from BP-I disorder based on its epidemiology, familial-genetic aspects, longitudinal course, and higher suicidal risk[98,107,108]. However, subsequent reviews concluded that there were more similarities than differences between the two subtypes[109-111]. More recently, this debate has been revived in a slightly different fashion. The essential controversy seems to be whether to use a dimensional or a categorical model of BD. Those who favor a dimensional model have argued that BP-II disorder has to be subsumed under the broader bipolar spectrum diagnosis[70,99,112-114], whereas others who favor a categorical approach maintain that there is sufficient evidence for an independent BP-II category[115-119]. The actual evidence in terms of validators provides almost equal support for both the dimensional and the categorical approaches. Moreover, the size of the evidence base is small and plagued by numerous methodological problems. Additionally, most of the differences seem to arise from the way that BP-II disorder (and hypomania) is defined and assessed across the different studies [32,42,111,120]. Nevertheless, the final verdict seems to be that it would be premature to abandon the BP-II subtype. Rather, it should be retained to encourage further research that may improve its definition and utility[118,119,121-123]. The controversies surrounding the BP-II diagnosis in the ICD-11 and the DSM-5 classifications are detailed in Table 5.

Cyclothymic disorder

The ICD-11 draft has made substantial changes to the diagnostic requirements for cyclothymic disorder compared to the ICD-10 version, bringing the definition closer to the one in the DSM-5. These changes are shown in Table 6.

Unlike the DSM-5, there is no requirement for mood symptoms to be present more than half the time in the ICD-11 version. Moreover, the diagnosis of hypomania can be made at any time after the onset of the disorder, and that of depressive disorder after the first two years. Thus, the definition is less rigid

Table 5 Controversies about type two bipolar disorder

Controversy	For retaining BP-II disorder	Against retaining BP-II disorder
The definition of hypomania	Current definitions of BP-II disorder in the ICD-11 and the DSM-5 represent an optimal balance between sensitivity and specificity; they will prevent the over-diagnosis and harmful effects of inappropriate treatment of a false positive diagnosis[30,38,42,43]	Current criteria are too restrictive and under-diagnose hypomania and BP-II disorder. The minimum duration required is not evidence-based and should be shorter[32,113,114,120,121]
Prevalence of BP-II disorder	The prevalence of BP-II disorder is as high as BP-I disorder, or even higher than the BP-I subtype[98,108-110]	Data on prevalence are mixed. Prevalence is also influenced by factors such as broader definitions, improved recognition, and increased awareness[111, 114]
Course of BP-II disorder	Compared to BP-I disorder, BP-II disorder has a more chronic course, greater syndromal and subsyndromal depressive symptoms, and higher episode frequency[98,107-109,112]	The seemingly adverse course of BP-II disorder could be a function of confounding factors such as symptom-severity, comorbidity, and the effects of treatment[32,70,99,114]
Diagnostic stability of BP-II disorder	The diagnosis of BP-II disorder remains the same for several years. Only 5%-15% of the patients with BP-II disorder develop BP-I disorder[6,98,105, 109]	The boundaries between BP-II and BP-I disorder, between BP-II disorder and cyclothymia, and between BP-II disorder and personality disorders are unclear [70,99,113,115]
The prevalence of psychotic symptoms	Patients with BP-I disorder are more likely than those with BP-II disorder to have psychotic symptoms[66,111,115]	Psychosis is also associated with hypomania, especially in longitudinal community studies[68,69, 113]
Suicidal behaviour	Suicide rates are higher in BP-II disorder than BP-I disorder[107-109,120, 121]	The higher suicide rates in BP-II disorder could be a function of comorbid personality disorders and comorbid substance use[98]
Family-genetics	BP-II disorder runs in families. Genetic studies help distinguish BP-II disorder from BP-I disorder[98,110,116,118,121]	Genetic studies show that BP-II and BP-I disorders lie on a continuum of genetic risk without any distinction between the two subtypes[106,112,114,120]
Neuroimaging	Some studies suggest quantitative or qualitative differences between the two subtypes[116,123]	There are no differences in neuroimaging between the two subtypes[98,111,112,114,120]
Neurocognition	Patients with BP-II disorder are less impaired on neuropsychological tests than those with BP-I disorder[98]	There is a great degree of overlap in the neurocognitive performance between the two subtypes[114,116]
Treatment response	The treatment requirements of patients with BP-II disorder are different [115,118,119]	There is no difference in treatment response between the two subtypes[98,108,111,114,120]

BP-I: Type I bipolar disorder; BP-II: Type II bipolar disorder; DSM-5: Diagnostic and Statistical Manual of Mental Disorders, 5th edition[6]; ICD-11: International Classification of Diseases, 11th version[8].

than the DSM-5 one.

However, the existing literature suggests that cyclothymic disorder is not only characterized by persistent subsyndromal mood changes, but also by mood lability, irritability, increased emotional sensitivity, and a lifelong pattern of impulsivity and interpersonal difficulties that make up the cyclothymic temperament[124-126]. Moreover, cyclothymic temperament seems to be the central part of the presentation of cyclothymia and has been linked to an increased risk of suicide. Accordingly, the selective emphasis on mood changes and the neglect of personality characteristics in the ICD-11 definition may be misplaced. Moreover, the complex diagnostic requirements may reduce the utility of the disorder[127]. The decision to allow hypomanic episodes creates further difficulties. Mixed states are very common in cyclothymia but they have been excluded from the ICD-11 because they denote a diagnosis of BP-I disorder. Therefore, more comprehensive and precise guidelines may be required to improve the reliability and clinical utility of cyclothymia in the ICD-11 CDDR.

Bipolar spectrum disorders

The ICD-11 has followed a somewhat contradictory approach to introducing a dimensional aspect to the BD category. Although it has tacitly accepted the existence of a bipolar spectrum by including BP-II disorder, mixed episodes, cyclothymia, and antidepressant-induced mania and hypomania as a part of BD, it has stopped short of including other categories from this spectrum. This is contrary to the evidence supporting a wider spectrum of BDs[128-132]. This evidence indicates that bipolar spectrum disorders are possibly more common than BP-I and BP-II disorders[133-136]. Additionally, up to half of those with major depression show signs of subthreshold bipolarity. Spectrum disorders are clinically significant forms of BD, often associated with a poor prognosis and enhanced risk of converting to BP-I or BP-II disorders. The failure to detect spectrum disorders often leads to inappropriate or delayed diagnosis and ineffective or harmful treatment. However, the ICD-11 draft chose not to include these disorders. This was because of the concerns about the uncertain boundaries of spectrum disorders and the risk of overdiagnosis and inappropriate treatment[132-135]. The relative lack of external validators,

Table 6 Changes to the diagnostic guidelines in the International Classification of Diseases, 11th version for cyclothymic disorder

	ICD-11-CDDR	DSM-5	ICD-10
Core features	Chronic mood instability of more than two years consisting of several hypomanic and depressive periods (irritability in children and adolescents)	Several hypomanic or depressive symptoms for more than two years	A persistent instability of mood, involving numerous periods of mild depression and mild elation (No duration mentioned)
	Hypomanic symptoms may meet the criteria for hypomanic episodes	Symptoms do not meet the criteria for hypomanic or major depressive episodes	None of these symptoms meet criteria for mania/BD or depressive episode/recurrent depressive disorder
Symptom-free periods	Symptom-free periods are no longer than two months during the course of the disorder	Hypomanic and depressive symptoms are present at least half of the time during the course of the disorder	Mood state may be normal and stable for months (No minimum duration for symptom-free periods specified)
		Symptom-free periods are no longer than two months during this period	
Children and adolescents	Duration of one year is appropriate	Duration of one year sufficient	No mention of duration in children and adolescents
Manic mixed, and depressive episodes	Criteria for manic and mixed episodes are never met. Depressive episodes cannot be diagnosed during the first two years of cyclothymia. After that, they can be diagnosed if criteria are met	Criteria for manic, hypomanic, or major depressive episodes are never met during the first 2 years. If the person subsequently experiences major depression, mania, or hypomania, the diagnosis is changed to major depressive disorder, BP-I disorder, or other specified or unspecified bipolar and related disorders	Criteria for manic, mixed, and depressive episodes are never met
	Criteria for BP-I or BP-II disorder are never met		Criteria for BD or recurrent depressive disorder are never met
Exclusions	Cyclothymia secondary to medical conditions or substance use	Cyclothymia secondary to medical conditions or substance use	No exclusions
Functional impairment	Symptoms result in significant distress and/or functional impairment	Symptoms result in significant distress and/or functional impairment	Symptoms are so mild that patients often do not seek treatment
Progression to BD	Mentioned	Mentioned	Mentioned
Inclusion of additional personality features	Not included-unlike personality disorders, cyclothymia does not include persistent self and interpersonal dysfunction	Included-the person may be temperamental, moody, unpredictable, inconsistent, or unreliable	Included-in some instances, mood changes are less prominent than cyclical disturbances of activity, self-confidence, and social behaviour

BP-I: Type I bipolar disorder; BP-II: Type II bipolar disorder; DSM-5: Diagnostic and Statistical Manual of Mental Disorders, 5th edition[6]; ICD-10: International Classification of Diseases, 10th version[14]; ICD-11-CDDR: International Classification of Diseases, 11th version, Clinical Descriptions and Diagnostic Requirements[8].

the problems with diagnostic and prognostic validity, and the absence of controlled data on treatment also proved problematic. Incidentally, the DSM-5 has included some of these disorders in the “Other Specified Bipolar and Related Disorders” category. Moreover, a community study utilizing DSM-5 criteria for BD has shown that the spectrum disorders are as frequent and disabling as BP-I and BP-II disorders[55].

