Expansion of Knowledge, Practice and Public Policy with the ICD-11 for Psychologists and Mental Health Professionals: A Literature Review and Critical Analysis

Expanding the knowledge, the practice and the public policies with the CIE-11 for psychologists and professionals of the mental health: a review of the literature and critical analysis

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Abstract

Background: Mental disorders are alterations in several functional domains of human beings that trigger greater morbidity and mortality if not adequately addressed. The International Classification of Diseases 11th Revision (ICD-11) is a recently approved global and modern system to guide clinical practice faced with these disorders and other conditions. State of the art: Despite the imminent implementation of this system in member states, the guidelines on its scientific basis, practice and importance in public health have been published in a scattered manner, with a mainly medical psychiatric target audience, hence, it is necessary to unify these guidelines in a unique text. Therefore, the objective of this review was to analyze three associated aspects: (a) current knowledge of the matter, (b) its application in psychological practice, and (c) reflection concerning the implications on public health policies. To do this, these aspects were divided into 10 sections with the most relevant topics, and examples to facilitate their use and comments to promote understanding were described. Conclusions: This paper presents a review that comprehensively addresses knowledge-practice-policy triad of mental disorders of the ICD-11.

Keywords: ICD-11; Mental Disorders; Psychology; Clinical Practice; Public Health.

Resumen

Antecedentes: los trastornos mentales son alteraciones en varios dominios funcionales del ser humano que desencadenan mayor morbilidad y mortalidad si no se abordan adecuadamente. La clasificación internacional de enfermedades en su 11.ª edición (CIE-11) es un sistema global y moderno recientemente aprobado para guiar la práctica clínica ante estos trastornos y otras condiciones. Estado del arte: a pesar de la inminente implementación de este sistema en los estados miembros, las guías sobre su base científica, práctica e importancia en la salud pública se han publicado de manera dispersa, con una audiencia objetivo principalmente médica psiquiátrica; y de este hecho parte la necesidad de unificar estas guías en un único texto. Por ello, el objetivo de esta revisión fue analizar tres aspectos asociados: (a) el conocimiento actual del tema, (b) su aplicación en la práctica psicológica y (c) la reflexión sobre las implicancias en las políticas de salud pública. Para ello, estos aspectos se han dividido en 10 secciones con los tópicos más relevantes, habiendo facilitado su uso y comentarios para promover su comprensión. Conclusiones: este artículo presenta una revisión que aborda integralmente la triada conocimiento-práctica-política de los trastornos mentales de la CIE-11.

Palabras clave: CIE-11; trastornos mentales; psicología; práctica clínica; salud pública.
Introduction

Mental disorders consist of significant disturbances in thinking, emotional regulation, or behavior (World Health Organization [WHO], 2022e). Although there are effective alternatives for the prevention and treatment of these conditions, a large proportion of the population does not have access to effective care. According to the WHO (2022e), one in every eight people in the world lives with a mental disorder by generating disability, increased morbidity and mortality. Classifications have been designed and revised for more than a century to guide clinical practice and improve communication between mental health professionals and researchers (Fiorillo & Falkai, 2021); all this, through widely accepted descriptions of mental disorders that allow an evaluation and diagnosis framework for adequate intervention of the patient (Fiorillo & Falkai, 2021; Lindmeier, 2022).

Although there are several used classification systems (such as the Diagnostic and Statistical Manual of Mental Disorders 5th edition, text revision [DSM-5-TR], the Hierarchical Taxonomy of Psychopathology [HiTOP], the Research Domain Criteria [RDoC] and the Systems Neuroscience of Psychosis [SyNoPsis]), there is no doubt that the most important is the International Classification of Diseases (ICD; Columbia Psychiatry, 2022) because of its development and global applicability; which not only describes mental disorders, but also all known diseases, possible causes and determination of their manifestation and joint influence (WHO; 2022d). The ICD revisions have taken into account (vertical) compatibility with the entire WHO family of international classifications and mutual (horizontal) compatibility with the United Nations (UN) families of international classifications (Guggenheim, 2013); which together allow a multidisciplinary and multisectoral approach to mental disorders (Hualparuca-Olivera et al., 2022). ICD-11, recently approved for use (WHO, 2022e), includes mental disorders in one of its chapters called Mental, Behavioral or Neurodevelopmental Disorders (ICD-11 MBNDs). This chapter presents the challenges and opportunities for health professionals, administrators, and authorities of member states in this new era.

In this sense, the current practice of clinical psychologists requires an understanding of the ICD-11 standards to be able to code properly and conduct a complete evaluation (i. e., case formulation) in order to improve mental health of their patients (Stein et al., 2020). Because the ICD-11 does not fully describe the causality of the diagnoses, it does not aim at what underlines a symptom, for therapeutic purposes, but rather at the phenomenology of each symptom (Kountouras & Sotirgiannidou, 2022; Stein et al., 2020). For that reason, it is possible that the assigned ICD-11 diagnosis serves as a first route to design an evidence-based intervention specific to a disorder, if this is unique and has a great adjustment to the clinical manifestations of a patient (very atypical situation); otherwise, psychologists will have to rely on case conceptualization strategies with a more in-depth evaluation to plan a treatment according to the individual needs of the user (The Psychology Practice, 2021). Certainly, this last route allows clinicians to intervene in the symptoms of a patient with relative independence from the diagnostic categories of the ICD-11-MBNDs.

From a biopsychosociocultural approach, mental health practice is often based on the knowledge and integration of psychotherapeutic theories and techniques to define the complex interactions between health factors (Hooley et al., 2021). Therefore, by integrating the lifespan and stepwise approach, and recognizing the natural course of the disorder (Gaebel et al., 2022; Stein et al., 2020; Vujnovic et al., 2021), psychologists must analyze the relationship of personal history; which includes biopsychosociocultural risk and protective factors, whether distal (past) and/or proximal (current) (Hooley et al., 2021), with clinical manifestations of the disorder (including current behavior). In addition, psychologists must measure the impact of the disorder on social impairment and assess subjective personal experiences (e. g., distress; see Regier et al., 2020). As they do so, it is pertinent to
consider the cultural characteristics (geography and language) of patients (Sharan & Hans, 2021), establish a differential diagnosis of the disorder and an etiological diagnosis of the deterioration; and define a treatment guideline according to the needs of the patient (Kielkiewicz, 2019). Psychologists must know and apply psychiatric, psychological (and legal, if required) terminology in addition to using the standard methodologies for research (and teaching) with the best possible evidence to guide (and even lead) public policies (see Saxena et al., 2012). An overview of the role that Peruvian psychologists would play in caring the MBNDs with the ICD-11 is shown in Figure 1.

Consequently, this paper offers a review to address the science-praxis-policy triad by using understandable terminology for psychologists. In addition, to reinforce collaborative work in this review for the sake of ICD-11 implementation, terminology compatible with other professions that work closely with mental health was also used. Certainly, the practice and public policies analyzed in this review is focused on the Peruvian reality, but they can be adapted to other realities.

**ICD-11: the new global standard**

ICD is the international standard for systematic recording, reporting, analysis, interpretation, and comparison of mortality and morbidity data (Lindmeier & Joi, 2018; Reed, 2010). The 11th revision is the result of a collaboration between health professionals, statisticians, epidemiologists, encoders, translators, experts in classification and information technology (IT) from around the world (Lindmeier & Joi, 2018). As Youmans (2022) mentions, the ICD-11 is a scientifically rigorous product that accurately reflects contemporary health and clinical practice and represents a significant improvement on previous revisions. In this sense, the objectives of the implementation were (1) to guarantee that the ICD-11 works in an electronic environment, (2) to provide a multipurpose classification by guaranteeing consistency and interoperability between different uses, and (3) to provide an international and multilingual reference standard which allows scientific comparability (WHO, 2022d).

The ICD-11 classification system integrates 26 chapters, including chapter 6 about mental, behavioral, or neurodevelopmental disorders, and includes a supplementary section for functioning assessment, referring to groups of diseases with more than 17 000 flexible alphanumeric codes, more than 120 000 coded entities and with the indexing of more than 1.6 million clinical terms to these coding entities (Pezzella, 2022; Regier et al., 2020). These codes range from 1A00.00 to ZZ9Z.ZZ including a letter as the second character to differentiate from the ICD-10 (Hyeji et al., 2022). As Caux-Harry (2018) mentions, ICD-11 changes category codes from 3 characters (characters to the left of the decimal) to 4, with an alphabetic character in the second position and a number always in the third position; thus, the first character of any code symbolizes the chapter number. For chapters 1 to 9, the first character of the code corresponds to the chapter number, whereas for chapters 10 to 26, the first character is a letter (Caux-Harry, 2018). Consequently, all codes of the same chapter always start with the same character; furthermore, the number of characters in the code varies from 4 to 7 (International Federation of Health Information Management Associations [IFHIMA], 2021). The basic structure, characteristics and substantial changes of ICD-11 compared to its previous revision are better described in Hyeji et al. (2022).

The ICD-11 for Mortality and Morbidity Statistics (ICD-11 MMS) has two online/offline systems: (a) an online browser which is an enlarged electronic version of a tabular list in English, Arabic, Spanish, French, Russian, and Chinese (see Harrison et al., 2021); (b) a coding tool that is used in a similar way to the alphabetical index in previous revisions, but with several enhancements to facilitate accurate, simple, and fast coding; (c) a reference guide describing an introduction to the context, components, and intended use (WHO, 2022d); and (d) a
maintenance platform –WHO-FIC Maintenance Platform–, where modifications or additions can be proposed (IFHIMA, 2021). The ICD-11 is currently used in 35 countries (WHO, 2022c) and several decades will possibly go by until there is a new review (Regier et al., 2020).

The ICD-11 has a dimensional approach that allows adding specific categories pertaining to current symptoms, severity, and course of illnesses to better track changes over time. As mentioned by Lindmeier and Joi (2018), this classification system contains the WHO nonproprietary names for drugs, clinical documentation, allergology, reimbursement, primary care, causes of death, cancer registry, patient safety, dermatology, pain documentation, and data dictionaries for the guidelines related to ICD-11. Additionally, in response to the COVID-19 pandemic, codes have been developed to confirm the diagnosis, categorize it as a cause of death, categorize post-disease problems, document the vaccination procedure, and identify any negative impacts on them, among others (Harrison et al., 2021; Lindmeier & Joi, 2018).

To gain a better understanding of ICD-11 MBNDs

As mentioned by Reed, Sharan, et al. (2018), an ideal classification system ensures reliable diagnosis of mental disorders. Moreover, it can be clinically useful and applicable worldwide (Keeley, 2016). Thus, a proper identification of a person’s mental health needs is ensured to provide adequate and cost-effective treatment (Reed, Sharan, et al., 2018). With this objective, a series of studies and reviews have been carried out by psychiatrists and psychologists when designing chapter 6 of the ICD-11: mental, behavioral, or neurodevelopmental disorders (ICD-11 MBNDs; Keeley, 2016; Keeley et al., 2016; Kulygina et al., 2021; Reed, Keeley, et al., 2018; Reed, Sharan, et al., 2018); which resulted in a preliminary product, the ICD-11 Clinical Descriptions and Diagnostic Guidelines (ICD-11 CDDG). Chapter 6 of the ICD-11 contains 21 sets of diagnostic categories for Mental, Behavioral, or Neurodevelopmental Disorders - MBNDs (see Table 1). The ICD-11 CDDG contains information about each of the groups of diagnostic categories concerning the ICD-11 MBNDs in addition to the statistical version of this chapter, which is displayed on their offline/online systems alongside the other medical conditions listed above. Owing to a worldwide partnership of healthcare professionals, this document was created as a project to assist in the diagnosis of the practice of mental health professionals, and it was accessible until 2021 in the global clinical practice network (GCPN).