Specifiers

Much like the DSM-5, the ICD-11 CDDR uses several specifiers for mood disorders to create more homogeneous subgroups. These specifiers are also intended to increase diagnostic specificity, assist treatment selection, and help prognostication[29]. They include those related to the course, severity, and descriptive symptom patterns. However, unlike the DSM-5, all specifiers can be coded in the ICD-11 draft so that this information is preserved. The primary specifiers include psychotic symptoms, severity in the case of depressive disorders, and course specifiers such as partial or full remission. Additional specifiers for melancholia and chronicity apply to depressive episodes. The rapid cycling specifier is used to describe BP-I and BP-II disorders. Specifiers common to both depression and BD include the presence of prominent anxiety symptoms, panic attacks, seasonal patterns, and the puerperal onset of episodes. Although most of these specifiers have been included in successive DSM classifications and are evidence-based, there are some uncertainties about their definitions and clinical utility[29]. However, the anxiety symptoms specifier is new to both the ICD-11 and the DSM-5. It is based on the evidence for the frequent occurrence of anxiety symptoms and the influence of these symptoms on the

Table 7 Considerations guiding the notion of clinical utility in the International Classification of Diseases, 11th version

Concept	Application to the ICD-11 CDDR
Working definition	Clinical utility of the classification and its categories includes the ability to facilitate communication among clinicians, having characteristics that help clinical practice (diagnostically accurate, easy to use, and feasible), and containing guidance for appropriate treatment choices[141,142]
Why clinical utility?	Validity is not a pragmatic goal; enhanced diagnostic reliability has not led to increased validity[143,144]. Current classifications have several shortcomings and are not useful in real-world settings[11,37,142]
Levels of utility	Clinical utility has two levels including the architectural or organizational level and the category level[24,141], utility should focus on both the levels and emphasize coverage, description of attributes, and ease of use[145]
Application to healthcare settings	The need for utility is the greatest during clinical encounters in routine practice settings. The classification must provide information of value to the clinician in these situations[9-11,13,146]
Public health utility	Consideration must be given to the features of the classification that enhance global applicability and reduce global mental health burden[9,147]
Contextual aspects	Utility is context-specific; it depends on the purpose for which a classification is used, clinical, research, or for public health[9,10,146]
Utility and scientific validity	Clinical utility has to go hand-in hand with the scientific evidence. Moreover, compromising the scientific basis of the classification to meet the needs of clinical utility has to be avoided as far as possible. There is considerable overlap between clinical utility and predictive validity and sometimes it is difficult to distinguish between them[105,145,147]
Greater emphasis on clinical utility in the ICD-11	¹ Clinical utility as the ultimate organizing principle is not a new notion, but the ICD-11 has paid the greatest systematic attention to this aspect[10,147,148]
Improving clinical utility in the ICD-11	Clinical utility has been the guiding principle at all the stages, from the evidence review, to content formation, and to the field trials. The standardized template or content-form was structured to enhance clinical utility. Working Groups were asked to consider the clinical utility of the changes suggested. The prototype-based approach contributed to enhanced clinical utility. Cross-cultural usefulness was addressed. The ICD-11 field-trial studies used methodology specifically designed to examine clinical utility in naturalistic settings. The results of these studies have been used to improve the revision further[9-13]

¹Similarities between the ICD-11 and the DSM-5 in this regard are shown in Table 1.ICD-11: International Classification of Diseases, 11th version, CDDR-Clinical Descriptions and Diagnostic Requirements ICD-11[8].

course and outcome of BD[137-140].

Clinical utility

The notion of clinical utility and its examination in the ICD-11 were influenced by different aspects of the concept. These included its working definition[141,142], the need for clinical utility[143-145], levels of utility[141,145], and clinical, research, and public health aspects of utility[146-148]. These are shown in Table 7.

Although clinical utility has been a consideration for the DSM-5 and the earlier versions of both classifications, systematic attention to its study was much greater during the preparation of the ICD-11 CDDR[147,148]. Notably, it was the guiding principle at all stages of the development of the ICD-11 draft, from its adoption as the primary principle, framing an operational definition, using it to guide the evidence review and the description of diagnostic categories, and conducting field trials to examine its relevance[9-11,13,141].

The ICD-11 field studies

The clinical utility of the ICD-11 CDDR categories was examined in a series of studies with a varied methodology in naturalistic settings. These studies were coordinated and conducted by the Field Studies Coordination Group and the GCPN[10,11,149,150]. They included internet-based surveys and clinic-based studies conducted at the field trial centres (FTCs). The formative field trials were conducted early during the guideline development and were meant to provide data to help improve the ICD-11 draft. These included surveys of mental health professionals to elicit their opinions and utilization patterns. Studies on the clinicians' organizational map were meant to inform the structure of the ICD-11 CDDR. Evaluative field studies were designed to assess the utility and reliability of the classification and the individual categories. They included internet-based studies using clinical vignettes and clinic-based FTC studies. The results of these studies regarding BD or mood disorders are shown in Table 8.

At the first glance, the results are encouraging. The clinical utility and utilization of the ICD-11 BD and mood disorders were very high[22,151-154]. The overall structure of the ICD-11 version and the structure of the mood disorders section was endorsed by the clinicians[23,24]. The diagnostic accuracy of BP-II disorders in the ICD-11 CDDR was better than that in the ICD-10 guidelines[155,156]. The clinical utility and inter-rater reliability of BP-I disorder, BD, and mood disorders all proved to be high [142,157-160]. While the clinical utility of these ICD-11 categories was similar to that of the ICD-10[161, 162] and the DSM-5 diagnoses[163], their inter-rater reliability was better than that of the corresponding

Table 8 The International Classification of Diseases, 11th version field trials on reliability and clinical utility of bipolar disorder¹

Ref.	Manuscript type	Results
Formative field trials		
Surveys of mental health professionals: Opinions and utilization patterns		
Reed <i>et al</i> [22], 2011	Internet-based survey	The ICD-10 category of BD had considerable clinical utility and was commonly used. The category of single depressive disorder was commonly used and should be retained. Functional impairment should be a diagnostic criterion for mood disorders
Evans <i>et al</i> [151], 2013	Internet-based survey of psychologists	The ICD-10 category of BD was not as commonly used. BD was rated to have low clinical utility, especially regarding its ease of use
Avasthi <i>et al</i> [152], 2014	Internet-based survey	The ICD-10 category of BD was commonly used and was easy to diagnose (high ease of use)
Robles <i>et al</i> [153], 2014	Internet-based survey	The ICD-10 category of BD was considered a problematic diagnosis by about 4% of the participants because of its non-specificity. Only about 1% of the participants felt that BP-II disorder should be included in the current version
Maruta <i>et al</i> [154], 2013	Internet-based survey	A majority (69%) of the participants felt that BD should be included in a separate category of mood disorders
Studies on the clinicians' organizational map for classifications		
Roberts <i>et al</i> [23], 2012	Internet-based survey	Clinicians' concepts were in keeping with the current evidence and similar across all groups and countries. BP-I, BP-II, and cyclothymic disorders were considered to be adult rather than developmental onset disorders. Clinicians' views about the organizational structure corresponded more to the ICD-11 classification than the ICD-10 or the DSM-5
Reed <i>et al</i> [24], 2013	Clinic-based FTC study	Clinicians' concepts were in keeping with the current evidence and similar across all groups and countries. Mood disorders including BP-I, BP-II, cyclothymic, depressive, and dysthymic disorders were grouped together by clinicians. This group was also among the most cohesively organized groups. The results supported the ICD-11 organization of the mood disorders group
Evaluative field trials		
Studies of clinical vignettes		
Gaebel <i>et al</i> [155], 2020	Internet-based based field study	Diagnostic accuracy of the ICD-11 BP-II disorder category was significantly higher than a modified ICD-10 BP-II category. However, regarding disorders already existing in the ICD-10, <i>e.g.</i> , BD, there were no differences between the ICD-11 and the ICD-10. There were no significant differences in overall clinical utility of BD between the ICD-11 and the ICD-10
Kogan <i>et al</i> [156], 2021	Internet-based based field study	Greater diagnostic accuracy was found for the ICD-10 categories of BP-I disorder and a modified category of BP-II disorder on initial analysis. However, there were no significant differences on re-analysis. There were no significant differences between the ICD-11 and the ICD-10 categories of cyclothymic disorder. Clinical utility was somewhat lower for the ICD-11 category of BP-I disorder. Ratings of severity of depression were better with the ICD-10
Clinic-based FTC studies		
Reed <i>et al</i> [142], 2018	ICD-11 diagnoses-reliability and utility	The clinical utility of BP-I disorder was higher than schizophrenia, schizoaffective disorder, and depressive disorders on all three parameters including diagnostic accuracy, ease of use, and clarity. Agreement between the raters was also the highest for BP-I disorder ($k = 0.85$) ^{2,3}
Reed <i>et al</i> [157], 2018	ICD-11 diagnoses-reliability	Agreement between the raters was one of the highest for BP-I disorder ($k = 0.84$). It was relatively low though adequate for BP-II disorder ($k = 0.62$) ^{3,4}
Hackmann <i>et al</i> [158], 2019	Qualitative study on patient perceptions of BP-I disorder	The patients commented on several additional features that were missing from the description of BP-I disorder in the ICD-11 CDR. They preferred native language and idioms. A lay language version of the diagnostic descriptions was preferred
Medina-Mora <i>et al</i> [159], 2019	ICD-11 diagnoses-reliability and utility	Inter-rater reliability of the mood disorders category was high (percentage agreement-87%). This was higher than schizophrenia and most of the other disorders. Clinical utility was also high
Onofa <i>et al</i> [160], 2019	ICD-11 diagnoses-reliability and utility	Inter-rater reliability of BP-I disorder ($k = 0.83$) was high. Ratings of diagnostic accuracy and ease of use were also high, but the descriptions were felt to be less useful in selecting treatment

¹Only those trials that have included results about the categories of bipolar or mood disorders are shown.

²The results were very similar to those of two ICD-10 FTC studies of clinical utility[161,162]. They were also similar to those of a clinical utility study of the DSM-5[163].

³The inter-rater reliability for a single depressive episode ranged from k values of 0.43 to 0.64. This was lower than the corresponding ICD-10 category ($k = 0.66-0.73$). Inter-rater reliability of recurrent depressive disorder was higher ($k = 0.74$) and similar to that of the ICD-10 category ($k = 0.69-0.70$)[161,162].

⁴The results were comparable to the BD category in the ICD-10 FTC studies ($k = 0.81-0.82$)[161,162]. Inter-rater reliability was also higher than that found in the DSM-5 FTC studies where reliability for BP-I disorder was 0.56 and for BP-II disorder was 0.40[164,165].

BD: Bipolar disorder; BP I: Type I bipolar disorder; BP II: Type II bipolar disorder; DSM-5: Diagnostic and Statistical Manual of Mental Disorders, 5th edition[6]; FTC: field trial centre; ICD-10: International Classification of Diseases, 10th version[14]; ICD-11: International Classification of Diseases, 11th

version, CDDR-Clinical Descriptions and Diagnostic Requirements[8]; *k*: Kappa value.

DSM-5 categories[164,165]. However, there were a few limitations. There was a divergence of opinion between psychiatrists and other mental health professionals in certain studies[151,153]. Although the ICD-11 categories were not inferior to the ICD-10 ones in terms of utility and reliability, there were no substantial differences between the two versions[155,156,161,162]. The reliability of BP-II disorder though adequate was relatively low[157]. Certain aspects of the clinical utility, *e.g.*, making treatment decisions based on the diagnoses, were difficult[160]. Patients' perceptions were not invariably favourable[158]. Finally, methodological limitations such as a selection bias towards those positively predisposed to the ICD-11 and inadequate generalization of the results to routine clinical practice could confound these findings[149]. Therefore, there is much scope for improving the utility and reliability of the ICD-11 guidelines as well as conducting further research on the subject.