The goals of the ICD-11 related to CDDG were to: (a) collect data and information systematically; (b) use a longitudinal approach rather than a transversal conceptualization; and (c) concentrate on more practical indices such as comorbidity and long-term disability (Vujnovic et al., 2021). The final product of this project, also published in the GCPN, replaced the ICD-11 CDDG and was called the ICD-11 Clinical Descriptions and Diagnostic Requirements (ICD-11 CDDR). The ICD-11 CDDR contains, in addition to the aforementioned diagnostic guidelines, considerations related to the limit of normality (threshold), characteristics of the course, development, culture, sex and/or gender, and the limits with other disorders and conditions (differential diagnosis). The ICD-11 CDDR is not part of a separate section or book but is implemented in the ICD-11 for MMS itself as part of the structure of its diagnostic categories.

Innovations in the ICD-11 MBNDs

For centuries, mental disorder classification systems have focused more on inter-rater reliability than on the clinical usefulness of diagnostic categories, resulting in clinicians who do not easily understand or apply diagnoses, which makes it difficult to identify and adequately treat people with mental disorders (Keeley, 2016). In the ICD-11 MBNDs chapter, an attempt was made to simplify this situation by eliminating or merging categories that were not useful, and flexible guidelines were established to improve their cross-cultural...
applicability (Keeley, 2016). The structural changes in this chapter were primarily: (a) the elimination of disorders of sleep and wakefulness and disorders related to sexual health, currently grouped into two separate chapters recently integrated (Gozi, 2019); and (b) the addition of various new diagnoses (see Gaebel et al., 2022). These new mental disorders were added to (i) optimize the usefulness of morbidity statistics; (ii) facilitate the identification of clinically important but misclassified mental disorders to provide appropriate management; and (iii) promote the investigation of more effective treatments (Reed et al., 2022). For more information on the amendments at the disorder level, see Table 2.

Other additional changes correspond to the dimensional perspective that is implemented within the diagnostic categories because the evidence has shown that MBNDs represent, for the most part, the interaction of latent dimensions (Columbia Psychiatry, 2022; Reed, 2021; Roessner et al., 2016). This dimensional perspective promotes a recuperative approach to the care of these conditions instead of treating them as chronic (Regier et al., 2020), labeling and generating stigma towards patients (Asociación Psiquiátrica Mexicana, 2022). Likewise, it offers the opportunity to intervene in specific problems with specific interventions, according to the complexity level (comorbidity) of the cases, thus also defining health care needs (Reed, 2021).

ICD-11 MBNDs in children and adolescents: the lifespan approach

Evidence has shown that: (a) the clinical manifestations of adult disorders occur similarly in childhood; (b) child and adult disorders appear to be continuous, as many young adults with psychiatric disorders (neurodevelopmental, emotional, and behavioral) have had psychiatric diagnoses in adolescence (Garralda, 2021); –e.g., separation anxiety disorder or avoidant/restrictive food intake disorder are diagnosable in both children and adults–. Based on this evidence and in line with the taxonomy proposed in the DSM-5, the ICD-11 working group made the decision to modify the location of childhood mental disorders and merge them into ICD-11 categories. Thus, all diagnoses offer a lifespan approach (i.e., with a longitudinal focus on human development) and an explicit set of instructions about the ways in which manifestations vary by age (Garralda, 2016).

The ICD-11 MBNDs category groups –unlike the Kraepelinian organizational structure (Gozi, 2019)– begin with diagnoses that reflect disturbances manifesting early in life development (Garralda, 2016); e.g., 6A00-6A06.Z neurodevelopmental disorders, and 6A20-6A2Z schizophrenia and other primary psychotic disorders, followed by diagnoses that manifest more frequently in adolescence and early adulthood, such as 6A60-6A8Z mood disorders, 6B00-6B0Z anxiety and fear-related disorders; and diagnoses relevant to adulthood and later life, such as 6D70-6E0Z neurocognitive disorders (Gozi, 2019; Regier et al., 2020). Within this overall framework, each disorder now aims to describe variations in children’s presentations, and children’s most typical diagnostic categories are those appearing in the first years of life, neurodevelopmental disorders, disruptive behavior, and disintegrative disorders (Garralda, 2016).

Neurodevelopmental disorders mainly include: 6A00 disorders of intellectual development, 6A01 developmental speech or language disorders (including alterations related to language and speech sound/fluency), 6A02 autism spectrum disorder, 6A03 developmental learning disorder, 6A04 developmental motor coordination disorder, 6A05 attention deficit hyperactivity disorder, 6A06 stereotyped movement disorder, and other residual diagnostic categories. These disorders, which may be comorbid, have an early onset in a person’s life with the potential to induce lifelong impairments (Roessner et al., 2016). In addition, their symptoms are characterized by delays, excesses, or deviations in the fulfillment of the maturation achievements of normal development. Autism spectrum disorders (ASD), –which include autism, Asperger syndrome, and disintegrative and
generalized developmental disorders—, comprise a dyad of alterations in social communication and restricted repetitive behaviors (Garralda, 2016).

It is recognized in ICD-11 that individuals with ASD frequently exhibit simultaneous degenerations in language and intellectual function, which probably generate the loss of some skills (previously acquired) without the presence of a neurological disorder (Garralda, 2021). These limitations should be considered for the scope of multidisciplinary support, treatment planning, and selection of effective individualized interventions. Likewise, specific language disorders cause significant limitations in the ability to communicate and can also be classified based on the main focus of the alteration, either in receptive language or in expressive (pragmatic) language. A possible guideline for the differential diagnosis of specific language disorders and ASDs is the lack of repetitive and restricted interests that characterize the latter (Garralda, 2016).

On the other hand, disruptive behavior and dissocial disorders mainly include 6C90 oppositional defiant disorder (with qualifier/subtype: with and without chronic irritability-anger), and 6C91 conduct-dissocial disorder (with qualifier/subtypes: childhood onset and adolescence; and it is the earliest onset with a poorer prognosis). Both disorders have a qualifier with limited prosocial emotions in children who are identifiable, relatively stable, and linked to a more severe, aggressive, and stable pattern of antisocial behavior. Intermittent explosive disorder, kleptomania, and pyromania may be classified in this section if they are chronic; or in a separate group of impulsive disorders, if they are episodic (Garralda, 2021).

To date, findings from field studies conducted in children and adolescents have confirmed adequate levels of validity and reliability of the CDDR for diagnosing oppositional defiant disorder, attention deficit hyperactivity disorder (ADHD), mood disorders, anxiety, and fear-related disorders, reinforcing its global applicability (see e. g., Robles et al., 2021).

ICD-11, DSM 5-TR and other MBNDs classification frameworks

Comparability between ICD-11 and DSM-5-TR

The differences between the ICD-11 and DSM-5-TR (American Psychiatric Association, 2022) are intentional because they are directed toward different goals. This is because the former is the product of the collaborative work (non-profit) of experts from different professions (in addition to authorities) from 159 member states; while the latter configures a (commercial) franchise of the work of experts from a single profession and from a single country (Asociación Psiquiátrica Mexicana, 2022; Columbia Psychiatry, 2022). The DSM-5-TR has a more research-oriented (and less practice-oriented) approach because it has rigid diagnostic criteria (e. g., criteria A, B, etc.), which are expected to maximize the reliability of diagnostics in different environments (Appelbaum, 2017; Bach et al., 2022; Stein et al., 2020). In contrast, the MBNDs of the ICD-11 have a more pragmatic approach because they incorporate flexible diagnostic guidelines (vignettes), considering in a deeper way the variability of diverse cultures and limitations of the different levels of health care, –even in low-resource settings– (Appelbaum, 2017; Bach et al., 2022; Stein et al., 2020).

The chapter groups of the ICD-11 MBNDs are listed in Table 1, which also includes a comparison with the DSM-5-TR meta-structure; –for further details on the differences and similarities in diagnosis between ICD-11 MBNDs and DSM-5-TR consult First et al. (2021) and O’Brien (2022)–. In general, the comparability of the structure of the two classifications can be considered a success of the harmonization efforts between the WHO and APA. Some structural differences reflect ICD-wide conventions related to residual categories and mental disorders associated with other underlying illnesses.
The discussions in which the WHO, the Advisory Group, and the various Working Groups took part resulted in other differences, such as those regarding the diagnosis and treatment of children with chronic irritability and anger, compulsive sexual behavior disorder, personality disorders, substance use/substance dependence, and somatoform disorders. Another distinction is that the new chapters of the ICD-11 include the classification of «organic» and «non-organic» components of sleep-wake disorders, problems relating to sexual health, and gender identity in ways that are connected with the most recent research and clinical practice (O’Brien, 2022).

Regier et al. (2020) stated that one of the similarities between the two diagnostic systems is the incorporation of a dimensional approach for some disorders within their categorical system. The debate between the psychoanalyst’s approach to the dimensionality of mental disorders, and the discrete categorization of these conditions from the neo-Kraepelinian approach, can lead to a better understanding of the disorders through the description of the etiological factors, characteristics, and clinical course of the disease, supplemented with symptom scores. Accordingly, for some ICD-11 and DSM5-TR diagnoses, dimensional expansions regarding severity, course, and specific symptoms were added. Some examples of ICD-11 include autism spectrum disorders (ASD), personality disorder, depressive or bipolar disorders, and primary psychotic disorders (Alves et al., 2020; Gaebel et al., 2022); while in the DSM-5 TR, they are autism spectrum disorders (ASD), attention deficit/hyperactivity disorder, bipolar disorder, and major depressive disorder (Regier et al., 2020).

According to Michael B. First, co-chair and editor of DSM-5-TR, the differences between ICD-11 and DSM-5 TR provide four main advantages and disadvantages (as cited in O’Brien, 2022): (a) it enables classifications to be improved to satisfy user group needs; (b) it also supports growing clinical research validity over time; (c) it encourages frequent evaluation of the best nosological approaches; (d) finally, opportunities were created for those working on the development of diagnostic and measuring tools. However, these variations are disadvantageous because: (ii) they make it more difficult to gather and report health statistics in countries that use the DSM; (ii) they make it more difficult to compare the findings of studies that were assessed using various systems; (iii) they make it more difficult to evaluate and approve drugs for patients whose medical indications were prescribed using various systems; and (iv) they add to the workload for those who create diagnostic tools and measurements (O’Brien, 2022).
**Table 1**  
*Equivalence in the meta-structure of the MBNDs of the ICD-11 with other diagnostic systems*

<table>
<thead>
<tr>
<th>ICD-10</th>
<th>ICD-11</th>
<th>DSM-5 TR</th>
</tr>
</thead>
<tbody>
<tr>
<td>F80-F89 Disorders of psychological development</td>
<td>6A00-6A06.Z Neurodevelopmental Disorders</td>
<td>Neurodevelopmental Disorders</td>
</tr>
</tbody>
</table>
| F20-F29 Schizophrenia, schizotypal and delusional disorder | 6A20-6A2Z Schizophrenia and Other Primary Psychotic Disorders  
6A40-6A4Z Catatonia | Schizophrenia Spectrum and Other Psychotic Disorders |
| F30-F39 Mood (affective) disorders | 6A60-6A8Z Mood Disorders | Bipolar and Related Disorders  
Depressive Disorders |
| F40-F48 Neurotic, stress-related and somatoform disorders | 6B00-6B02Z Anxiety and Fear-Related Disorders  
6B20-6B22Z Obsessive-Compulsive and Related Disorders  
6B40-6B4Z Disorders Specifically Associated with Stress  
6B60-6B62Z Dissociative Disorders | Anxiety Disorders  
Obsessive-Compulsive and Related Disorders  
Trauma- and Stressor-Related Disorders  
Dissociative Disorders |
| F50-F59 Behavioural syndromes associated with physiological disturbances and physical factors | 6B80-6B82Z Feeding and Eating Disorders | Feeding and Eating Disorders |
| F90-F98 Behavioural and emotional disorders with onset usually occurring in childhood and adolescence | 6C00-6C0Z Elimination Disorders | Elimination Disorders |
| F40-F48 Neurotic, stress-related and somatoform disorders | 6C20-6C22Z Disorders of Bodily Distress and Bodily Experience | Somatic Symptom and Related Disorders (not in the same order as ICD-11; placed before Feeding and Eating Disorders) |
| F10-F19 Mental and Behavioural disorders due to psychoactive substance use | 6C40-6C5Z Disorders Due to Substance Use and Addictive Behaviours | Substance-Related and Addictive Disorders |
| F60-F69 Disorders of adult personality and behaviour | 6C70-6C7Z Impulse Control Disorders | Disruptive, Impulse-Control, and Conduct Disorders |
| F90-F98 Behavioural and emotional disorders with onset usually occurring in child-hood and adolescence | 6C90-6C9Z Disruptive Behaviour and Dissocial Disorders | |
| F60-F69 Disorders of adult personality and behaviour | 6D10-6D11.5 Personality Disorders and Related Traits  
6D30-6D32 Paraphilic Disorders  
6D50-6D52 Factitious Disorders | Personality Disorders (not in the same order as ICD-11; placed after Neurocognitive Disorders)  
Paraphilic Disorders (not in the same order as ICD-11; placed after Personality Disorders)  
Not a separate grouping but included in Somatic Symptom and Related Disorders |
Nota: Elaborado de la integración de los trabajos de algunos autores (ver First et al., 2021; Gaebel et al., 2022). Los grupos de Trastornos del sueño y vigilia (7A00-7B2Z; colocados después de los Trastornos de eliminación) y Disfunciones sexuales (HA00- HA0Z; colocados en Capítulo 17, Condiciones relacionadas a la salud sexual) se han movido a otros grupos de ICD-11 (ahora considerados enfermedades y no trastornos) para reducir su estigma; ya que por sí mismos no explican la disfunción mental (Baleige et al., 2022; Gozi, 2019; Graham, 2019). Esto es particularmente favorable para la Incongruencia de género, ya que la transexualidad tenía un «doble estigma», la resistencia moral religiosa (incluso sesista) y la rechazo a considerar un trastorno mental (Asociación Psiquiátrica Mexicana, 2022; The Lancet Child & Adolescent Health, 2018).

<table>
<thead>
<tr>
<th>ICD-10</th>
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<th>DSM-5 TR</th>
</tr>
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<tbody>
<tr>
<td>F00-F09 Organic, including symptomatic, mental disorders</td>
<td>6D70-6E0Z Neurocognitive Disorders</td>
<td>Neurocognitive Disorders</td>
</tr>
<tr>
<td>F50-F59 Behavioural syndromes associated with physiological disturbances and physical factors</td>
<td>6E20-6E22Z Mental or Behavioural Disorders Associated with Pregnancy, Childbirth and the Puerperium</td>
<td>(Not a separate grouping; perinatal specifiers available for specific disorders)</td>
</tr>
<tr>
<td>F99 Unspecified mental disorder</td>
<td>6E60-6E6Z Secondary Mental or Behavioural Syndromes Associated with Disorders or Diseases Classified Elsewhere</td>
<td>(Not a separate grouping but included within the disorder groupings with which they share Phenomenology)</td>
</tr>
<tr>
<td>F50-F59 Behavioural syndromes associated with physiological disturbances and physical factors</td>
<td>6E40-6E40Z Psychological and Behavioural Factors Affecting Disorders or Diseases Classified Elsewhere</td>
<td>(Not a separate grouping but included in Somatic Symptom and Related Disorders)</td>
</tr>
<tr>
<td>F60-F69 Disorders of adult personality and behaviour</td>
<td>Sleep-Wake Disorders (7A00-7B2Z; placed in Chapter 7)</td>
<td>Sleep-Wake Disorders (within mental disorders; placed after Elimination Disorders)</td>
</tr>
<tr>
<td>F50-F59 Behavioural syndromes associated with physiological disturbances and physical factors</td>
<td>Sexual Dysfunctions (HA00- HA0Z; placed in Chapter 17, Conditions Related to Sexual Health)</td>
<td>Sexual Dysfunctions (within mental disorders; placed after Sleep-Wake Disorders)</td>
</tr>
<tr>
<td>F60-F69 Disorders of adult personality and behaviour</td>
<td>Gender Incongruence (HA60-HA6Z; placed in Chapter 17, Conditions related to Sexual Health)</td>
<td>Gender Dysphoria (within mental disorders; placed after Sexual Dysfunctions)</td>
</tr>
</tbody>
</table>
## Diagnostic categories

### Neurodevelopmental disorders
- 6A00: Disorders of intellectual development
- 6A01: Developmental speech or language disorders
- 6A02: Autism spectrum disorder
- 6A03: Developmental learning disorder
- 6A04: Developmental motor coordination disorder
- 6A05: Attention deficit hyperactivity disorder
- 6A06: Stereotyped movement disorder

### Schizophrenia or other primary psychotic disorders
- 6A20: Schizophrenia
- 6A21: Schizoaffective disorder
- 6A22: Schizotypal disorder
- 6A23: Acute and transient psychotic disorder
- 6A24: Delusional disorder
- 6A25: Symptomatic manifestations of primary psychotic disorders

### Mood disorders
- 6A40: Catatonia associated with another mental disorder
- 6A41: Catatonia induced by substances or medications

### Mood disorders
- 6A42: Bipolar type II disorder
- 6A43: Cyclothymic disorder
- 6A44: Single episode depressive disorder
- 6A45: Recurrent depressive disorder
- 6A46: Dysthymic disorder
- 6A47: Mixed depressive and anxiety disorder
- 6A48: Prominent anxiety symptoms in mood episodes
- 6A49: Panic attacks in mood episodes
- 6A50: Current depressive episode persistent melancholia
- 6A51: Seasonal pattern of mood episode onset
- 6A52: Rapid cycling