CONCLUSION

The ICD-11 guidelines on BD have been more or less finalized following a protracted and complicated process. Many changes have been suggested. Many limitations are also evident, mostly arising from the conflicting nature of the existing evidence. Imperfections are also due to the consensus-based system of creating classifications[166] and the limitations of the current state of knowledge about the aetiology of psychiatric disorders[167-171]. The conservative approach followed may lead to some frustration. However, it has to be accepted that any change can only be incremental and that the scope for paradigmatic shifts is limited at present[30,172]. It is also time to move beyond the endless debates about the necessity of revisions[145,173,174] and focus on the challenges of implementation, dissemination, and education and training of the potential users of these guidelines. A provision for continuous upgrading similar to the DSM-5[175] and a greater focus on treatment-utility are also needed[148]. Although the initial results of clinical utility and reliability of BD seem promising, it will take several years and many studies to evaluate the real impact of the ICD-11 guidelines on the current psychiatric practice. It would be imperative that all stakeholders including the policymakers, professionals, and the people impacted by mental illnesses are engaged in this process[9]. Ultimately, only they will determine if the revision was worth the effort.

FOOTNOTES

Author contributions: Chakrabarti S is the sole author of this manuscript.

Conflict-of-interest statement: There are no conflicts of interest to report.

Open-Access: This article is an open-access article that was selected by an in-house editor and fully peer-reviewed by external reviewers. It is distributed in accordance with the Creative Commons Attribution NonCommercial (CC BY-NC 4.0) license, which permits others to distribute, remix, adapt, build upon this work non-commercially, and license their derivative works on different terms, provided the original work is properly cited and the use is non-commercial. See: <https://creativecommons.org/licenses/by-nc/4.0/>

Country/Territory of origin: India

ORCID number: Subho Chakrabarti 0000-0001-6023-2194.

Corresponding Author's Membership in Professional Societies: Fellow of the Royal College of Psychiatrists, U.K., No. 11659; Fellow of the International Society for Affective Disorders, No. P0001064; Fellow of the National Academy of Medical Sciences, India, No. F-2016-0878; Life Fellow of the Indian Psychiatric Society, No. 03051.

S-Editor: Chen YL

L-Editor: Wang TQ

P-Editor: Chen YL

REFERENCES

- 1 **Fountoulakis KN**, Young A, Yatham L, Grunze H, Vieta E, Blier P, Moeller HJ, Kasper S. The International College of Neuropsychopharmacology (CINP) Treatment Guidelines for Bipolar Disorder in Adults (CINP-BD-2017), Part 1: Background and Methods of the Development of Guidelines. *Int J Neuropsychopharmacol* 2017; **20**: 98-120 [PMID:

- 27815414 DOI: 10.1093/ijnp/pyw091]
- 2 **Carvalho AF**, Firth J, Vieta E. Bipolar Disorder. *N Engl J Med* 2020; **383**: 58-66 [PMID: 32609982 DOI: 10.1056/NEJMra1906193]
 - 3 **Hyman SE**. The diagnosis of mental disorders: the problem of reification. *Annu Rev Clin Psychol* 2010; **6**: 155-179 [PMID: 17716032 DOI: 10.1146/annurev.clinpsy.3.022806.091532]
 - 4 **Suris A**, Holliday R, North CS. The Evolution of the Classification of Psychiatric Disorders. *Behav Sci (Basel)* 2016; **6** [PMID: 26797641 DOI: 10.3390/bs6010005]
 - 5 **Regier DA**, Goldberg DP, Ustun BT, Reed GM. DSM-5 and ICD-11 classifications. In: Geddes JR, Andreasen NC, Goodwin GM. *New oxford textbook of psychiatry*. 3rd ed. Oxford: Oxford University Press, 2020: 51-61 [DOI: 10.1093/med/9780198713005.003.0007]
 - 6 **American Psychiatric Association**. Diagnostic and statistical manual of mental disorders. 5th ed. Washington, DC: American Psychiatric Publishing, 2013: 1-947 [DOI: 10.1176/appi.books.9780890425596]
 - 7 **World Health Organization**. ICD-11 homepage. [cited 11 February 2022]. Available from: <https://www.who.int/standards/classifications/classification-of-diseases>
 - 8 **The Global Clinical Practice Network**. The ICD-11. Clinical descriptions and diagnostic requirements. Mood disorders. [cited 31 March 2022]. Available from: <https://gcp.network/groupings/mood-disorders>
 - 9 **International Advisory Group for the Revision of ICD-10 Mental and Behavioural Disorders**. A conceptual framework for the revision of the ICD-10 classification of mental and behavioural disorders. *World Psychiatry* 2011; **10**: 86-92 [PMID: 21633677 DOI: 10.1002/j.2051-5545.2011.tb00022.x]
 - 10 **First MB**, Reed GM, Hyman SE, Saxena S. The development of the ICD-11 Clinical Descriptions and Diagnostic Guidelines for Mental and Behavioural Disorders. *World Psychiatry* 2015; **14**: 82-90 [PMID: 25655162 DOI: 10.1002/wps.20189]
 - 11 **Keeley JW**, Reed GM, Roberts MC, Evans SC, Medina-Mora ME, Robles R, Rebello T, Sharan P, Gureje O, First MB, Andrews HF, Ayuso-Mateos JL, Gaebel W, Zielasek J, Saxena S. Developing a science of clinical utility in diagnostic classification systems field study strategies for ICD-11 mental and behavioral disorders. *Am Psychol* 2016; **71**: 3-16 [PMID: 26766762 DOI: 10.1037/a0039972]
 - 12 **Rebello TJ**, Reed GM, Saxena S. Core considerations in the development of the World Health Organization's international classification of diseases, 11th revision. *Indian J Soc Psychiatry* 2018; **34** Suppl. S1: 5-10 [DOI: 10.4103/ijsp.ijsp_43_18]
 - 13 **Reed GM**, First MB, Kogan CS, Hyman SE, Gureje O, Gaebel W, Maj M, Stein DJ, Maercker A, Tyrer P, Claudino A, Garralda E, Salvador-Carulla L, Ray R, Saunders JB, Dua T, Poznyak V, Medina-Mora ME, Pike KM, Ayuso-Mateos JL, Kanba S, Keeley JW, Khoury B, Krasnov VN, Kulygina M, Lovell AM, de Jesus Mari J, Maruta T, Matsumoto C, Rebello TJ, Roberts MC, Robles R, Sharan P, Zhao M, Jablensky A, Udomratn P, Rahimi-Movaghar A, Rydelius PA, Bährer-Köhler S, Watts AD, Saxena S. Innovations and changes in the ICD-11 classification of mental, behavioural and neurodevelopmental disorders. *World Psychiatry* 2019; **18**: 3-19 [PMID: 30600616 DOI: 10.1002/wps.20611]
 - 14 **World Health Organization**. The ICD-10 classification of mental and behavioural disorders. Clinical descriptions and diagnostic guidelines. Geneva: World Health Organization, 1992; 1-267
 - 15 **Chakrabarti S**. Mood disorders in the International Classification of Diseases-11: similarities and differences with the Diagnostic and Statistical Manual of Mental Disorders-5 and the International Classification of Diseases-10. *Indian J Soc Psychiatry* 2018; **34** Suppl. S1: 17-22 [DOI: 10.4103/ijsp.ijsp_19_18]
 - 16 **Regier DA**, Kuhl EA, Kupfer DJ. The DSM-5: Classification and criteria changes. *World Psychiatry* 2013; **12**: 92-98 [PMID: 23737408 DOI: 10.1002/wps.20050]
 - 17 **Cooper R**. Understanding the DSM-5: stasis and change. *Hist Psychiatry* 2018; **29**: 49-65 [PMID: 29183162 DOI: 10.1177/0957154X17741783]
 - 18 **Andrews G**, Goldberg DP, Krueger RF, Carpenter WT, Hyman SE, Sachdev P, Pine DS. Exploring the feasibility of a meta-structure for DSM-V and ICD-11: could it improve utility and validity? *Psychol Med* 2009; **39**: 1993-2000 [PMID: 19796425 DOI: 10.1017/S0033291709990250]
 - 19 **Goldberg DP**, Andrews G, Hobbs MJ. Where should bipolar disorder appear in the meta-structure? *Psychol Med* 2009; **39**: 2071-2081 [PMID: 19796430 DOI: 10.1017/S0033291709990304]
 - 20 **First MB**, Gaebel W, Maj M, Stein DJ, Kogan CS, Saunders JB, Poznyak VB, Gureje O, Lewis-Fernández R, Maercker A, Brewin CR, Cloitre M, Claudino A, Pike KM, Baird G, Skuse D, Krueger RB, Briken P, Burke JD, Lochman JE, Evans SC, Woods DW, Reed GM. An organization- and category-level comparison of diagnostic requirements for mental disorders in ICD-11 and DSM-5. *World Psychiatry* 2021; **20**: 34-51 [PMID: 33432742 DOI: 10.1002/wps.20825]
 - 21 **Stein DJ**, Reed GM. ICD-11: the importance of a science of psychiatric nosology. *Lancet Psychiatry* 2019; **6**: 6-7 [PMID: 30579496 DOI: 10.1016/S2215-0366(18)30461-9]
 - 22 **Reed GM**, Mendonça Correia J, Esparza P, Saxena S, Maj M. The WPA-WHO Global Survey of Psychiatrists' Attitudes Towards Mental Disorders Classification. *World Psychiatry* 2011; **10**: 118-131 [PMID: 21633689 DOI: 10.1002/j.2051-5545.2011.tb00034.x]
 - 23 **Roberts MC**, Reed GM, Medina-Mora ME, Keeley JW, Sharan P, Johnson DK, Mari Jde J, Ayuso-Mateos JL, Gureje O, Xiao Z, Maruta T, Khoury B, Robles R, Saxena S. A global clinicians' map of mental disorders to improve ICD-11: analysing meta-structure to enhance clinical utility. *Int Rev Psychiatry* 2012; **24**: 578-590 [PMID: 23244613 DOI: 10.3109/09540261.2012.736368]
 - 24 **Reed GM**, Roberts MC, Keeley J, Hooppell C, Matsumoto C, Sharan P, Robles R, Carvalho H, Wu C, Gureje O, Leal-Leturia I, Flanagan EH, Correia JM, Maruta T, Ayuso-Mateos JL, de Jesus Mari J, Xiao Z, Evans SC, Saxena S, Medina-Mora ME. Mental health professionals' natural taxonomies of mental disorders: implications for the clinical utility of the ICD-11 and the DSM-5. *J Clin Psychol* 2013; **69**: 1191-1212 [PMID: 24122386 DOI: 10.1002/jclp.22031]
 - 25 **Uher R**, Payne JL, Pavlova B, Perlis RH. Major depressive disorder in DSM-5: implications for clinical practice and research of changes from DSM-IV. *Depress Anxiety* 2014; **31**: 459-471 [PMID: 24272961 DOI: 10.1002/da.22217]
 - 26 **Malhi GS**, Byrow Y. The current classification of bipolar disorders. In: Carvalho AF, Vieta E. *The treatment of bipolar*