## Other modifications and considerations in ICD-11 MBNDs

- The denomination «intellectual development disorders» replaced the «mental retardation» of the ICD-10
- Attention deficit hyperactivity disorder (ADHD) in ICD-11 replaced «hyperkinetic disorders».
- Autism Spectrum Disorder (ASD) now encompasses Asperger syndrome and childhood autism.
- «Primary tics or tic disorders» are now placed in Chapter 8.
- The diagnostic category «Secondary neurodevelopmental syndrome» is included (imported) as a cross reference.
- In the ICD-11 it is recognized the existence of intra- and inter-individual heterogeneity in the course of this group of disorders, which makes it possible to identify symptoms and evolution specifiers. With this, a first episode can be differentiated from a recurring one for early attention; in addition to better defining the limits with other mental disorders and the limit with normality.
- Due to their lack of prognostic validity and temporal stability, the schizophrenia subtypes were eliminated in ICD-11. Likewise, cognitive alterations are recognized as primary symptoms. These disorders are also considered to have a dimensional course and symptom specifiers are incorporated for each of the primary psychotic disorders.
- The diagnostic categories «Substance-induced psychotic disorders» and «Secondary psychotic syndrome» are included (imported) as a cross reference.
- The diagnostic categories/disorder groups: «Premenstrual dysphoric disorder», «Mental or behavioural disorders associated with pregnancy, childbirth or the puerperium, without psychotic symptoms», «Mental or behavioural disorders associated with pregnancy, childbirth or the puerperium, with psychotic symptoms», «Substance-induced mood disorders» and «Secondary mood syndrome» are included (imported) as a cross reference.
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<th>Diagnostic categories</th>
<th>Other modifications and considerations in ICD-11 MBNDs</th>
</tr>
</thead>
</table>
| 6B00-6B0Z Anxiety or fear-related disorders  
  6B00 Generalised anxiety disorder  
  6B01 Panic disorder  
  6B02 Agoraphobia  
  6B03 Specific phobia  
  6B04 Social anxiety disorder  
  6B05 Separation anxiety disorder  
  6B06 Selective mutism | • (✓) The distinction between phobic anxiety disorders and other anxiety disorders in ICD-10 has been removed, incorporating both conditions into a single group.  
 • (✓) «Selective mutism» and «separation anxiety disorder» were added taking into account the life-span approach.  
 • (1) The diagnostic categories/disorder groups: «Substance-induced anxiety disorders», «Hypochondriasis», and «Secondary anxiety syndrome» are included (imported) as a cross reference. |
| 6B20-6B2Z Obsessive-compulsive or related disorders  
  6B20 Obsessive-compulsive disorder  
  (1) 6B21 Body dysmorphic disorder  
  (1) 6B22 Olfactory reference disorder  
  6B23 Hypochondriasis  
  (1) 6B24 Hoarding disorder  
  6B25 Body-focused repetitive behaviour disorders  
  [6B25.0 Trichotillomania and (1) 6B25.1 Excoriation disorder] | • (✓) Unwanted repetitive thoughts and related repetitive behaviors, which constitute the main clinical presentation of OCD, were merged for the guidelines; and (✓) OCD subtypings were eradicated.  
 • (✓) The restriction (exclusion) of this diagnosis with depressive disorders was removed.  
 • (1) The diagnostic categories/disorder groups: «Substance-induced obsessive-compulsive or related disorders», «Secondary obsessive-compulsive or related syndrome», and «Tourette syndromes», are included (imported) as a cross reference. |
| 6B40-6B4Z Disorders specifically associated with stress  
  6B40 Post traumatic stress disorder  
  (1) 6B41 Complex post traumatic stress disorder  
  (1) 6B42 Prolonged grief disorder  
  6B43 Adjustment disorder  
  6B44 Reactive attachment disorder  
  6B45 Disinhibited social engagement disorder | • (1) A new diagnostic category is included, complex PTSD; which includes all the symptoms of PTSD, plus three additional clinical manifestations: negative self-concept, emotional dyscontrol and interpersonal relationship problems. |
| 6B60-6B6Z Dissociative disorders  
  6B60 Dissociative neurological symptom disorder  
  6B61 Dissociative amnesia  
  6B62 Trance disorder  
  6B63 Possession trance disorder  
  6B64 Dissociative identity disorder  
  (1) 6B65 Partial dissociative identity disorder  
  6B66 Depersonalization-derealization disorder  
  6E65 Secondary dissociative syndrome | • (✓) The word «conversion» is eradicated.  
 • (✓) The names «dissociative movement and sensation disorder», and «multiple personality disorder» of the ICD-10 are changed to «dissociative neurological symptom disorder» and «dissociative identity disorder», respectively. |
| 6B80-6B8Z Feeding or eating disorders  
  6B80 Anorexia Nervosa  
  6B81 Bulimia Nervosa  
  (1) 6B82 Binge eating disorder  
  (1) 6B83 Avoidant-restrictive food intake disorder  
  6B84 Pica  
  (1) 6B85 Rumination-regurgitation disorder | • (✓) The definitions of anorexia nervosa and bulimia nervosa are updated.  
 • (✓) The atypical diagnostic categories of ICD-10 are eliminated |
<table>
<thead>
<tr>
<th>Diagnostic categories</th>
<th>Other modifications and considerations in ICD-11 MBNDs</th>
</tr>
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<tbody>
<tr>
<td>6C00-6C0Z Elimination disorders</td>
<td>• (✗) The term «non-organic» is eliminated in this group.</td>
</tr>
<tr>
<td>6C00 Enuresis</td>
<td></td>
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<tr>
<td>6C01 Encopresis</td>
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<td></td>
<td>• (✓) Hypochondriasis was transferred to the group of obsessive-compulsive and related disorders.</td>
</tr>
<tr>
<td>6C20-6C22Z Disorders of bodily distress or bodily experience</td>
<td>• (✓) Bodily distress disorder is generated from the fusion of neurasthenia and somatoform disorders from the previous version of the ICD. This disorder, unlike the ICD-10 Somatoform Disorders, is classified by essential features rather than the absence of medical explanations.</td>
</tr>
<tr>
<td>6C20 Bodily distress disorder</td>
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<tr>
<td>(1) 6C21 Body integrity dysphoria</td>
<td></td>
</tr>
<tr>
<td>6C40-6C4Z Disorders due to substance use or addictive behaviours</td>
<td>• (✓) The subgroup «Disorders due to substance use» had minimal revisions to improve its clinical utility, increasing the various types of substances for disorders that can now be classified as single episodes. (✓) It also offers simplified diagnostic guidelines for drug dependence, more information on the use of dangerous substances, and a better definition of various harmful patterns of substance use.</td>
</tr>
<tr>
<td>6C40-6C44 Disorders due to substance use</td>
<td></td>
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<tr>
<td>6C50-6C5Z Disorders due to addictive behaviours</td>
<td>• (✓) ICD-10 pathological gambling changed its name to Gambling disorder.</td>
</tr>
<tr>
<td>[6C50 Gambling disorder and (1) 6C51 Gaming disorder]</td>
<td>• (✓) The diagnostic category «Catatonia induced by substances or medications» is included (imported) as a cross reference.</td>
</tr>
<tr>
<td>6C50 Gambling disorder</td>
<td></td>
</tr>
<tr>
<td>(1) 6C51 Gaming disorder</td>
<td></td>
</tr>
<tr>
<td>6C70-6C7Z Impulse control disorders</td>
<td>• (✓) The «excessive sexual drive» of the previous version of the ICD is called «compulsive sexual behavior disorders» in this eleventh revision.</td>
</tr>
<tr>
<td>6C70 Pyromania</td>
<td>• (✓) This group, previously called «disorders of social functioning with onset specific to childhood and adolescence» in ICD-10, fits the lifespan approach and can be applied to all age groups.</td>
</tr>
<tr>
<td>6C71 Kleptomania</td>
<td>• (✓) Mental health practitioners can use qualifiers to appropriately specify disorders with onset in childhood or adolescence.</td>
</tr>
<tr>
<td>(1) 6C72 Compulsive sexual behaviour disorder</td>
<td></td>
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<tr>
<td>(1) 6C73 Intermittent explosive disorder</td>
<td></td>
</tr>
<tr>
<td>6C90-6C9Z Disruptive behaviour or dissocial disorders</td>
<td>• (✓) The 10 types of PD of the ICD-10 have been replaced by the basic guideline of identifying the existence of PD (valid for adolescents and adults) and then classifying its severity (mild, moderate, severe) depending on the alteration in functioning of the self and interpersonal.</td>
</tr>
<tr>
<td>6C90 Oppositional defiant disorder</td>
<td>• (✓) Prominent maladaptive traits and borderline pattern can optionally be scored.</td>
</tr>
<tr>
<td>6C91 Conduct-dissocial disorder</td>
<td>• (✓) The diagnostic category: «Secondary personality change» is included (imported) as a cross reference.</td>
</tr>
<tr>
<td>6D10-6D11.5 Personality disorders and related traits</td>
<td></td>
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<tr>
<td>6D10 Personality disorder</td>
<td>• (✓) Almost all of this group, called sexual preference disorders in ICD-10, share patterns of sexual arousal without the consent of others.</td>
</tr>
<tr>
<td>6D11 Prominent personality traits or patterns</td>
<td>• (✗) The fetishistic transvestism disorders, fetishism and sadomasochism, typical of the previous revision, were eliminated.</td>
</tr>
<tr>
<td>6D30-6D3Z Paraphilic disorders</td>
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<td>6D30 Exhibitionistic disorder</td>
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<td>6D31 Voyeuristic disorder</td>
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<td>6D32 Pedophilic disorder</td>
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<td>6D33 Coercive sexual sadism disorder</td>
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<td>6D34 Frotteuristic disorder</td>
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In recent years, three approaches have been introduced in psychiatric nosology: HiTOP, RDoC and SyNoPsis –see Figure 2 for more detail on the constructs of these approaches–. As Gaebel et al. (2022) mentioned, these frameworks were developed from a dimensional perspective to enable more accurate and nuanced knowledge of mental disorder assessment and diagnosis of mental conditions, rather than categorical descriptions that reduce the validity and reliability of mental disorders (Strik et al., 2017). The first of them (HiTOP), designed by the HiTOP Consortium, seeks a classification based on the multivariate phenotype of clinical conditions; and the remaining two, –RDoC from the National Institute of Mental Health in the USA (NIMH) and SyNoPsis from the Bern University Hospital of Psychiatry in Switzerland– an etiological explanation based on the neurobiology and pathophysiology of these conditions. Currently, these three frameworks have deficits in terms of their global and clinical applicability (utility) because they are: complex for practice and culturally variable (Gaebel et al., 2022; Sharan & Keeley, 2018), –mainly in the case of HiTOP–; and practically inaccessible and do not have convincing evidence of the neurobiology-psychopathology association (Gaebel et al., 2022; Regier et al., 2020), –mainly in case of RDoC and SynoPsis–. In the future, if science demonstrates a harmonization of the RDoC or Synopsis units of analysis with syndromic manifestations, these neurobiological frameworks may be incorporated into future versions of the ICD; –only if they have evidence of acceptable diagnostic validity and are practical in routine settings (Gaebel
et al., 2022). Gaebel et al. (2022) mention that HiTOP can be incorporated, but only in specialized mental health units; however, given its complexity, it will not be able to offer substantial changes in the classification of these systems. Recent preliminary evidence has rejected HiTOP as complex to use (see Balling et al., 2023); however, more study is still needed on this subject.

**Essentials of ICD-11 MBNDs diagnosis in the practice of psychologists**

**Extending categorical and dimensional diagnosis strengths: a stepwise approach**

As mentioned by some authors, a potential problem with current categorical classification systems is that they were designed for global applicability in various settings, which could lead to the loss of construct validity (Gaebel et al., 2022; Maercker, 2022). Complex frameworks such as RDoC or HiTOP are suitable for research purposes, while the categorical classification system in ICD-11 provides greater clinical utility (Gaebel et al., 2022; Regier et al., 2020). For this reason, researchers often prefer detailed dimensional assessments; while primary care mental health professionals need diagnostic categories that are easy to understand and communicate (e. g., referrals and counter-referrals) (Gaebel et al., 2022). However, the strengths of these dimensional frameworks can already be used by the member states, including Peru.

Gaebel et al. (2022) emphasized that to ensure that future versions of the ICD meet the needs of different user groups, it is pertinent that a gradual procedure for diagnosis (i. e., a stepwise approach) be implemented. In this approach, each diagnostic step describes the patient’s psychopathology in greater detail. In step 1 of the diagnosis, a patient’s symptoms can be classified into broad diagnostic categories, as suggested in the primary care version of ICD-11, –e. g., for the identification and management of mental disorders in the first level of care of Peruvian health establishments (levels of care from I-1 to I-4 of the establishments of the Ministry of Health [MINSA])–. In this step, patients suffering from a degree of distress who require additional diagnostics and specialized interventions can be identified. In step 2, a more specific differential diagnosis can be made. The ICD-11 CDDR provides detailed descriptions of the core symptoms of disorders, boundaries with normality, and guidelines for differential diagnosis. This step can be performed in the second and third level of care (e. g., from II-1 to III-E of MINSA establishments). Once the disorder has been identified and differentiated, reassurance, brief cognitive interventions can be performed for a mild level of disorder severity.

**Step 3** of the diagnosis enriches categorical diagnoses with dimensional assessments in research settings and specialized interventions to pin down psychopathology; –e. g., also at the second and third level of care (specialized care)–. Thus, the advantages of both approaches can be combined (e. g., for the diagnosis of schizophrenia or other primary psychotic disorders). Specifically, the result of each categorical diagnosis can be complemented with a symptom profile that provides specific information about the domains involved. In this step, users with moderate and severe personality disorder can be cared for. In moderate cases, brief cognitive interventions, less intensive structured psychotherapies are used; whereas, in severe cases structured intense psychotherapies and medications are used (Mulder, 2012). Similarly, counter-referrals can be issued if mild or subclinical levels of the disorder are found. Bach and Simonsen (2021) mentioned that the disorder severity configures a decision tool for clinical management and the intensity of required treatment (involving the need to establish epistemic trust, level of support approach and strength of the therapeutic alliance).

Consequently, with the stepwise approach, prompt communication based on diagnostic categories is promoted; and dimensional assessments will provide more nuanced profiles for contexts where detailed dimensional information beyond the overall degree of severity is needed to inform treatment (e. g.,
A biopsychosociocultural perspective for diagnosis

Biological perspective

One should consider (a) genetic abnormalities, (b) brain dysfunction and neuronal plasticity, (c) hormonal and neurological abnormalities, (d) neurotransmitters in the brain or other parts of the central nervous system, and (e) temperament when examining biologically based abnormalities for potential diagnosis of any MBND ICD-11 (see Hooley et al., 2021). The ways in which the environment can influence the genotype (genotype-environment correlations), the ways in which the genotype can influence the phenotype, and the ways in which genetic vulnerabilities can influence the development of mental disorders (environment-genotype interactions) are some of the proposed objectives in the biological investigation of MBNDs (Hooley et al., 2021; Kring & Johnson, 2021). Adoption, twin, and family history studies are all ways to examine how much genetic and environmental factors play a role. However, recent research has concentrated on employing linkage analysis and association studies to identify the precise position of genes that contribute to mental diseases (Hooley et al., 2021).

According to Hooley et al. (2021), the results of these studies showed that there are 1000 (distinct) genes that influence with a certain degree of vulnerability (diathesis) to schizophrenia; and some of these genes are also found in severe depressive disorder, 6A02 autism spectrum disorder (ASD), bipolar disorder and in 6A05 attention deficit hyperactivity disorder (ADHD). On the other hand, studies of neuronal plasticity have shown that the genetic makeup of brain development is not fixed as existing neural circuitry can be often modified based on experience. Additionally, various neurotransmitters (primarily serotonin, dopamine, norepinephrine, glutamate, and gamma aminobutyric acid) and hormonal abnormalities (primarily the hypothalamic-pituitary-adrenal, axis with activation of corticotrophin, adrenocorticotropic, epinephrine [adrenaline], and cortisol) contribute to the development of different mental disorders because of their effects on specific areas of the brain and body. Likewise, temperament—strongly influenced by genetics—configures the set of characteristics for reactions and self-regulation to environmental stimuli. Temperament also constitutes the basis of adult personality and influences vulnerability to various disorders (Hooley et al., 2021).

Psychologists must consider these vulnerabilities mainly at the time of case conceptualization, and treatment planning. To control the associated acute symptoms of these vulnerabilities, immediate psychiatric care is crucial—e.g., the above-mentioned schizophrenia or ADHD, which are more strongly associated with alterations in biological domains as established by the organization of ICD-11 MBNDs through the lifetime approach—. Additionally, in specialty care health centers (e.g., hospitals), patients with life-threatening, degenerative, and/or chronic medical conditions (e.g., 2C61 Invasive breast carcinoma) may develop psychiatric conditions (e.g., 6E62.2 Secondary mood syndrome, with mixed symptoms). In these circumstances, multidisciplinary and coordinated work between doctors, nurses, psychologists, and clinical social workers is needed to achieve adequate knowledge of the disease and develop coping strategy and adherence to psychological and medical treatment (Semple & Smyth, 2019).
**Psychological perspective**

The ICD-11 stems from the medical model, where the disorder is identified solely through its symptoms, and the typical treatment is to eliminate them through medication, without the need to identify and treat its causes. If only this approach is used, mainly for severe levels of the disorder, it is possible that the patient develops dependence on the medication and the symptoms reappear once it is discontinued (Kielkiewicz, 2019). For example, a meta-analysis showed that a combination of psychotherapy and pharmacotherapy produces more effective outcomes against major depressive disorder than each of these treatments applied individually (i.e., monotherapy; Kamenov et al., 2017). Although there is some interpretation bias, another umbrella review also demonstrated the superiority of combined treatment in cases of ADHD, complex post-traumatic stress disorder (PTSD) and Social Anxiety compared to monotherapy (Leichsenring et al., 2022). Given this, the psychological interpretation of the patient’s condition, through psychological theories, is important for the psychotherapeutic approach (Peterson, 2009).

Certainly, science cannot find replicability of the results to identify genetic and environmental agents, or their degree of influence in the development of a mental condition; consequently, these cannot be generalized. However, based on the individual psychological evaluation, conceptualization of the case, psychodynamic definition of the problem, functional analysis and other strategies used by the psychologist, it is possible to find the causal components (or at least the most influential central components in the deterioration) for the development, maintenance, and exacerbation of other symptoms or signs of the disorder(s) (Kielkiewicz, 2019). Intervening in these causal agents from the individual intervention, and progressively with group therapies, pharmacological treatment can be enhanced, and eventually discontinued without fear of relapse.

A psychologist, unlike a psychiatrist— as is traditional— must delve deeper into the patient’s problem. Psychiatrists often have a high demand for patients (often continuators) and therefore, reduce their attention time (Evans et al., 2013; Guggenheim, 2013); which probably also affects rapport (Patel et al., 2017). Additionally, patients may feel less stigmatized and better understood in a psychological consultation because psychologists, unlike psychiatrists, assign fewer diagnostic categories to a patient (Evans et al., 2013). According to Evans et al. (2013), these different perspectives on the patient’s mental condition lie in main issues such as: theoretical perspectives, training, professional activities, the services provided, the served patient populations, and health policies. The stigma must certainly be of particular interest and care for psychologists to address and reduce its effects on patient care.

Although both types of mental health practitioners are responsible for treating patients with compassion, empathy, and dignity, psychological care produces more relief than psychiatric consultation because of the emotional and therapeutic link that is created. Moreover, in psychological care, people are not usually labeled as «depressed» or «schizophrenic», and active listening and other interview techniques based on emotional reflection are used. Also, a feedback based on psychological theories is carried out to obtain an understandable, assertive, and compassionate message of the psychiatric condition.

Psychologists are aware of two fundamental problems: (a) Psychiatric diseases are severe forms of internal experience and behavior, due to sadness, rage, and anxiety; which are common human emotions; (b) unlike other medical conditions (illnesses), mental disorders generate more prejudiced and derogatory assumptions than other types of medical conditions (Miles, 2018). The patient is not to blame for having a disorder (Corrigan et al., 2014), and probably does not deserve to be objectified with these adjectives.

Considering the role of the psychologist for the management of diagnostic categories of the ICD-MBNDs (see Figure 1), prevention would mainly lie...
in the adequate detection (presumptive diagnosis) of the MBNDs, their subclinical levels and the psychosocial factors present that affect the patient; this is followed by a brief CBT approach or referral as appropriate. For this, the psychologist and health professionals at the first level of care must receive training for proper management of step 1 of the stepwise approach (categorical diagnosis) using the ICD-11-PHC and ICD-11 MMS as a guide.

At the second level of care where confirmation of the clinical condition is required in a precise and refined manner (steps 2 and 3 of the stepwise approach), the psychiatrist must assign the definitive diagnosis of the ICD-11 MBNDs after a multidisciplinary evaluation with the psychologist and/or a nursing professional specialized in mental health issues. This diagnosis must be complemented with a case formulation that includes the anamnesis, current behavior, presentation of symptoms, subjective experience of the user and social functioning. After that, the psychologist will be able to establish the most appropriate therapeutic regimen for the case (see e.g., Kramer, Eubanks, et al., 2022); being able to predict the estimated time of therapy, possible complications –e.g., abandonment of therapy, usual in patients with 6D11.5 Borderline pattern (Arntz et al., 2022; Iliakis et al., 2021); or refusal of therapy, typical in patients with 6D11.2 dissociality in personality disorder or personality difficulty (Herpertz et al., 2022)–, possible acute episodes and comorbidities with other conditions and/or mortality outcomes. These predictions will also provide psychologists with possible treatment/approach alternatives to initiate a change in the proposed therapeutic scheme and improve the therapeutic alliance (Kramer, Ranjbar, et al., 2022).

Likewise, the forecast extracted from the case conceptualization will serve to establish distance between the dates of home visits, or phone call tracking of the users. For example, continuous (weekly) tracking is preferable in patients with severe levels of a condition and suicidal intent –e.g., in cases of patients with 6A71.4 recurrent depressive disorder, current episode severe, with psychotic symptoms / 6B41 Complex post-traumatic stress disorder / 6D11.5 Borderline pattern (Gelezelyte et al., 2022)–, than in patients with mild levels or with psychosocial problems derived from judicial instances. Finally, in the third level of care where the rehabilitation of patients with severe and chronic conditions prevails, the psychologist repeats clinical management of the second level of care and accompanies and guides scientific practice of the ICD-11 MBNDs. To do this, it involves a multidisciplinary team in regional and national studies at all levels of care, designs and evaluates the health care programs and protocols of the MBNDs taking the ICD-11 as a framework and a comprehensive and inclusive perspective.

Traditionally, the psychological approach involves different frameworks to treat clinical manifestations of a disorder. For example, from the ICD-11 model, for a patient with 6C40.2 alcohol dependence, a psychologist using the psychodynamic framework may interpret the condition as her attempt to reduce intrapsychic conflict and anxiety through repeated alcohol use; and that the person when making catharsis and realizing this dynamic can find a corrective emotional experience. On the other hand, from the behavioral framework, the same professional can interpret the disorder as the patient learning inadequate habits to reduce social stress; and the approach to it is precisely aimed at modifying this learning through conditioning factors (Hooley et al., 2021).

As Hooley et al. (2021) stated, from the cognitive-behavioral framework, the same psychologist can interpret said psychopathology as the irrational thought that the patient has about his excessive alcohol consumption as a way to reduce social stress; and his approach is based upon guidelines to modify these irrational thoughts. Likewise, from a humanistic framework, the psychologist interprets the exaggerated consumption of alcohol as a blockage or distortion of the natural growth of the individual.
person. In addition, the psychiatric condition can be overshadowed if the «client» promotes his virtues and achieves self-realization. Finally, from the existentialist framework, alcohol dependence is interpreted as a failure for the constructive management of the «client» in the face of despair and frustration, of his own existence; and that the disorder can be dealt with by promoting its values, but also by managing the adverse obstacles it may encounter.

Evidence-based psychological interventions for specific diagnostic categories are known to be effective, but only if they perfectly fit the patient’s clinical manifestations; situations that are more pragmatic but unfortunately not very common in clinical practice (The Psychology Practice, 2021). Thus, current practice of psychologists, at least in specialized care, requires comprehensive management of various psychotherapeutic techniques that have shown evidence for addressing specific symptomatic domains (Livesley, 2018; Tyrer & Mulder, 2022). This ensures personalized therapeutic attention to individual needs of the user. This, in turn, generates greater efficiency within a shorter intervention time (Tyrer & Mulder, 2022).

On the other hand, in primary care where anxious and depressive disorders predominate (i.e., with symptoms that represent common alterations in the somatic and emotional domains), the progressive approach with the behavioral and cognitive-behavioral approach is more effective and practical. However, for more complex cases, such as the chronic emptiness presented by a patient with a borderline pattern, in which alterations in the volitional domain predominate, it will be necessary to integrate these approaches with others such as the psychodynamic, humanistic, or existential ones, according to the needs of the patient.