- disorder: integrative clinical strategies and future directions. Oxford: Oxford University Press, 2017: 1-15 [DOI: [10.1093/med/9780198748625.001.0001](https://doi.org/10.1093/med/9780198748625.001.0001)]
- 27 **Paykel ES.** Mood disorders: review of current diagnostic systems. *Psychopathology* 2002; **35**: 94-99 [PMID: [12145491](https://pubmed.ncbi.nlm.nih.gov/12145491/) DOI: [10.1159/000065126](https://doi.org/10.1159/000065126)]
 - 28 **American Psychiatric Association.** Updates to DSM-5 criteria and text. [cited August 2015]. Available from: <https://psychiatry.org/psychiatrists/practice/dsm/updates-to-dsm/updates-to-dsm-5-criteria-text>
 - 29 **Maj M.** Clinical presentation & epidemiology of bipolar disorder. In: Strakowski SM, DelBello MP, Adler CM, Fleck DE. Bipolar disorder. Oxford: Oxford University Press, 2020: 5-26 [DOI: [10.1093/med/9780190908096.001.0001](https://doi.org/10.1093/med/9780190908096.001.0001)]
 - 30 **Stein DJ, Szatmari P, Gaebel W, Berk M, Vieta E, Maj M, de Vries YA, Roest AM, de Jonge P, Maercker A, Brewin CR, Pike KM, Grilo CM, Fineberg NA, Briken P, Cohen-Kettenis PT, Reed GM.** Mental, behavioral and neurodevelopmental disorders in the ICD-11: an international perspective on key changes and controversies. *BMC Med* 2020; **18**: 21 [PMID: [31983345](https://pubmed.ncbi.nlm.nih.gov/31983345/) DOI: [10.1186/s12916-020-1495-2](https://doi.org/10.1186/s12916-020-1495-2)]
 - 31 **Angst J, Ajdacic-Gross V, Rössler W.** Bipolar disorders in ICD-11: current status and strengths. *Int J Bipolar Disord* 2020; **8**: 3 [PMID: [31956923](https://pubmed.ncbi.nlm.nih.gov/31956923/) DOI: [10.1186/s40345-019-0165-9](https://doi.org/10.1186/s40345-019-0165-9)]
 - 32 **Severus E, Bauer M.** Diagnosing bipolar disorders: ICD-11 and beyond. *Int J Bipolar Disord* 2020; **8**: 4 [PMID: [31960156](https://pubmed.ncbi.nlm.nih.gov/31960156/) DOI: [10.1186/s40345-019-0177-5](https://doi.org/10.1186/s40345-019-0177-5)]
 - 33 **Maj M.** Psychiatric diagnosis: pros and cons of prototypes vs. operational criteria. *World Psychiatry* 2011; **10**: 81-82 [PMID: [21633674](https://pubmed.ncbi.nlm.nih.gov/21633674/) DOI: [10.1002/j.2051-5545.2011.tb00019.x](https://doi.org/10.1002/j.2051-5545.2011.tb00019.x)]
 - 34 **Westen D.** Prototype diagnosis of psychiatric syndromes. *World Psychiatry* 2012; **11**: 16-21 [PMID: [22294998](https://pubmed.ncbi.nlm.nih.gov/22294998/) DOI: [10.1016/j.wpsyc.2012.01.004](https://doi.org/10.1016/j.wpsyc.2012.01.004)]
 - 35 **First MB.** A practical prototypic system for psychiatric diagnosis: the ICD-11 Clinical Descriptions and Diagnostic Guidelines. *World Psychiatry* 2012; **11**: 24-25 [PMID: [22295001](https://pubmed.ncbi.nlm.nih.gov/22295001/) DOI: [10.1016/j.wpsyc.2012.01.022](https://doi.org/10.1016/j.wpsyc.2012.01.022)]
 - 36 **DeFife JA, Peart J, Bradley B, Ressler K, Drill R, Westen D.** Validity of prototype diagnosis for mood and anxiety disorders. *JAMA Psychiatry* 2013; **70**: 140-148 [PMID: [23403467](https://pubmed.ncbi.nlm.nih.gov/23403467/) DOI: [10.1001/jamapsychiatry.2013.270](https://doi.org/10.1001/jamapsychiatry.2013.270)]
 - 37 **Maj M.** The media campaign on the DSM-5: recurring comments and lessons for the future of diagnosis in psychiatric practice. *Epidemiol Psychiatr Sci* 2015; **24**: 197-202 [PMID: [25204198](https://pubmed.ncbi.nlm.nih.gov/25204198/) DOI: [10.1017/S2045796014000572](https://doi.org/10.1017/S2045796014000572)]
 - 38 **Machado-Vieira R, Luckenbaugh DA, Ballard ED, Henter ID, Tohen M, Suppes T, Zarate CA Jr.** Increased Activity or Energy as a Primary Criterion for the Diagnosis of Bipolar Mania in DSM-5: Findings From the STEP-BD Study. *Am J Psychiatry* 2017; **174**: 70-76 [PMID: [27523498](https://pubmed.ncbi.nlm.nih.gov/27523498/) DOI: [10.1176/appi.ajp.2016.15091132](https://doi.org/10.1176/appi.ajp.2016.15091132)]
 - 39 **Grunze A, Born C, Fredskild MU, Grunze H.** How Does Adding the DSM-5 Criterion Increased Energy/Activity for Mania Change the Bipolar Landscape? *Front Psychiatry* 2021; **12**: 638440 [PMID: [33679488](https://pubmed.ncbi.nlm.nih.gov/33679488/) DOI: [10.3389/fpsy.2021.638440](https://doi.org/10.3389/fpsy.2021.638440)]
 - 40 **Kessing LV, González-Pinto A, Fagiolini A, Bechdolf A, Reif A, Yildiz A, Etain B, Henry C, Severus E, Reininghaus EZ, Morken G, Goodwin GM, Scott J, Geddes JR, Rietschel M, Landén M, Manchia M, Bauer M, Martinez-Cengotitabengoa M, Andreassen OA, Ritter P, Kupka R, Licht RW, Nielsen RE, Schulze TG, Hajek T, Lagerberg TV, Bergink V, Vieta E.** DSM-5 and ICD-11 criteria for bipolar disorder: Implications for the prevalence of bipolar disorder and validity of the diagnosis - A narrative review from the ECNP bipolar disorders network. *Eur Neuropsychopharmacol* 2021; **47**: 54-61 [PMID: [33541809](https://pubmed.ncbi.nlm.nih.gov/33541809/) DOI: [10.1016/j.euroneuro.2021.01.097](https://doi.org/10.1016/j.euroneuro.2021.01.097)]
 - 41 **Nemeroff CB, Weinberger D, Rutter M, MacMillan HL, Bryant RA, Wessely S, Stein DJ, Pariente CM, Seemüller F, Berk M, Malhi GS, Preisig M, Brüne M, Lysaker P.** DSM-5: a collection of psychiatrist views on the changes, controversies, and future directions. *BMC Med* 2013; **11**: 202 [PMID: [24229007](https://pubmed.ncbi.nlm.nih.gov/24229007/) DOI: [10.1186/1741-7015-11-202](https://doi.org/10.1186/1741-7015-11-202)]
 - 42 **Severus E, Bauer M.** Diagnosing bipolar disorders in DSM-5. *Int J Bipolar Disord* 2013; **1**: 14 [PMID: [25505681](https://pubmed.ncbi.nlm.nih.gov/25505681/) DOI: [10.1186/2194-7511-1-14](https://doi.org/10.1186/2194-7511-1-14)]
 - 43 **Calabrese JR, Gao K, Sachs G.** Diagnosing Mania in the Age of DSM-5. *Am J Psychiatry* 2017; **174**: 8-10 [PMID: [28040998](https://pubmed.ncbi.nlm.nih.gov/28040998/) DOI: [10.1176/appi.ajp.2016.16091084](https://doi.org/10.1176/appi.ajp.2016.16091084)]
 - 44 **Scott J, Murray G, Henry C, Morken G, Scott E, Angst J, Merikangas KR, Hickie IB.** Activation in Bipolar Disorders: A Systematic Review. *JAMA Psychiatry* 2017; **74**: 189-196 [PMID: [28002572](https://pubmed.ncbi.nlm.nih.gov/28002572/) DOI: [10.1001/jamapsychiatry.2016.3459](https://doi.org/10.1001/jamapsychiatry.2016.3459)]
 - 45 **Martino DJ, Valerio MP, Parker G.** The structure of mania: An overview of factorial analysis studies. *Eur Psychiatry* 2020; **63**: e10 [PMID: [32093802](https://pubmed.ncbi.nlm.nih.gov/32093802/) DOI: [10.1192/j.eurpsy.2020.18](https://doi.org/10.1192/j.eurpsy.2020.18)]
 - 46 **Akiskal HS, Hantouche EG, Bourgeois ML, Azorin JM, Sechter D, Allilaire JF, Chatenêt-Duchêne L, Lancrenon S.** Toward a refined phenomenology of mania: combining clinician-assessment and self-report in the French EPIMAN study. *J Affect Disord* 2001; **67**: 89-96 [PMID: [11869755](https://pubmed.ncbi.nlm.nih.gov/11869755/) DOI: [10.1016/s0165-0327\(01\)00441-4](https://doi.org/10.1016/s0165-0327(01)00441-4)]
 - 47 **Angst J, Gamma A, Benazzi F, Ajdacic V, Eich D, Rössler W.** Toward a re-definition of subthreshold bipolarity: epidemiology and proposed criteria for bipolar-II, minor bipolar disorders and hypomania. *J Affect Disord* 2003; **73**: 133-146 [PMID: [12507746](https://pubmed.ncbi.nlm.nih.gov/12507746/) DOI: [10.1016/s0165-0327\(02\)00322-1](https://doi.org/10.1016/s0165-0327(02)00322-1)]
 - 48 **Hantouche EG, Angst J, Akiskal HS.** Factor structure of hypomania: interrelationships with cyclothymia and the soft bipolar spectrum. *J Affect Disord* 2003; **73**: 39-47 [PMID: [12507736](https://pubmed.ncbi.nlm.nih.gov/12507736/) DOI: [10.1016/s0165-0327\(02\)00319-1](https://doi.org/10.1016/s0165-0327(02)00319-1)]
 - 49 **Angst J, Gamma A, Bowden CL, Azorin JM, Perugi G, Vieta E, Young AH.** Diagnostic criteria for bipolarity based on an international sample of 5,635 patients with DSM-IV major depressive episodes. *Eur Arch Psychiatry Clin Neurosci* 2012; **262**: 3-11 [PMID: [21818629](https://pubmed.ncbi.nlm.nih.gov/21818629/) DOI: [10.1007/s00406-011-0228-0](https://doi.org/10.1007/s00406-011-0228-0)]
 - 50 **Hoertel N, Le Strat Y, Angst J, Dubertret C.** Subthreshold bipolar disorder in a U.S. national representative sample: prevalence, correlates and perspectives for psychiatric nosography. *J Affect Disord* 2013; **146**: 338-347 [PMID: [23040874](https://pubmed.ncbi.nlm.nih.gov/23040874/) DOI: [10.1016/j.jad.2012.09.016](https://doi.org/10.1016/j.jad.2012.09.016)]
 - 51 **Goodwin FK, Jamison KR.** Manic-depressive illness: bipolar disorder and recurrent depression. 2nd ed. New York: Oxford University Press, 2007: 1-1288
 - 52 **Terao T, Tanaka T.** Antidepressant-induced mania or hypomania in DSM-5. *Psychopharmacology (Berl)* 2014; **231**: 315 [PMID: [24247478](https://pubmed.ncbi.nlm.nih.gov/24247478/) DOI: [10.1007/s00213-013-3358-4](https://doi.org/10.1007/s00213-013-3358-4)]
 - 53 **Angst J.** Bipolar disorders in DSM-5: strengths, problems and perspectives. *Int J Bipolar Disord* 2013; **1**: 12 [PMID: [23040874](https://pubmed.ncbi.nlm.nih.gov/23040874/) DOI: [10.1186/2194-7511-1-12](https://doi.org/10.1186/2194-7511-1-12)]