With this, the complexity of multiple domains can be better addressed, which in ordered sequence are biological, somatic, emotional, behavioral, cognitive and volitional ones involved in the patient’s disorders. Certainly, in the domains closest to biological components, it is simpler to assign a diagnosis and a brief and effective pharmacological and psychological approach (cure/treatment). However, as the complexity of the condition progresses owing to the influence of social and cultural factors, a complex, comprehensive, and multidisciplinary approach is necessary. In fact, this perspective of sequential diagnosis and intervention has been considered for the organization of ICD-11 MBNDs through the lifetime approach; which, similar to human development, clearly represents how clinical manifestations deviate dimensionally (quantitatively) from normality; and they become more complex as human subjectivity increases with personal experience. From this perspective, the evaluation and diagnosis with the ICD-11 must be constant since most mental disorders by themselves are not chronic; and they depend a lot on inadequate social functioning strategies that make the condition last over time, creating and maintaining disability.
**Social perspective**

(a) *Early deprivation or trauma* (classified in ICD-11 as QE82 personal history of maltreatment) is a common cause of social vulnerability. Being raised in inadequate children’s shelters after parental abandonment and to experience abandonment and/or physical or sexual abuse at home by a close family member produces «emotional wounds» difficult to heal; facts like these can result in the development of inadequate attachment patterns, avoidance, reactive anger, and other behaviors like these. (b) *Problems with parenting style* (which can be categorized as QE52.0 caregiver-child relationship / QE70.Z problems related to primary support group, including family circumstances, unspecified) include the psychopathology of the parents, since primary caregivers have depression, personality disorder, among others. This leads to a dysfunctional coexistence characterized by pain, helplessness, and despair for all the family, where children are often the most vulnerable. Likewise, authoritarian, authoritative, permissive, and neglectful parenting styles also generate insecure attachment, an increase in maladaptive personality characteristics and syndromic manifestations of various mental disorders.
(c) Marital discord and divorce (classified as QE70.1 disruption of family by separation or divorce) that causes harm to both parents and children; and low socioeconomic status and unemployment (classified as QD51 low income and QD80 problem associated with unemployment, respectively). It also generates stress that can affect the development of some physical or mental illness. (d) Maladaptive relationships with peers such as bullying, bullying and harassment at work (classified as QE50.1 relationships with teachers or classmates / QD85 burnout / QD82 problem associated with threat of job loss) can also be configured as triggers for mental problems. For example, burnout syndrome (QD85 Burnout) has greatly increased as a result of the pandemics currently affecting the world population and the health professionals who deal with them (Menon et al., 2022; Taylor, 2022; Ulfa et al., 2022). This is particularly relevant since it has been seen that (uninformed) society does not only discriminate people for having a disadvantaged mental condition. Certainly, discrimination based on gender, race, ethnicity, or others may generate stress and influence the presentation and exacerbation of mental disorders (Hooley et al., 2021).

Since women frequently exhibit more internalizing disorders and males more externalizing and thinking disorders, gender also plays a significant effect in how mental problems appear (see Figure 2, for an adequate identification of these disorders and their equivalence in the ICD-11). Even though the ICD-11 does not code gender as a risk factor, it should be considered because it helps identify the diagnosis. For example, a large part of Peruvian women evidences a higher suicidal risk (i.e., symptom of 6A70.3 Single episode depressive disorder, severe, without psychotic symptoms) and a large part of the country’s males have a tendency towards aggression (i.e., characteristic of 6D11.2 dissociality in personality disorder or personality difficulty) (Instituto Nacional de Salud Mental, 2019). With this evidence, it could be more certain to assign a diagnosis of severe depression to Peruvian women and a diagnosis of PD with prominent externalizing characteristics to men in the country.

The rejection of immigrants by members of the new culture of the current region or nation in which they dwell is known as acculturation, a term frequently employed in the field of mental health. This social risk factor is codified in the ICD-11 as QE04 target of perceived adverse discrimination or persecution. For example, in secular societies or states, marginalized groups—such as immigrants (WHO, 2021), the gay community (File & Marlay, 2022), the Peruvian Andean rural community (Hualparuca-Olivera, 2022; Instituto Nacional de Salud Mental, 2019)—can show a greater degree of anxiety and depression due to constant violence (rejection) they experience.

In addition, it is common to observe cases in which legal procedures produce distress, and if such an association is detected, the psychologist can code the current problem as QE40 problem associated with conviction in civil or criminal proceedings without imprisonment. Often in primary and specialized care, a Peruvian psychologist is in charge of reporting judicial cases and acts of violence in MINSA records. This serves as epidemiological support to make decisions on budget management for infrastructure and human resources in the fight against violence and the promotion of a culture of peace. If these cases are not registered, it is possible that efforts and investments would be allocated to other activities in the executive agenda of the governments.

Although some authors refer that those adverse factors experienced during infancy and early childhood, including those related to primary caregivers, are the ones that have the greatest influence on the onset of a mental disorder, the truth is that the accumulation (quantity) of social risk factors, more than what they are, contribute to the appearance of mental conditions. Psychologists may decide if a patient’s diagnosed disorder is accompanied by some social risk factor or diagnose only one or more symptoms (e.g., MB26.A...
suicidal ideation and/or QC4B personal history of self-harm) rather than diagnosis of a more complex entity (e.g., 6A71.1 recurrent depressive disorder, current episode moderate, without psychotic symptoms) accompanied by social risk factors (e.g., QE51 problem associated with interactions with spouse or partner) if the current problem is better explained by social circumstances, rather than a psychiatric disorder.

In the same way, it is important to mention that the approach to social risk factors requires multidisciplinary and intersectoral work, the generation of government regulations and investments, health promotion at different levels of care, and the prevention in primary care. A collaborative work structure is needed between authorities, health technicians and professionals, educators, among others, to reduce these risk factors.

Note: OCD = Obsessive Compulsive Disorder; ADHD = Attention Deficit Hyperactive Disorder; HSDD = Hypoactive Sexual Desire Dysfunction; SEDD = Single Episode Depressive Disorder; RDD = Recurrent Depressive Disorder. Panels A, B, and C show the RDoC, SynNoPsis, and HiTOP frameworks, respectively; Likewise, panels D and E show the systems of the DSM-5-TR and the ICD-11 MBNDs, respectively. The diagnostic categories of the DSM-5-TR and ICD-11 MBNDs systems are aligned with the syndromes of the HiTOP framework. This figure was made based on the integration of some authors’ work (see Conway et al., 2021; Gaebel et al., 2022; Michelini et al., 2021).
Cultural perspective

The way in which a social group experiences each of the adverse biopsychosocial factors in a certain culture of a region also influences the manifestation of psychopathology (Gureje et al., 2020). The ICD-11 MBNDs working groups have collected information on cultural variants in order to: (a) identify cultural concepts of distress syndrome (causes/explanations, idioms) in various cultural groups, (b) assess the impact of culture on the manifestation of disorders and their dynamics, (c) identify the differences in the prevalence of various disorders considering the dynamics and cultural factors (Sharan & Hans, 2021). The result is mainly reflected for some of the ICD-11 MBNDs. For example, 6B83 avoidant-restrictive food intake disorder is diagnosed mostly in populations of low and middle-income countries (LMICs) who avoid food intake for fear of generating somatization (Sharan & Hans, 2021; Sharan & Keeley, 2018). Likewise, category 6B04 social anxiety disorder has a marked cultural variant in Asian countries (e.g., Japan and South Korea) as fear of offending others; more than the fear of being evaluated (offended or mocked) socially (Sharan & Hans, 2021).

An applied example of this variability in Peru is found in the distress symptoms of 6B43 Adjustment disorder; which in Quechua-speaking communities is referred to as “sunquymi llakisqa kachkan” which can be translated as “my heart is sad” since the patient attributes to a part of her body—in this case, her heart—feeling worried about an adverse situation and not knowing what to do, which generates impotence and sadness (Paniagua, 2018; Sharan & Hans, 2021). Spanish-speaking patients, who are native Quechua speakers, frequently use the term “mi cuerpo hizo razz” to describe somatic anxiety—as a Peruvian expression of “ataque de nervios” (see Paniagua, 2018) in 6B01 panic disorder—in the form of muscle contractions that cause the skin to stand on end. Another common attribution in these Spanish-speaking Peruvian Andean communities (with Quechua as their mother tongue),—specifically in relatives who attend consultation together with the patient having psychotic symptoms—, is the phrase “su cabeza está débil” since they think that hearing voices is a product of undernutrition, and consequently the weakness manifests itself in their head (as an Andean folkloric explanation of this condition; Quiroz-Valdivia et al., 1997).

In the same way, habits and behaviors that may appear to be signs of detachment traits of a personality disorder (PD) are common behavior in remote communities of Andean areas whose main economic activity is mining. In these places, where intense cold is experienced, and with an institutionalized mining economy,—which means that social contact is scarce—, normal behavior can appear to be perceived as a sign of mental alteration if the psychologist who evaluates them is a foreigner (Hualparuca-Olivera, 2022). Moreover, it is common for patients to attribute the cause of a mental disorder to witchcraft. This cultural group certainly does not have sufficient terms to report a mental disorder and often refers to external entities to confirm its possible cause. This leads this community to seek the service of sorcerers and healers who recommend them to perform mystical rituals instead of seeking help from mental health professionals.

Other disorders, in which there is cultural variability in the prevalence and subjective experience of certain symptoms, more than others, are those manifested in: depression, adjustment disorder. Unlike its previous version and the DSM-5-TR, in the ICD-11 CDDR it has been decided to eliminate culture-specific diagnostic categories, and sections have been created to explain possible cultural variations for each disorder (Sharan & Hans, 2021). This change still generates debate both for the practice and for the research of the ICD-11 MBNDs, which mainly argues for two opposing reasons: (a) the designation of vignettes, instead of criteria, facilitates the cultural adaptation of diagnostic categories in clinical practice (Bach et al., 2022); b) the designation of vignettes reflects the lack of interest from the WHO in compiling exhaustive information on culture as the priority of scientists is to
find biological markers (Seligman, 2019), rather than cultural markers in their desire to universalize the diagnostic system (Sharan & Hans, 2021).

Although the first statement has been continually supported by the ICD-11 MBNDs working group in its research, it is also true that most of this has been done in high-income countries (HICs). Although they were conducted in LMICs, most of these studies have been conducted in major urban cities, rather than in remote rural communities, which represents both a weakness and an opportunity for the research and practice of the psychologist and other professionals dedicated to mental health.

**Implications of ICD-11 MBNDs in public health and its policies**

Classification systems have been criticized for medicalizing common problems (Stein et al., 2020); however, the psychopathology subthreshold that is addressed is relevant for early recognition of future psychiatric disorders—that is, with a focus on primary care (Krasnov, 2021). With the most accurate identification of MBNDs in a country, the availability of assistance services can be evaluated and plans to implement them can be structured (Reed, 2021). Furthermore, when combining well-targeted treatment and prevention programs in the field of mental health; and in general, public strategies, it would be possible to: (a) avoid years lived with disability and deaths, (b) reduce the stigma associated with mental disorders, (c) substantially increase social capital, (d) reduce poverty and promote development of a country (Saxena et al., 2012). When determining what will be financed with a certain number of resources, the general objective must be to guarantee that health interventions maximize the benefits for society. For this, evidence-based prevention programs must be applied to improve positive mental health (Messias, 2020; Peseschkian & Remmers, 2020; Sarý & Schlechter, 2020; Smirnova & Parks, 2018), physical health and generate economic and social benefits. In order to favor decision-making in public policies, some issues to be considered are presented below.

**Implementation**

**Information and statistics systems**

Information systems configure a tool to improve mental health; however, difficulties may arise in implementing them due to multiple electronic health records and multiplicity of mental illness classifications. Many countries have two or more electronic systems—at least for specialized care units—for registering health information, depending on the state sectors to which they are attached. An example is the system managed by EsSalud and the Ministry of Health (MINSA) in Peru, which are independent but, in many cases, incompatible. Another limitation is that there is a group of diagnostic classifications from the WHO and the UN, to which they must be adjusted as they offer an international framework for managing, administrating, and researching patients and services. Making all these classifications compatible allows communication between healthcare and administrative professionals. It also supports the bases for registering and requesting state investment for goods and services.