- 25505679 DOI: [10.1186/2194-7511-1-12](https://doi.org/10.1186/2194-7511-1-12)]
- 54 **de Dios C**, Goikolea JM, Colom F, Moreno C, Vieta E. Bipolar disorders in the new DSM-5 and ICD-11 classifications. *Rev Psiquiatr Salud Ment* 2014; **7**: 179-185 [PMID: [25450512](https://pubmed.ncbi.nlm.nih.gov/25450512/) DOI: [10.1016/j.rpsm.2014.07.005](https://doi.org/10.1016/j.rpsm.2014.07.005)]
- 55 **Fassassi S**, Vandeleur C, Aubry JM, Castelao E, Preisig M. Prevalence and correlates of DSM-5 bipolar and related disorders and hyperthymic personality in the community. *J Affect Disord* 2014; **167**: 198-205 [PMID: [24995887](https://pubmed.ncbi.nlm.nih.gov/24995887/) DOI: [10.1016/j.jad.2014.06.004](https://doi.org/10.1016/j.jad.2014.06.004)]
- 56 **Calvó-Perxas L**, Garre-Olmo J, Vilalta-Franch J. Prevalence and sociodemographic correlates of depressive and bipolar disorders in Catalonia (Spain) using DSM-5 criteria. *J Affect Disord* 2015; **184**: 97-103 [PMID: [26074018](https://pubmed.ncbi.nlm.nih.gov/26074018/) DOI: [10.1016/j.jad.2015.05.048](https://doi.org/10.1016/j.jad.2015.05.048)]
- 57 **Blanco C**, Compton WM, Saha TD, Goldstein BI, Ruan WJ, Huang B, Grant BF. Epidemiology of DSM-5 bipolar I disorder: Results from the National Epidemiologic Survey on Alcohol and Related Conditions - III. *J Psychiatr Res* 2017; **84**: 310-317 [PMID: [27814503](https://pubmed.ncbi.nlm.nih.gov/27814503/) DOI: [10.1016/j.jpsychires.2016.10.003](https://doi.org/10.1016/j.jpsychires.2016.10.003)]
- 58 **Gordon-Smith K**, Jones LA, Forty L, Craddock N, Jones I. Changes to the Diagnostic Criteria for Bipolar Disorder in DSM-5 Make Little Difference to Lifetime Diagnosis: Findings From the U.K. Bipolar Disorder Research Network (BDRN) Study. *Am J Psychiatry* 2017; **174**: 803 [PMID: [28760020](https://pubmed.ncbi.nlm.nih.gov/28760020/) DOI: [10.1176/appi.ajp.2017.17010109](https://doi.org/10.1176/appi.ajp.2017.17010109)]
- 59 **Fredskild MU**, Mintz J, Frye MA, McElroy SL, Nolen WA, Kupka R, Grunze H, Keck PE Jr, Post RM, Kessing LV, Suppes T. Adding Increased Energy or Activity to Criterion (A) of the DSM-5 Definition of Hypomania and Mania: Effect on the Diagnoses of 907 Patients From the Bipolar Collaborative Network. *J Clin Psychiatry* 2019; **80** [PMID: [31665571](https://pubmed.ncbi.nlm.nih.gov/31665571/) DOI: [10.4088/JCP.19m12834](https://doi.org/10.4088/JCP.19m12834)]
- 60 **Faurholt-Jepsen M**, Christensen EM, Frost M, Bardram JE, Vinberg M, Kessing LV. Hypomania/Mania by DSM-5 definition based on daily smartphone-based patient-reported assessments. *J Affect Disord* 2020; **264**: 272-278 [PMID: [32056761](https://pubmed.ncbi.nlm.nih.gov/32056761/) DOI: [10.1016/j.jad.2020.01.014](https://doi.org/10.1016/j.jad.2020.01.014)]
- 61 **Fredskild MU**, Stanislaus S, Coello K, Melbye SA, Kjaerstad HL, Sletved KSO, Suppes T, Vinberg M, Kessing LV. Impact of modification to DSM-5 criterion A for hypomania/mania in newly diagnosed bipolar patients: findings from the prospective BIO study. *Int J Bipolar Disord* 2021; **9**: 14 [PMID: [33937949](https://pubmed.ncbi.nlm.nih.gov/33937949/) DOI: [10.1186/s40345-020-00219-9](https://doi.org/10.1186/s40345-020-00219-9)]
- 62 **American Psychiatric Association**. Diagnostic and statistical manual of mental disorders. 4th ed. Washington, DC: American Psychiatric Association, 1994: 317-391
- 63 **American Psychiatric Association**. Diagnostic and statistical manual of mental disorders. 4th ed. Text revision. Washington, DC: American Psychiatric Association, 2000: 345-428
- 64 **Parker G**. The DSM-5 classification of mood disorders: some fallacies and fault lines. *Acta Psychiatr Scand* 2014; **129**: 404-409 [PMID: [24571120](https://pubmed.ncbi.nlm.nih.gov/24571120/) DOI: [10.1111/acps.12253](https://doi.org/10.1111/acps.12253)]
- 65 **Parker G**, Tavella G, Macqueen G, Berk M, Grunze H, Deckersbach T, Dunner DL, Sajatovic M, Amsterdam JD, Ketter TA, Yatham LN, Kessing LV, Bassett D, Zimmerman M, Fountoulakis KN, Duffy A, Alda M, Calkin C, Sharma V, Anand A, Singh MK, Hajek T, Boyce P, Frey BN, Castle DJ, Young AH, Vieta E, Rybakowski JK, Swartz HA, Schaffer A, Murray G, Bayes A, Lam RW, Bora E, Post RM, Ostacher MJ, Lafer B, Cleare AJ, Burdick KE, O'Donovan C, Ortiz A, Henry C, Kanba S, Rosenblat JD, Parikh SV, Bond DJ, Grunebaum MF, Frangou S, Goldberg JF, Orum M, Osser DN, Frye MA, McIntyre RS, Fagiolini A, Manicavasagar V, Carlson GA, Malhi GS. Revising *Diagnostic and Statistical Manual of Mental Disorders*, Fifth Edition, criteria for the bipolar disorders: Phase I of the AREDOC project. *Aust N Z J Psychiatry* 2018; **52**: 1173-1182 [PMID: [30378461](https://pubmed.ncbi.nlm.nih.gov/30378461/) DOI: [10.1177/0004867418808382](https://doi.org/10.1177/0004867418808382)]
- 66 **Parker G**, Tavella G, Ricciardi T, Hadzi-Pavlovic D, Alda M, Hajek T, Dunner DL, O'Donovan C, Rybakowski JK, Goldberg JF, Bayes A, Sharma V, Boyce P, Manicavasagar V. Refined diagnostic criteria for the bipolar disorders: phase two of the AREDOC project. *Acta Psychiatr Scand* 2020; **142**: 193-202 [PMID: [33460033](https://pubmed.ncbi.nlm.nih.gov/33460033/) DOI: [10.1111/acps.13218](https://doi.org/10.1111/acps.13218)]
- 67 **Dargél AA**, Masson M. Bipolar disorder: a single illness. *Bipolar Disord* 2018 [PMID: [29667285](https://pubmed.ncbi.nlm.nih.gov/29667285/) DOI: [10.1111/bdi.12651](https://doi.org/10.1111/bdi.12651)]
- 68 **Dubovsky SL**. Mania. *Continuum (Minneapolis)* 2015; **21**: 737-755 [PMID: [26039851](https://pubmed.ncbi.nlm.nih.gov/26039851/) DOI: [10.1212/01.CON.0000466663.28026.6f](https://doi.org/10.1212/01.CON.0000466663.28026.6f)]
- 69 **Nielsen LG**, Køster Rimvall M, Van Os J, Verhulst F, Rask CU, Skovgaard AM, Olsen EM, Jeppesen P. Precursors of self-reported subclinical hypomania in adolescence: A longitudinal general population study. *PLoS One* 2021; **16**: e0253507 [PMID: [34143836](https://pubmed.ncbi.nlm.nih.gov/34143836/) DOI: [10.1371/journal.pone.0253507](https://doi.org/10.1371/journal.pone.0253507)]
- 70 **Malhi GS**, Irwin L, Outhred T. Counting the days from bipolar II to bipolar true! *Acta Psychiatr Scand* 2019; **139**: 211-213 [PMID: [30811580](https://pubmed.ncbi.nlm.nih.gov/30811580/) DOI: [10.1111/acps.12999](https://doi.org/10.1111/acps.12999)]
- 71 **Zisook S**, Pies R, Iglewicz A. Grief, depression, and the DSM-5. *J Psychiatr Pract* 2013; **19**: 386-396 [PMID: [24042244](https://pubmed.ncbi.nlm.nih.gov/24042244/) DOI: [10.1097/01.pra.0000435037.91049.2f](https://doi.org/10.1097/01.pra.0000435037.91049.2f)]
- 72 **Pies RW**. The Bereavement Exclusion and DSM-5: An Update and Commentary. *Innov Clin Neurosci* 2014; **11**: 19-22 [PMID: [25337442](https://pubmed.ncbi.nlm.nih.gov/25337442/)]
- 73 **Wakefield JC**, First MB. Validity of the bereavement exclusion to major depression: does the empirical evidence support the proposal to eliminate the exclusion in DSM-5? *World Psychiatry* 2012; **11**: 3-10 [PMID: [22294996](https://pubmed.ncbi.nlm.nih.gov/22294996/) DOI: [10.1016/j.wpsyc.2012.01.002](https://doi.org/10.1016/j.wpsyc.2012.01.002)]
- 74 **Sabin JE**, Daniels N. Seeking Legitimacy for DSM-5: The Bereavement Exception as an Example of Failed Process. *AMA J Ethics* 2017; **19**: 192-198 [PMID: [28225700](https://pubmed.ncbi.nlm.nih.gov/28225700/) DOI: [10.1001/journalofethics.2017.19.2.pfor2-1702](https://doi.org/10.1001/journalofethics.2017.19.2.pfor2-1702)]
- 75 **Maj M**. Validity and clinical utility of the current operational characterization of major depression. *Int Rev Psychiatry* 2012; **24**: 530-537 [PMID: [23244608](https://pubmed.ncbi.nlm.nih.gov/23244608/) DOI: [10.3109/09540261.2012.712952](https://doi.org/10.3109/09540261.2012.712952)]
- 76 **Maj M**. Development and validation of the current concept of major depression. *Psychopathology* 2012; **45**: 135-146 [PMID: [22399134](https://pubmed.ncbi.nlm.nih.gov/22399134/) DOI: [10.1159/000329100](https://doi.org/10.1159/000329100)]
- 77 **Mitchell PB**, Goodwin GM, Johnson GF, Hirschfeld RM. Diagnostic guidelines for bipolar depression: a probabilistic approach. *Bipolar Disord* 2008; **10**: 144-152 [PMID: [18199233](https://pubmed.ncbi.nlm.nih.gov/18199233/) DOI: [10.1111/j.1399-5618.2007.00559.x](https://doi.org/10.1111/j.1399-5618.2007.00559.x)]
- 78 **Ghaemi SN**, Bauer M, Cassidy F, Malhi GS, Mitchell P, Phelps J, Vieta E, Youngstrom E; ISBD Diagnostic Guidelines Task Force. Diagnostic guidelines for bipolar disorder: a summary of the International Society for Bipolar Disorders Diagnostic Guidelines Task Force Report. *Bipolar Disord* 2008; **10**: 117-128 [PMID: [18199230](https://pubmed.ncbi.nlm.nih.gov/18199230/) DOI: [10.1111/j.1399-5618.2007.00559.x](https://doi.org/10.1111/j.1399-5618.2007.00559.x)]