According to Saxena et al. (2012), ICD-11 MBNDs are mainly linked to four WHO classifications (in addition to ICD-11 itself) that allow computer management of public health: (a) the International Classification of Functioning, Disability and Health, (b) the International Classification of Health Interventions, (c) the International Classification of Primary Care, Third Edition, (d) and the International Classification of External Causes of Injury. In some countries, pilot mapping studies between clinical terminologies are being carried out, considering three layers: (i) Foundation—i. e., a semantic network of biomedical concepts; e. g., Systematized Nomenclature of Medicine-Clinical Terms (SNOMED-CT) and the ICD-11 Foundation Component—, (ii) a formal coding that anchors the meaning of terms in the semantic web, (iii) Linearization—i. e., a classical tabulation of hierarchical codes that are derived from that network—, and (iv) Content Model—i. e., an
information model of mandatory and optional content, to which each entry in the semantic network is associated—(Chute & Çelik, 2022).

In the USA, for example, there are consulting firms Kathy Giannangelo Consulting, LLC and the RXNT compatible software designer corporation, who support the implementation of the ICD-11 clinical codes to facilitate the billing and reimbursement processes for benefits and medications (e.g., psychotropic drugs), in addition to training health servers on the classifications of the WHO. However, implementation in developing countries will require significant effort and investment (Almeida et al., 2020). The implementation experiences of the ICD-11 in countries like Iran (Golpira et al., 2021) and Kuwait (Ibrahim et al., 2022) can serve as a reference for other HICs and LMICs in the Latin American region.

Another aspect to be considered is that mental health activities in Peru have been usually coded based on health information systems (HIS). Based on a normative guide (Ministerio de Salud, 2021), packages are established (which include the type and quantity of activities) for care and follow-up according to the user’s diagnosis at the different levels of care. As Hualparuca-Olivera (2022) mentions, these packages have been prioritized for anxiety, depression, psychosis, and substance use disorders; fact that has limited the clinical management and research of these and other psychopathological conditions. Moreover, with this strict rule, diagnosis has often become a sociopolitical consensus to meet health goals (Hualparuca-Olivera, 2022). Although this makes it possible to quantitatively organize the activities and the health budget, it becomes a tedious and unnecessary task for the healthcare personnel since it fails to provide quality care and effective treatment to the user. In this sense, the flexibility offered by the diagnostic guidelines of the ICD-11 MBNDs to prioritize the clinician’s criteria could be subtly transferred to current regulations to improve the clinical use of the mental health activities proposed by MINSA.

Training

With the arrival of ICD-11, it is expected that governments, in coordination with the WHO, or with its regional entities such as the Pan American Health Organization, academic societies, non-governmental organizations would create bridges of communication with state leaders to establish strategies in order to train each health professionals, administrators and managers on the use of the ICD-11 (Krasnov, 2021; Stein et al., 2020). Likewise, state leaders and their ministers should organize working groups to adapt ICD-11 to local laws, policies, health systems and infrastructures, and subsequently design various multilevel actions and train mental health practitioners (Fiorillo & Falkai, 2021). Although educational resources are available online, the implementation and training of health professionals (by the Peruvian authorities) has not yet started; and it will take time (R. Valle [Psychiatrist of the National Institute of Mental Health ‘Honorio Delgado-Hideyo Noguchi’], personal communication, December 1, 2022). Even epidemiological studies on mental health in the country are being carried out under the ICD-10 framework. Everything suggests that the implementation of the ICD-11 in Peru will begin, at least, in a future five-year period.

Furthermore, since the education of health professionals represents one of the most essential steps to implement and disseminate the new classification system in routine care, the WHO International Advisory Group led by Geoffrey M. Reed has organized training courses for professionals on the use of the ICD-11 MBNDs chapter through the GCP Network platform. Likewise, psychiatric associations, mainly centralized in Europe and the USA, have provided educational activities through interactive virtual formats, including online courses with the active participation of students through the application of the new guidelines to clinical cases and discussion of diagnostic dilemmas (Reed, 2021). Certainly, these trainings have focused on psychiatrists and at the moment have left aside other mental health professionals or those who work on mental health issues.
Because ICD-11 will represent an important change in global clinical practice, it is urgent to promote educational activities to improve the dissemination of this innovative classification approach and contribute to the continuing education of mental health and related professionals. Also, The WHO Collaborating Centre voor de Familie van Internationale Classificaties in Nederland (WHO-FIC Netwerk; 2019) established a roadmap for the Americas that can be adapted for mental health issues when implementing ICD-11. The promotion and dissemination stage, for example, mainly involves (a) designing and strengthening committees, councils or inter-institutional health information centers (health statistics, social security and civil registration); (b) developing a transition plan and implementation of ICD-10 to ICD-11 aligned with the country’s health information improvement plan; and (c) develop attractive materials in different formats and use social networks to spread ICD-11 innovations (Fiorillo & Falkai, 2021).

Primary health care

In primary health care (PHC), a large number of new patients have to be treated, and certainly the official version of ICD-11 is not practical. For this reason, the WHO interested in mental health is in the process of revising the Diagnostic and Management Guidelines for Mental Disorders in Primary Care 11th revision (ICD-11 PHC). The previous version (ICD-10 PHC) included 26 common mental disorders or relevant to these settings. The ICD-11 PHC describes 27 mental disorders, 25 of which are equivalent to the ICD-11 MBNDs (Chapman, 2019); and include problems with drugs, alcohol, eating and sleeping, and the body stress syndrome (BSS; see Regier et al., 2020; Robles-García & Reed, 2017). Also, in the ICD-11 PHC, common presentations in primary care, distinctive characteristics and relevant differential diagnoses are described; and information for the patient and family, response to both psychological and pharmacological treatment and indications for referral to a specialist (Regier et al., 2020). Revisions have also been proposed for mood and anxiety disorders, BSS, and health anxiety (HA) proposed for the ICD-11 PHC and suggested that these categories could be usefully implemented in global primary care settings (Goldberg et al., 2017).

In PHC, it is important to recognize and intervene in the depressive symptoms that commonly accompany chronic physical disorders and the management of multiple somatic symptoms without any accompanying physical illness. According to some authors refer, it is recognized in the ICD-11 PHC that depression and generalized anxiety disorder (GAD) commonly co-exist, but the diagnostic requirements for depression include a duration of only 2 weeks, while the requirement for GAD is several months (Razzque & Minhas, 2018) since the most frequent thing is that a patient develops anxiety due to his own depressive state condition. This has implications for early management; since the previous condition (depression) can be intervened in the first two weeks before anxiety is generated. Otherwise, a combination of both conditions in clinical thresholds (depression-anxiety) probably leads to comorbidity with other mental disorders or possible suicide (Regier et al., 2020).

Mixed states of anxiety and depressive symptoms («cothymia»; see Yang et al., 2022) with subclinical thresholds are very common in community settings. For this reason, the WHO Primary Care Consultative Group recommends three main ways of diagnosis: (a) if there is depressive disorder (clinical level or «disorder») + anxiety disorder (clinical level), then it is diagnosed as «anxious depression»; (b) if there is depressive disorder (clinical level) + anxiety disorder (subclinical level), then it is diagnosed as «depression with current anxiety»; and (c) if there is depressive disorder (subclinical level) + anxiety disorder (subclinical level), then it is diagnosed as «subclinical anxious depression» (see Regier et al., 2020).

Likewise, the ICD-11 Primary Care Consultation Group evaluated two brief anxiety and depression screening scales based on an assembly of the items from the Composite International Diagnostic Interview
adapted for primary care (CIDI-PC) to help primary care mental health professionals to decide whether a diagnosable psychological problem was likely to be present (Goldberg et al., 2012). Given the time and resource pressures—in addition to patients’ reading comprehension issues—these screening scales will be especially useful in LMICs and will be published alongside the ICD-11 PHC (Warren, 2017). The application of these scales will be soon implemented in all primary care health centers and in mental health care units within educational institutions where mental health personnel work (e.g., school psychologists financed by regional governments) for early detection of negative emotional symptoms. In addition, it is likely that these professionals need training in brief cognitive behavioral interventions to intervene in these cases.

Health policies for primary care should also focus on improving the population’s access to mental health services. The need to increase budget for investment in hiring more and better qualified mental health professionals has been alerted in addition to improving and increasing primary care services to achieve better coverage (WHO, 2022a). Unfortunately, in many LMICs, specialized care is overwhelmed, and primary care is very helpful in assisting to ease the demand for mental health services (Kyanko et al., 2022; WHO, 2022a). The importance of improving working conditions of health professionals for their own mental well-being in a post-pandemic context has also been highlighted; which also affects the quality of care in the mental health services that they offer (Belloni et al., 2022; Shields et al., 2021; WHO, 2022f). The implementation of the ICD-11 MBNDs in primary care should also consider all these issues.

**Disability**

Mental disorders are strongly associated with disability, a term that includes dysfunction of the brain, the body, in your personal daily activities, and restrictions in your social life. Both physical illnesses and mental disorders have an influence (as a sufficient or contributing cause) in the disability generation. Disability is often a key factor in: (a) people seeking health care; and an important factor in (b) health providers determining the types of health services and level of care needed. However, the frequency, etiology (type of causality), and manifestation of disabilities generated by mental disorders are not well defined or scientifically studied (Regier et al., 2020). An attempt has been made to keep disability out of the main diagnostic classification of the ICD-11 since it has only incorporated a supplementary section called the International Classification of Functioning, Disability and Health (ICF). This section has a disability measurement instrument, WHODAS 2.0, which includes the following domains: (1) understanding and communication with the world (cognition); (2) movement and move (mobility); (3) self-care; (4) get along with people (interpersonal relationships); (5) home life, occupation, school, and leisure; and (6) participation in society.

The ICD-11—like the DSM-5-TR—has a tradition of incorporating part of the disability construct for all its disorders, which it names as «impairment»; which primarily focuses on social dysfunction. Impairment for each of the disorders is also accompanied by subjective «distress»; and for mental disorders that are dimensionally classified in ICD-11, they define their «severity» (i.e., mild, moderate, or severe). This is where the question arises, why is social dysfunction included in mental disorders as part of the diagnostic guidelines, unlike the other physical illnesses of the ICD-11? This has to do with scientific and practical issues since, unlike physical illnesses, it is very difficult to detect a single (or at least generalizable) etiology for mental disorders. Using the guidelines alone, without including distress or impairment in mental disorders, was shown to lead to high rates of disorder prevalence; this, without people generating any personal or social dysfunction (Regier et al., 2020). Consequently, it was decided that these two indicators (distress and social impairment) constitute the clinical importance of the ICD-11 MBNDs.
Financial issues

According to Saxena et al. (2012), social insurance (financed by state and/or private entities) mainly covers the payment of health services, distribution of medicines and health devices for a particular patient who pays a monthly payment. In the event that the patient cannot pay, a validated disability certificate is needed so that the insurance continues to be maintained and they continue to receive decent care. For a long time in HIC social insurance, the DSM criterion has been used to regulate disability criteria, which mainly include: (a) the existence of a disorder and (b) that said disorder is associated with significant dysfunction. On the other hand, in most low-income countries, only people with formal employment are eligible (often civil servants based in urban areas), which excludes the working poor and informal and most of the poor rural population. As a result, access to decent and effective treatment was (and continues to be) conditioned by employment status; however, most people with a diagnosed mental disorder are not in the workforce.