- 10.1111/j.1399-5618.2007.00556.x]
- 79 **Goodwin GM**, Anderson I, Arango C, Bowden CL, Henry C, Mitchell PB, Nolen WA, Vieta E, Wittchen HU. ECNP consensus meeting. Bipolar depression. Nice, March 2007. *Eur Neuropsychopharmacol* 2008; **18**: 535-549 [PMID: 18501566 DOI: 10.1016/j.euroneuro.2008.03.003]
 - 80 **Mitchell PB**, Frankland A, Hadzi-Pavlovic D, Roberts G, Corry J, Wright A, Loo CK, Breakspear M. Comparison of depressive episodes in bipolar disorder and in major depressive disorder within bipolar disorder pedigrees. *Br J Psychiatry* 2011; **199**: 303-309 [PMID: 21508436 DOI: 10.1192/bjp.bp.110.088823]
 - 81 **Frankland A**, Cerrillo E, Hadzi-Pavlovic D, Roberts G, Wright A, Loo CK, Breakspear M, Mitchell PB. Comparing the phenomenology of depressive episodes in bipolar I and II disorder and major depressive disorder within bipolar disorder pedigrees. *J Clin Psychiatry* 2015; **76**: 32-8; quiz 39 [PMID: 25650671 DOI: 10.4088/JCP.14m09293]
 - 82 **Phillips ML**, Kupfer DJ. Bipolar disorder diagnosis: challenges and future directions. *Lancet* 2013; **381**: 1663-1671 [PMID: 23663952 DOI: 10.1016/S0140-6736(13)60989-7]
 - 83 **Vieta E**, Valentí M. Mixed states in DSM-5: implications for clinical care, education, and research. *J Affect Disord* 2013; **148**: 28-36 [PMID: 23561484 DOI: 10.1016/j.jad.2013.03.007]
 - 84 **Swann AC**, Lafer B, Perugi G, Frye MA, Bauer M, Bahk WM, Scott J, Ha K, Suppes T. Bipolar mixed states: an international society for bipolar disorders task force report of symptom structure, course of illness, and diagnosis. *Am J Psychiatry* 2013; **170**: 31-42 [PMID: 23223893 DOI: 10.1176/appi.ajp.2012.12030301]
 - 85 **Solé E**, Garriga M, Valentí M, Vieta E. Mixed features in bipolar disorder. *CNS Spectr* 2017; **22**: 134-140 [PMID: 28031070 DOI: 10.1017/S1092852916000869]
 - 86 **Malhi GS**, Fritz K, Elangovan P, Irwin L. Mixed States: Modelling and Management. *CNS Drugs* 2019; **33**: 301-313 [PMID: 30712252 DOI: 10.1007/s40263-019-00609-3]
 - 87 **Barroilhet SA**, Ghaemi SN. Psychopathology of Mixed States. *Psychiatr Clin North Am* 2020; **43**: 27-46 [PMID: 32008686 DOI: 10.1016/j.psc.2019.10.003]
 - 88 **Koukopoulos A**, Sani G, Ghaemi SN. Mixed features of depression: why DSM-5 is wrong (and so was DSM-IV). *Br J Psychiatry* 2013; **203**: 3-5 [PMID: 23818531 DOI: 10.1192/bjp.bp.112.124404]
 - 89 **Koukopoulos A**, Sani G. DSM-5 criteria for depression with mixed features: a farewell to mixed depression. *Acta Psychiatr Scand* 2014; **129**: 4-16 [PMID: 23600771 DOI: 10.1111/acps.12140]
 - 90 **Pacchiarotti I**, Kotzalidis GD, Murru A, Mazzarini L, Rapinesi C, Valentí M, Anmella G, Gomes-da-Costa S, Gimenez A, Llach C, Perugi G, Vieta E, Verdolini N. Mixed Features in Depression: The Unmet Needs of Diagnostic and Statistical Manual of Mental Disorders Fifth Edition. *Psychiatr Clin North Am* 2020; **43**: 59-68 [PMID: 32008688 DOI: 10.1016/j.psc.2019.10.006]
 - 91 **First MB**. DSM-5 proposals for mood disorders: a cost-benefit analysis. *Curr Opin Psychiatry* 2011; **24**: 1-9 [PMID: 21042219 DOI: 10.1097/YCO.0b013e328340b594]
 - 92 **Liu X**, Jiang K. Should major depressive disorder with mixed features be classified as a bipolar disorder? *Shanghai Arch Psychiatry* 2014; **26**: 294-296 [PMID: 25477723 DOI: 10.11919/j.issn.1002-0829.214146]
 - 93 **Swann AC**, Steinberg JL, Lijffijt M, Moeller GF. Continuum of depressive and manic mixed states in patients with bipolar disorder: quantitative measurement and clinical features. *World Psychiatry* 2009; **8**: 166-172 [PMID: 19812754 DOI: 10.1002/j.2051-5545.2009.tb00245.x]
 - 94 **Perlis RH**, Cusin C, Fava M. Proposed DSM-5 mixed features are associated with greater likelihood of remission in out-patients with major depressive disorder. *Psychol Med* 2014; **44**: 1361-1367 [PMID: 22417535 DOI: 10.1017/S0033291712000281]
 - 95 **Ostergaard SD**, Rothschild AJ, Bertelsen A, Mors O. Rethinking the classification of mixed affective episodes in ICD-11. *J Affect Disord* 2012; **138**: 170-172 [PMID: 22284015 DOI: 10.1016/j.jad.2011.12.012]
 - 96 **Malhi GS**, Porter RJ. ICD-11 features of a mixed mood state: Bold or simply old? *Aust N Z J Psychiatry* 2016; **50**: 1016-1017 [PMID: 27650690 DOI: 10.1177/0004867416669439]
 - 97 **Parker G**, Ricciardi T. Mixed states in bipolar disorder: modelling, measuring and managing. *Australas Psychiatry* 2019; **27**: 69-71 [PMID: 30182740 DOI: 10.1177/1039856218794883]
 - 98 **Vieta E**, Suppes T. Bipolar II disorder: arguments for and against a distinct diagnostic entity. *Bipolar Disord* 2008; **10**: 163-178 [PMID: 18199235 DOI: 10.1111/j.1399-5618.2007.00561.x]
 - 99 **Malhi GS**, Byrow Y, Boyce P, Bassett D, Fitzgerald PB, Hopwood M, Lyndon W, Mulder R, Murray G, Singh A, Bryant R, Porter R. Why the hype about subtype? *Aust N Z J Psychiatry* 2016; **50**: 303-306 [PMID: 27005426 DOI: 10.1177/0004867416641541]
 - 100 **Angst J**. Will mania survive DSM-5 and ICD-11? *Int J Bipolar Disord* 2015; **3**: 24 [PMID: 26650389 DOI: 10.1186/s40345-015-0041-1]
 - 101 **Angst J**, Rössler W, Ajdacic-Gross V, Angst F, Wittchen HU, Lieb R, Beesdo-Baum K, Asselmann E, Merikangas KR, Cui L, Andrade LH, Viana MC, Lamers F, Penninx BW, de Azevedo Cardoso T, Jansen K, Dias de Mattos Souza L, Azevedo da Silva R, Kapczinski F, Grobler C, Gholam-Rezaee M, Preisig M, Vandelour CL. Differences between unipolar mania and bipolar-I disorder: Evidence from nine epidemiological studies. *Bipolar Disord* 2019; **21**: 437-448 [PMID: 30475430 DOI: 10.1111/bdi.12732]
 - 102 **Yazici O**. Unipolar mania: a distinct entity? *J Affect Disord* 2014; **152-154**: 52-56 [PMID: 24210629 DOI: 10.1016/j.jad.2013.10.005]
 - 103 **Subramanian K**, Sarkar S, Kattimani S. Bipolar disorder in Asia: Illness course and contributing factors. *Asian J Psychiatr* 2017; **29**: 16-29 [PMID: 29061417 DOI: 10.1016/j.ajp.2017.04.009]
 - 104 **Angst J**, Grobler C. Unipolar mania: a necessary diagnostic concept. *Eur Arch Psychiatry Clin Neurosci* 2015; **265**: 273-280 [PMID: 25631618 DOI: 10.1007/s00406-015-0577-1]
 - 105 **First MB**, Pincus HA, Levine JB, Williams JB, Ustun B, Peele R. Clinical utility as a criterion for revising psychiatric diagnoses. *Am J Psychiatry* 2004; **161**: 946-954 [PMID: 15169680 DOI: 10.1176/appi.ajp.161.6.946]
 - 106 **Guzman-Parra J**, Streit F, Forstner AJ, Strohmaier J, González MJ, Gil Flores S, Cabaleiro Fabeiro FJ, Del Río Noriega F, Perez Perez F, Haro González J, Orozco Diaz G, de Diego-Otero Y, Moreno-Kustner B, Auburger G, Degenhardt F,

- Heilmann-Heimbach S, Herms S, Hoffmann P, Frank J, Foo JC, Sirignano L, Witt SH, Cichon S, Rivas F, Mayoral F, Nöthen MM, Andlauer TFM, Rietschel M. Clinical and genetic differences between bipolar disorder type 1 and 2 in multiplex families. *Transl Psychiatry* 2021; **11**: 31 [PMID: 33431802 DOI: 10.1038/s41398-020-01146-0]
- 107 **MacQueen GM**, Young LT. Bipolar II disorder: symptoms, course, and response to treatment. *Psychiatr Serv* 2001; **52**: 358-361 [PMID: 11239105 DOI: 10.1176/appi.ps.52.3.358]
- 108 **Hadjipavlou G**, Mok H, Yatham LN. Bipolar II disorder: an overview of recent developments. *Can J Psychiatry* 2004; **49**: 802-812 [PMID: 15679203 DOI: 10.1177/070674370404901203]
- 109 **Benazzi F**. Bipolar II disorder : epidemiology, diagnosis and management. *CNS Drugs* 2007; **21**: 727-740 [PMID: 17696573 DOI: 10.2165/00023210-200721090-00003]
- 110 **Benazzi F**. Bipolar disorder--focus on bipolar II disorder and mixed depression. *Lancet* 2007; **369**: 935-945 [PMID: 17368155 DOI: 10.1016/S0140-6736(07)60453-X]
- 111 **Parker G**, Fletcher K. Differentiating bipolar I and II disorders and the likely contribution of DSM-5 classification to their cleavage. *J Affect Disord* 2014; **152-154**: 57-64 [PMID: 24446541 DOI: 10.1016/j.jad.2013.10.006]
- 112 **Gitlin M**, Malhi GS. The existential crisis of bipolar II disorder. *Int J Bipolar Disord* 2020; **8**: 5 [PMID: 31993793 DOI: 10.1186/s40345-019-0175-7]
- 113 **Malhi GS**. Thing one and thing two¹: What 'Doctors use' to doctor you? *Aust N Z J Psychiatry* 2021; **55**: 536-547 [PMID: 34080455 DOI: 10.1177/00048674211022602]
- 114 **Malhi GS**, Outhred T, Irwin L. Bipolar II Disorder Is a Myth. *Can J Psychiatry* 2019; **64**: 531-536 [PMID: 31060361 DOI: 10.1177/0706743719847341]
- 115 **Parker G**. Bipolar II disorder: Once missed, now dismissed, time to resist. *Bipolar Disord* 2022; **24**: 574-579 [PMID: 34990044 DOI: 10.1111/bdi.13174]
- 116 **Fawcett M**, Agius M. Are there different genotypes in Bipolar II and Bipolar I disorder and if so, why then do we tend to observe Unipolar Depression converting to Bipolar II and then converting to Bipolar I? *Psychiatr Danub* 2015; **27** Suppl 1: S160-S169 [PMID: 26417754]
- 117 **Nierenberg AA**. Bipolar II Disorder Is NOT a Myth. *Can J Psychiatry* 2019; **64**: 537-540 [PMID: 31340671 DOI: 10.1177/0706743719852096]
- 118 **Post RM**. Bipolar II Disorder: Not So Sure It Is Time for Something New. *Can J Psychiatry* 2019; **64**: 544-547 [PMID: 31104479 DOI: 10.1177/0706743719852097]
- 119 **Vieta E**. Bipolar II Disorder: Frequent, Valid, and Reliable. *Can J Psychiatry* 2019; **64**: 541-543 [PMID: 31340672 DOI: 10.1177/0706743719855040]
- 120 **Dunner DL**. Bipolar II disorder. *Bipolar Disord* 2017; **19**: 520-521 [PMID: 29205722 DOI: 10.1111/bdi.12567]
- 121 **Fletcher K**, Tan EJ, Scott J, Murray G. Bipolar II disorder: The need for clearer definition and improved management. *Aust N Z J Psychiatry* 2018; **52**: 598-599 [PMID: 29516743 DOI: 10.1177/0004867418761580]
- 122 **Post RM**. Bipolar II: Comments on its validity and utility. *Bipolar Disord* 2018; **20**: 280-281 [PMID: 29327795 DOI: 10.1111/bdi.12607]
- 123 **Ha K**, Ha TH, Hong KS. Bipolar I and Bipolar II: It's Time for Something New for a Better Understanding and Classification of Bipolar Disorders. *Can J Psychiatry* 2019; **64**: 548-549 [PMID: 31248270 DOI: 10.1177/0706743719861279]
- 124 **Van Meter AR**, Youngstrom EA, Findling RL. Cyclothymic disorder: a critical review. *Clin Psychol Rev* 2012; **32**: 229-243 [PMID: 22459786 DOI: 10.1016/j.cpr.2012.02.001]
- 125 **Perugi G**, Hantouche E, Vannucchi G, Pinto O. Cyclothymia reloaded: A reappraisal of the most misconceived affective disorder. *J Affect Disord* 2015; **183**: 119-133 [PMID: 26005206 DOI: 10.1016/j.jad.2015.05.004]
- 126 **Bielecki JE**, Gupta V. Cyclothymic Disorder. 2022 Jul 25. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2022 Jan- [PMID: 32491800]
- 127 **Malhi GS**, Bell E. Fake views: Cyclothymia - A dithering disorder? *Aust N Z J Psychiatry* 2019; **53**: 818-821 [PMID: 31401865 DOI: 10.1177/0004867419867764]
- 128 **Phelps J**, Angst J, Katzow J, Sadler J. Validity and utility of bipolar spectrum models. *Bipolar Disord* 2008; **10**: 179-193 [PMID: 18199236 DOI: 10.1111/j.1399-5618.2007.00562.x]
- 129 **Nusslock R**, Frank E. Subthreshold bipolarity: diagnostic issues and challenges. *Bipolar Disord* 2011; **13**: 587-603 [PMID: 22085472 DOI: 10.1111/j.1399-5618.2011.00957.x]
- 130 **Ghaemi SN**, Dalley S. The bipolar spectrum: conceptions and misconceptions. *Aust N Z J Psychiatry* 2014; **48**: 314-324 [PMID: 24610031 DOI: 10.1177/0004867413504830]
- 131 **Benvenuti A**, Miniati M, Callari A, Giorgi Mariani M, Mauri M, Dell'Osso L. Mood Spectrum Model: Evidence reconsidered in the light of DSM-5. *World J Psychiatry* 2015; **5**: 126-137 [PMID: 25815262 DOI: 10.5498/wjp.v5.i1.126]
- 132 **Hede V**, Favre S, Aubry JM, Richard-Lepouriel H. Bipolar spectrum disorder: What evidence for pharmacological treatment? *Psychiatry Res* 2019; **282**: 112627 [PMID: 31677696 DOI: 10.1016/j.psychres.2019.112627]
- 133 **Strakowski SM**, Fleck DE, Maj M. Broadening the diagnosis of bipolar disorder: benefits vs. risks. *World Psychiatry* 2011; **10**: 181-186 [PMID: 21991268 DOI: 10.1002/j.2051-5545.2011.tb00046.x]
- 134 **Zimmerman M**. Broadening the concept of bipolar disorder: what should be done in the face of uncertainty? *World Psychiatry* 2011; **10**: 188-189 [PMID: 21991270 DOI: 10.1002/j.2051-5545.2011.tb00048.x]
- 135 **Zimmerman M**. Would broadening the diagnostic criteria for bipolar disorder do more harm than good? *J Clin Psychiatry* 2012; **73**: 437-443 [PMID: 22579144 DOI: 10.4088/JCP.11com07288]
- 136 **Mason BL**, Brown ES, Croarkin PE. Historical Underpinnings of Bipolar Disorder Diagnostic Criteria. *Behav Sci (Basel)* 2016; **6** [PMID: 27429010 DOI: 10.3390/bs6030014]
- 137 **Goldberg D**, Fawcett J. The importance of anxiety in both major depression and bipolar disorder. *Depress Anxiety* 2012; **29**: 471-478 [PMID: 22553107 DOI: 10.1002/da.21939]
- 138 **Takehima M**. Anxious distress in monopolar and bipolar depression: Clinical characteristics and relation with mixed depression in Japan. *Psychiatry Clin Neurosci* 2018; **72**: 456-457 [PMID: 29652106 DOI: 10.1111/pcn.12660]