In many countries, including Peru, insurers arbitrarily decide that their financing policies are specific only for some mental disorders. In this sense, insurers focus on the rarest conditions instead of covering the full range of mental disorders; or include one’s coverage only for ICD «organic mental disorders». Therefore, any change in the structure of the ICD-11 MBNDs with respect to its previous version affects the selection criteria of the beneficiaries and the conditions of the insurance policy. In fact, with the changes made in eliminating «organic» and «non-organic» arbitrary distinction of sleep disorders, of sexual dysfunctions (even grouped in other chapters of the ICD-11) and elimination disorders insurers are likely to adapt their regulations.

The WHO, as already mentioned in the previous section, has been very clear in emphasizing that disability should be measured by standard dysfunction domains –as measured by WHODAS 2.0 and classified by the IFC– and not just by the presence of a specific diagnosis. For a policy to be inclusive, it will be important that the diagnostic system used to make coverage decisions would also be inclusive. It is true that no classification system or instrument is completely free of errors, and, for this reason, it is of vital importance that the evaluator is trained, and must also take into account that, like a mental disorder, disability is a dimensional construct, and that a greater biopsychosociocultural vulnerability must influence temporary or permanent disability.

Legal settings

The evaluation and diagnosis of mental disorders have always been part of the forensic assessment for civil and criminal law. In civil law, it mainly involves tests to specify the effect of emotional injuries on a third party involved in after a car accident, guardianship evaluations, ability to write a will, ability to enter into contracts; testamentary capacity assessments; psychological autopsies in cases of suicide or sudden death, fitness for work evaluations; disability insurance benefit assessments (Saxena et al., 2012). For most of these situations, the issue at hand is the determination of the ability to perform some function, including autonomous decision-making by the person with a disability. On the other hand, in criminal law, diagnosis is usually necessary for forensic assessments (e. g., of criminal responsibility and fitness for trial in the offender and assessment of harm in the victim) and for assessments correctional (e. g., for prison classification decisions and treatment purposes within the prison system).

The psychopathology constructs offered in the ICD-11, and as defined by the WHO, are important issues for the law in matters of conduct, cognition, will and action in accordance with the understanding of wrongfulness (García-López, 2022). Consequently, forensic, and correctional evaluators must address both a legal and mental health standard since a unified communication code of psychopathology is needed before the courts of justice (García-López, 2022; Hall, 2022). It is crucial to understand that while forensic
psychology/psychiatry diagnoses behavior, the law typifies it; In addition, while forensic psychology bases its knowledge on the ICD-11, the law frames its action in the codes, norms and statutes of ministerial entities, international treaties, action protocols of the Supreme Court of Justice and others. international legal standards (Ramírez & Dzib, 2022).

With a clinical look at legal situations, Reed and colleagues state that some changes in the ICD-11 MBNDs with respect to their previous version are particularly important in legal matters (see Asociacion Psiquiatrica Mexicana AC, 2022). (a) The dimensional change that is established at most in the personality disorder and related traits group must remove any stigma and deterministic guilt decisions solely based on the presence of traits since not all people are psychopaths –dissocial traits, which now is focused on limited pro-social emotions rather than the pattern of criminal behavior– commit crimes, apart from to the fact that both healthy people and psychopaths can commit crimes. In this sense, personality disorder treatment in legal units can help reduce maladaptive characteristics, which was previously believed to be impossible or in vain. (b) In the same way, the dimensional change that also affects the course of the group of schizophrenia or other primary psychotic disorders, explicitly allows the identification of autonomy and awareness of a criminal act without this necessarily implying a release from criminal responsibility or a permanent stigma. In addition, the condition is prevented from worsening its course if it is intervened early within the civil or criminal units.

(c) The displacement of the transsexual identity to a chapter outside of mental disorders collaborates with the reduction of physical and psychological violence that these minority groups receive –and seen in legal jurisdictions– due to the double stigma mentioned above, which are also transferred to prison where they are often tortured. (d) The inclusion of complex PTSD as a diagnostic category helps to quantify the psychic damage to penalize the guilty party of producing a trauma (with internal disorganization) in the victim; what could not be done before because the diagnosis was confused with borderline personality disorder. (e) Paraphilic disorders in ICD-11 do not require the commission of an act in response to sexual desires (e. g., 6D32 pedophilic disorder, 6D33 coercive sexual sadism disorder, etc.) to be diagnosed. This allows early detection and intervention of these mental disorders before the crime is committed without the need to stigmatize these people.

However, from a legal perspective, as Münch et al. (2020) mention, ICD-11 may have some negative implications for forensic assessment. Specifically, in groups of disorders mainly described as «behavior harmful to others» –e. g., Disruptive behavior or dissocial disorders and Paraphilic disorders (excluding consensual behaviors) or–, since using the conjunction «or» is grouped in the same category to patients who have distress/deterioration with individuals who act recurrently harming others. These patterns «without prosocial emotions» in criminal behavior,–which may be due to «learned and self-consensual vices, and not due to mental disorders»–, are the ones that most predict recidivism and a rejection of prison treatment (Münch et al., 2020). Bründl and Fuss (2021), reinforce the argument that the continuity of intermittent explosive disorder and compulsive sexual behavior in ICD-11 is still questionable –although, other authors mention that the continuity of compulsive sexual behavior promote research and improvement in prevention and treatment (Mead & Sharpe, 2019)–. In addition, including harm to other people’s health as one of the criteria for substance use could medically justify crimes committed under the influence of alcohol or drugs (García-López, 2022; Reed et al., 2019).

As evidenced, there is a lot of misinformation and lack of understanding between clinical and legal disciplines when mental health problems are involved in criminal behavior. Most criminal liability decisions only consider schizophrenia as a defense since criminal behavior is attributed as the effect of the individual’s lack of awareness when differentiating the illegality of its acts; and only in some severe and comorbid cases,
the other disorders that affect the lack of emotional regulation are considered as defenses. In this sense, it is clear, as mentioned by Saxena et al. (2012), that a diagnosis of a mental disorder in a defendant does not imply by itself being exculpatory or mitigating, or decisive for the certain prognosis of recidivism; however, it is used to communicate the results of an expertise to the judge or legal actors, and to make legal decisions regarding mental treatment within civil or criminal units. Criminal responsibility and the capacity to stand trial will always have to be based on a deep and ideographic expertise of conscience and volitional control rather than on a psychiatric diagnosis (Carroll et al., 2022).

This issue is not often well understood by legal professionals, who seek a deterministic standard framework to establish a cause for penance; however, ICD-11 has been designed to communicate and treat health problems. In this sense, the implications of the changes in the ICD-11 MBNDs must be carefully analyzed in order to adapt to the standards already used in legal contexts. If there is no rigorous training in mental health issues and in national and international standards for justice administrators or health professionals –who work in these legal units–, it is possible that corruption, impunity, negligence, abuse, and injustice continue to reign in these contexts.

**Closing remarks**

Keeley (2016) states that classifications of mental disorders represent a necessary evil, as they provide the infrastructure to help people with mental problems (i.e., clinical use). In other words, they make it possible to have an exhaustive and consensual list of each of people’s problems. With an adequate diagnosis, tracking the social and personal burden of the patient, the following are ideally improved: (a) communication between professionals, (b) the standardized identification of clinical conditions for research and (c) the choice of best treatments (Keeley, 2016).

The ICD-11 has been committed to mental health, and its inclusive perspective with states with fewer resources focused on prevention represents one of its strongholds. While the interest and benefits to be generated by such an approach are laudable, such a prospect may also bring some limitations. Since the reliability and validity of the diagnoses is improved, it allows to reach the objective of improving communication between health professionals. Although the ICD-11 MBNDs guidelines are flexible at the clinician’s criterion, which improves their cross-cultural applicability, this may somewhat decrease its reliability for research compared to the DSM-5 TR. This system, and other dimensional classification frameworks, due to the competence they represent, have also contributed (e.g., with the lifespan and stepwise approach) to improving the validity and reliability of the diagnostic categories of the ICD-11 MBNDs in research and in specialized care. In short, this reflects the current knowledge of the organization; and the changes and additions of the ICD-11 MBNDs.

However, there are gaps regarding its usefulness for the most appropriate psychological and psychiatric treatment for the individual needs of the user. This is due to the phenomenological and non-etiological nature of said diagnoses; besides, it does not consider the subjective experience, the strengths of the human being; instances that are inseparable from the general functioning –i.e., positive, normal (adapted) or pathological ones– of the patient. In this sense, the psychologist’s work for the diagnosis, prognosis, treatment, and follow-up of the patient’s clinical condition will be preliminarily based on the ICD-11 classification, but it will not be usually limited to the latter. The conceptualization of the case, through the different psychological frameworks (including the stepwise approach and a biopsychosociocultural view of the underlying factors), will be an essential tool for clinical management from psychological practice.

The implications for public health and its policies for the implementation of the ICD-11 MBNDs lie in the adaptability of current information systems and
their regulations to improve the clinical use of these diagnoses. A considerable economic investment and continuous training of health care and administrative servers will be necessary to better understand the reasons, content, and opinions of the changes in this eleventh revision. Other important aspects derived from the above are: (a) the management of ICD-11 MBNDs in primary care, which implies early identification of the most common mental conditions (Regier et al., 2020), and the creation of more establishments and the improvement of the conditions in employment contracts of human resources (see Hualparuca-Olivera, 2022); (b) disability assessment for health insurance financing issues will have to focus more on personal and social dysfunction than on the ICD-11 MBNDs themselves; (c) in legal environments, there will be little impact of this new model for civil and criminal law. The benefits will be consolidated to a greater extent if communication between legal actors and mental health professionals is improved, thereby reducing the stigma associated with mental disorders for the commission of the crime.

It is unfortunate that the field studies carried out by the WHO for the revision and implementation of the ICD-11 have not included Peru or other Spanish-speaking South American countries. In addition, it is important to consider studies that evaluate the applicability and clinical use, as well as the clinical management perspectives of the different mental health professionals perceived by the health professionals themselves and the users. Likewise, it is important to consider in epidemiological studies other common but misdiagnosed conditions (e.g., personality disorder) since this will provide a better overview of mental health in Peruvians. Finally, experimental research (randomized clinical trials) of brief psychological interventions is necessary to prove its efficacy and efficiency, and to compare to other evidence-based treatments.

The review and analysis presented in this article can serve as an additional resource for comprehensive training on the ICD-11 MBNDs by describing the science-practice-public policy triad from the psychology perspective. This resource can also be considered by other professionals who have previous knowledge in mental health and work closely on this topic since it uses terminology compatible with other health sciences (psychiatric medicine, nursing). Moreover, the previously described implications can be of reflection and value for professionals in the social sciences (i.e., social workers) and administrative sciences (health managers and telehealth or digital health consultants) and legal sciences (forensic psychiatrists and psychologists, judges, etc.) linked to mental health; a fact that as a whole also represents a great tool for decision-making in public policies related to mental health.

**Conflicts of interest**

We declare that we have no conflict of interest.

**Ethical responsibility**

In this research, no experiments have been carried out on humans or animals, nor conducts that come into conflict with ethical issues because it is a theoretical paper.

**Authors’ contributions**

The authors participated equally in the preparation of this paper.

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