- 139 **Sugawara H**, Tsutsumi T, Inada K, Ishigooka J, Hashimoto M, Takebayashi M, Nishimura K. Association between anxious distress in a major depressive episode and bipolarity. *Neuropsychiatr Dis Treat* 2019; **15**: 267-270 [PMID: 30697051 DOI: 10.2147/NDT.S188947]
- 140 **Zimmerman M**, Kerr S, Balling C, Kiefer R, Dalrymple K. DSM-5 anxious distress specifier in patients with bipolar depression. *Ann Clin Psychiatry* 2020; **32**: 157-163 [PMID: 32343287]
- 141 **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 [DOI: 10.1037/a0021701]
- 142 **Reed GM**, Keeley JW, Rebello TJ, First MB, Gureje O, Ayuso-Mateos JL, Kanba S, Khoury B, Kogan CS, Krasnov VN, Maj M, de Jesus Mari J, Sharan P, Stein DJ, Zhao M, Akiyama T, Andrews HF, Asevedo E, Cheour M, Domínguez-Martínez T, El-Khoury J, Fiorillo A, Grenier J, Gupta N, Kola L, Kulygina M, Leal-Leturia I, Luciano M, Lusu B, Martínez-López JN, Matsumoto C, Odunleye M, Onofa LU, Paterniti S, Purnima S, Robles R, Sahu MK, Sibeko G, Zhong N, Gaebel W, Lovell AM, Maruta T, Pike KM, Roberts MC, Medina-Mora ME. Clinical utility of ICD-11 diagnostic guidelines for high-burden mental disorders: results from mental health settings in 13 countries. *World Psychiatry* 2018; **17**: 306-315 [PMID: 30192090 DOI: 10.1002/wps.20581]
- 143 **Kendell R**, Jablensky A. Distinguishing between the validity and utility of psychiatric diagnoses. *Am J Psychiatry* 2003; **160**: 4-12 [PMID: 12505793 DOI: 10.1176/appi.ajp.160.1.4]
- 144 **Jablensky A**. Psychiatric classifications: validity and utility. *World Psychiatry* 2016; **15**: 26-31 [PMID: 26833601 DOI: 10.1002/wps.20284]
- 145 **Maj M**. The need for a conceptual framework in psychiatry acknowledging complexity while avoiding defeatism. *World Psychiatry* 2016; **15**: 1-2 [PMID: 26833594 DOI: 10.1002/wps.20291]
- 146 **First MB**. Clinical utility in the revision of the Diagnostic and Statistical Manual of Mental Disorders (DSM). *Prof Psychol Res Pr* 2010; **41**: 465-473 [DOI: 10.1037/a0021511]
- 147 **Stein DJ**, Lund C, Nesse RM. Classification systems in psychiatry: diagnosis and global mental health in the era of DSM-5 and ICD-11. *Curr Opin Psychiatry* 2013; **26**: 493-497 [PMID: 23867662 DOI: 10.1097/YCO.0b013e3283642dfd]
- 148 **Maj M**. Why the clinical utility of diagnostic categories in psychiatry is intrinsically limited and how we can use new approaches to complement them. *World Psychiatry* 2018; **17**: 121-122 [PMID: 29856539 DOI: 10.1002/wps.20512]
- 149 **Gaebel W**, Stricker J, Kerst A. Changes from ICD-10 to ICD-11 and future directions in psychiatric classification. *Dialogues Clin Neurosci* 2020; **22**: 7-15 [PMID: 32699501 DOI: 10.31887/DCNS.2020.22.1/wgaebel]
- 150 **Fabrazzo M**. Internet-based field trials of the ICD-11 chapter on mental disorders. *World Psychiatry* 2022; **21**: 163-164 [PMID: 35015372 DOI: 10.1002/wps.20954]
- 151 **Evans SC**, Reed GM, Roberts MC, Esparza P, Watts AD, Correia JM, Ritchie P, Maj M, Saxena S. Psychologists' perspectives on the diagnostic classification of mental disorders: results from the WHO-IUPsyS Global Survey. *Int J Psychol* 2013; **48**: 177-193 [PMID: 23750927 DOI: 10.1080/00207594.2013.804189]
- 152 **Avasthi A**, Grover S, Maj M, Reed G, Thirunavukarasu M, Garg UC. Indian Psychiatric Society-World Psychiatric Association - World Health Organization survey on usefulness of International Classification of Diseases-10. *Indian J Psychiatry* 2014; **56**: 350-358 [PMID: 25568475 DOI: 10.4103/0019-5545.146522]
- 153 **Robles R**, Fresán A, Evans SC, Lovell AM, Medina-Mora ME, Maj M, Reed GM. Problematic, absent and stigmatizing diagnoses in current mental disorders classifications: Results from the WHO-WPA and WHO-IUPsyS Global Surveys. *Int J Clin Health Psychol* 2014; **14**: 165-177 [DOI: 10.1016/j.ijchp.2014.03.003]
- 154 **Maruta T**, Ono Y, Matsumoto C. ICD-11 and DSM-5 classifications: a survey of Japanese psychiatrists. *Psychiatr Serv* 2013; **64**: 1279-1280 [PMID: 24292738 DOI: 10.1176/appi.ps.201300396]
- 155 **Gaebel W**, Stricker J, Riesbeck M, Zielasek J, Kerst A, Meisenzahl-Lechner E, Köllner V, Rose M, Hofmann T, Schäfer I, Lotzin A, Briken P, Klein V, Brunner F, Keeley JW, Brechbiel J, Rebello TJ, Andrews HF, Reed GM, Vogel U, Hasan A, Falkai P. Accuracy of diagnostic classification and clinical utility assessment of ICD-11 compared to ICD-10 in 10 mental disorders: findings from a web-based field study. *Eur Arch Psychiatry Clin Neurosci* 2020; **270**: 281-289 [PMID: 31654119 DOI: 10.1007/s00406-019-01076-z]
- 156 **Kogan CS**, Maj M, Rebello TJ, Keeley JW, Kulygina M, Matsumoto C, Robles R, Huang J, Zhong N, Chakrabarti S, Figueira ML, Stein DJ, Strakowski SM, Garcia-Pacheco JA, Burns S, Montoya M, Andrade L, Ayuso-Mateos JL, Arango I, Balhara YPS, Bryant R, Cournos F, Porto JAD, Meyer TD, Medina-Mora ME, Gureje O, First MB, Gaebel W, Khoury B, Krasnov VN, de Jesus Mari J, Maruta T, Pike KM, Roberts MC, Sharan P, Zhao M, Reed GM. A global field study of the international classification of diseases (ICD-11) mood disorders clinical descriptions and diagnostic guidelines. *J Affect Disord* 2021; **295**: 1138-1150 [PMID: 34706426 DOI: 10.1016/j.jad.2021.08.050]
- 157 **Reed GM**, Sharan P, Rebello TJ, Keeley JW, Elena Medina-Mora M, Gureje O, Luis Ayuso-Mateos J, Kanba S, Khoury B, Kogan CS, Krasnov VN, Maj M, de Jesus Mari J, Stein DJ, Zhao M, Akiyama T, Andrews HF, Asevedo E, Cheour M, Domínguez-Martínez T, El-Khoury J, Fiorillo A, Grenier J, Gupta N, Kola L, Kulygina M, Leal-Leturia I, Luciano M, Lusu B, Nicolas J, Martínez-López I, Matsumoto C, Umukoro Onofa L, Paterniti S, Purnima S, Robles R, Sahu MK, Sibeko G, Zhong N, First MB, Gaebel W, Lovell AM, Maruta T, Roberts MC, Pike KM. 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 [PMID: 29856568 DOI: 10.1002/wps.20524]
- 158 **Hackmann C**, Balhara YPS, Clayman K, Nemeč PB, Noley C, Pike K, Reed GM, Sharan P, Rana MS, Silver J, Swarbrick M, Wilson J, Zeilig H, Shakespeare T. Perspectives on ICD-11 to understand and improve mental health diagnosis using expertise by experience (INCLUDE Study): an international qualitative study. *Lancet Psychiatry* 2019; **6**: 778-785 [PMID: 31296444 DOI: 10.1016/S2215-0366(19)30093-8]
- 159 **Medina-Mora ME**, Robles R, Rebello TJ, Domínguez T, Martínez N, Juárez F, Sharan P, Reed GM. 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 [PMID: 30619492 DOI: 10.1016/j.ijchp.2018.09.003]
- 160 **Onofa L**, Odunleye M, Kola L, Gureje O. Reliability and Clinical Utility of ICD-11 Diagnostic Guidelines for Severe Mental Disorders in Nigeria. *Arch Med Res* 2019; **50**: 535-542 [PMID: 32032925 DOI: 10.1016/j.arcmed.2020.01.004]

- 161 **Sartorius N**, Kaelber CT, Cooper JE, Roper MT, Rae DS, Gulbinat W, Ustün TB, Regier DA. Progress toward achieving a common language in psychiatry. Results from the field trial of the clinical guidelines accompanying the WHO classification of mental and behavioral disorders in ICD-10. *Arch Gen Psychiatry* 1993; **50**: 115-124 [PMID: 8427551 DOI: 10.1001/archpsyc.1993.01820140037004]
- 162 **Sartorius N**, Ustün TB, Korten A, Cooper JE, van Drimmelen J. Progress toward achieving a common language in psychiatry, II: Results from the international field trials of the ICD-10 diagnostic criteria for research for mental and behavioral disorders. *Am J Psychiatry* 1995; **152**: 1427-1437 [PMID: 7573580 DOI: 10.1176/ajp.152.10.1427]
- 163 **Mościcki EK**, Clarke DE, Kuramoto SJ, Kraemer HC, Narrow WE, Kupfer DJ, Regier DA. Testing DSM-5 in routine clinical practice settings: feasibility and clinical utility. *Psychiatr Serv* 2013; **64**: 952-960 [PMID: 23852272 DOI: 10.1176/appi.ps.201300098]
- 164 **Freedman R**, Lewis DA, Michels R, Pine DS, Schultz SK, Tamminga CA, Gabbard GO, Gau SS, Javitt DC, Oquendo MA, Shrout PE, Vieta E, Yager J. The initial field trials of DSM-5: new blooms and old thorns. *Am J Psychiatry* 2013; **170**: 1-5 [PMID: 23288382 DOI: 10.1176/appi.ajp.2012.12091189]
- 165 **Regier DA**, Narrow WE, Clarke DE, Kraemer HC, Kuramoto SJ, Kuhl EA, Kupfer DJ. 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 [PMID: 23111466 DOI: 10.1176/appi.ajp.2012.12070999]
- 166 **Kendler KS**. Toward a scientific psychiatric nosology. Strengths and limitations. *Arch Gen Psychiatry* 1990; **47**: 969-973 [PMID: 2222134 DOI: 10.1001/archpsyc.1990.01810220085011]
- 167 **Maj M**. Keeping an open attitude towards the RDoC project. *World Psychiatry* 2014; **13**: 1-3 [PMID: 24497235 DOI: 10.1002/wps.20111]
- 168 **Maj M**. Narrowing the gap between ICD/DSM and RDoC constructs: possible steps and caveats. *World Psychiatry* 2016; **15**: 193-194 [PMID: 27717257 DOI: 10.1002/wps.20370]
- 169 **Lupien SJ**, Sasseville M, François N, Giguère CE, Boissonneault J, Plusquellec P, Godbout R, Xiong L, Potvin S, Kouassi E, Lesage A; Signature Consortium. The DSM5/RDoC debate on the future of mental health research: implication for studies on human stress and presentation of the signature bank. *Stress* 2017; **20**: 95-111 [PMID: 28124571 DOI: 10.1080/10253890.2017.1286324]
- 170 **Clark LA**, Cuthbert B, Lewis-Fernández R, Narrow WE, Reed GM. Three Approaches to Understanding and Classifying Mental Disorder: ICD-11, DSM-5, and the National Institute of Mental Health's Research Domain Criteria (RDoC). *Psychol Sci Public Interest* 2017; **18**: 72-145 [PMID: 29211974 DOI: 10.1177/1529100617727266]
- 171 **Stoyanov D**, Maes MH. How to construct neuroscience-informed psychiatric classification? *World J Psychiatry* 2021; **11**: 1-12 [PMID: 33511042 DOI: 10.5498/wjp.v11.i1.1]
- 172 **Kendler KS**, First MB. Alternative futures for the DSM revision process: iteration v. paradigm shift. *Br J Psychiatry* 2010; **197**: 263-265 [PMID: 20884947 DOI: 10.1192/bjp.bp.109.076794]
- 173 **Zachar P**. Psychiatric disorders: natural kinds made by the world or practical kinds made by us? *World Psychiatry* 2015; **14**: 288-290 [PMID: 26407776 DOI: 10.1002/wps.20240]
- 174 **Kendler KS**. The nature of psychiatric disorders. *World Psychiatry* 2016; **15**: 5-12 [PMID: 26833596 DOI: 10.1002/wps.20292]
- 175 **First MB**, Kendler KS, Leibenluft E. The Future of the DSM: Implementing a Continuous Improvement Model. *JAMA Psychiatry* 2017; **74**: 115-116 [PMID: 27851854 DOI: 10.1001/jamapsychiatry.2016.3004]



Published by **Baishideng Publishing Group Inc**
7041 Koll Center Parkway, Suite 160, Pleasanton, CA 94566, USA
Telephone: +1-925-3991568
E-mail: bpgoffice@wjgnet.com
Help Desk: <https://www.f6publishing.com/helpdesk>
<https://www.wjgnet.com>

