THE MAIN CHANGES IN THE ICD-11

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The World Health Organization presented a new edition of the International Classification of Diseases (ICD-11) at the World Health Assembly on May 20, 2019 in Geneva.

ICD-11 will enter into force after consultation with all WHO countries.

The development of ICD-11 European Committee on Democracy and Governance (CDDG) for mental and behavioral disorders is the first major revision of the world's leading classification of mental disorders in almost 30 years.

WHO notes that the implementation of ICD-11 involves the interaction of classification with the rule of law, laws, national policies, health systems and information infrastructure of each country.

The methodological basis of the study was based on the paradigm of organizational and legal, clinical and pharmacological standards: ICD-11; ICD-10; DSM-5; materials of the American Psychological Association; international and national medical and technological documents on standardization of medical care; normative documents (standards of medical care, clinical protocols, forms of medicines, National list of essential medicines, instructions for medical use); scientific publications on the topic of work.

ICD -11 is built on the clustering method. Diagnostic codes ICD -11 - alphanumeric from 1A00.00 to ZZ9Z.ZZ.

Clustering of ICD -11 is an important innovation compared to ICD -10.

In addition, for the first time, ICD-11 will be a fully electronic publication.

The main changes in ICD-11 include gaming addiction, chronic pain, burnout syndrome, stroke, sexual health, allergies, alternative medicine, and antibiotic resistance.

In the new ICD-11 edition, gaming addiction is classified as a mental disorder for the first time.

This disorder is characterized as behavioral addiction to gaming – online and offline.

We will be able to diagnose it if there is a violation of personal, family, social behavior, which is observed for at least 12 months.

The next ICD-11 novel deals with chronic pain. The International Association for the Study of Pain (IASP) has developed a classification of chronic pain, which has been included in the ICD-11 code "MG30". In the studies of Korwisi B., Barke A., Rief W. et al. ICD-11 chronic pain classification provides the results of an Internet survey of 177 healthcare professionals from all countries using the WHO-FiT platform. After training on the chronic pain coding website, participants evaluated 18 diagnostic codes from the 2017 frozen version of ICD-11 and 12 cases describing conditions with chronic pain. Correctness, ambiguity and perceived coding complexity were compared between ICD-11 and ICD-10. The applicability of the

incidence rules for ICD-11 was checked. 43.0% of correct diagnoses of chronic pain made according to ICD-10 and 63.2% according to ICD-11 were received. Especially in cases where chronic pain is considered a symptom of the underlying disease, ICD-11 (63.5%) gives more accurate diagnoses than ICD-10 (26.8%). Coding of cases was on average 83.9% accurate, with only 1.6% of cases having difficulty. Morbidity rates were applied correctly in 74.1% of cases. In terms of coding, ICD-11 outperforms ICD-10 in every way, offering better coding accuracy, complexity, and ambiguity for chronic pain conditions.

The International Association for the Study of Pain (IASP - International Association for the Study of Pain) has developed a classification of chronic pain for ICD-11, code "MG30".

The correctness of the diagnosis of chronic pain according to ICD -10 and ICD -11 was checked.

43.0% of correct diagnoses of chronic pain were obtained according to ICD-10 and 63.2% - according to ICD-11.

WHO emphasizes that the burnout syndrome at work is not an innovation of ICD -11.

According to ICD-11, burnout is a syndrome resulting from chronic stress at the workplace.

That is, chronic stress at work can lead to burnout.

This definition was also in the previous edition - MKH-10.

The main signs of professional burnout: energy is lost, a feeling of exhaustion appears; psychological distancing from work, negative and pessimistic thoughts about work increases; professional efficiency decreases.

In ICD-11, approaches to the classification of stroke have changed: it is now a disease of the brain, not the circulatory system.

The next innovation is that in ICD-11 the whole section is devoted to sexual health.

In ICD-11:

- specific symptoms for diagnosing post-traumatic stress disorder have been clarified
- complex post-traumatic stress disorder has been added

Allergies are listed as diseases of the immune system.

Alternative medicine is presented in one section – for easy calculation of statistics on diseases and conditions, concepts that originated in ancient Chinese medicine, and are now widely used in China, Japan, Korea and other countries.

Special codes for antibiotic resistance have been introduced to help more accurately measure the effectiveness of drugs around the world.

New chapters of ICD-11:

• Chapter 03: Diseases of the blood or blood-forming organs

• Chapter 04: Immune system disorders (conditions affecting the immune system and conditions affecting the blood, now in two separate chapters)

• Chapter 07: Sleep and Wakefulness Disorders

• Chapter 17: Conditions related to sexual health

• Chapter 27: Alternative medicine

New chapter of ICD-11 on alternative medicine: non-traditional medicine is used all over the world, but it has never been classified as ailment before.

The new chapter on sexual health in ICD-11 brings together conditions that were previously classified in other ways (for example, gender disparity was listed as mental health conditions) or described differently.

Implementation of ICD-11: does not require significant financial costs, guarantees the availability of education and software

There are electronic resources available (WHO browser).

Table 1

ICD-10 and ICD-11 codes for mental and behavioral disorders as a result of psychoactive substances use *(author's text)*

ICD-10 code	ICD-11 code
F10-F19. Mental and behavioral disorders due to the use of psychoactive substances	6C Disorders caused by the use of psychoactive substances
F10. Mental and behavioral disorders due to alcohol consumption	6C40 Disorders caused by alcohol consumption
F11. Mental and behavioral disorders due to opioid use	6C43 Diseases caused by opioids use
F12. Mental and behavioral disorders due to cannabinoids use	6C41 Diseases caused by cannabis use
	6C42 Diseases caused by the use of synthetic cannabinoids
F13. Mental and behavioral disorders due to the use of sedatives or hypnotics	6C44 Disorders caused by the use of sedatives, hypnotics or anxiolytics
F14. Mental and behavioral disorders due to cocaine use	6C45 Disorders caused by cocaine use
F15. Mental and behavioral disorders due to the use of other stimulants, including caffeine	6C46 Disorders caused by stimulants use, including amphetamines, methamphetamine or methcathinone
	6C47 Diseases caused by the use of synthetic cathinones
	6C48 Disorders caused by caffeine consumption
F16. Mental and behavioral disorders due	6C49 Disorders caused by the use of hallucinogens

to the use of hallucinogens	
F17. Mental and behavioral disorders due to tobacco use	6C4A Disorders caused by nicotine use
F18. Mental and behavioral disorders due to the use of volatile solvents	6C4B Violations caused by volatile inhalants
F19. Mental and behavioral disorders due to the use of several drugs and other psychoactive substances	6C4F Disorders caused by the use of several of these psychoactive substances, including drugs
	6C4C Diseases caused by methylenedioxymethamphetamine or related drugs, including tenamphetamine (e.g., ecstasy)
	6C4D Dissociative disorders including ketamine and phencyclidine (e.g., telazole)
	6C4E Disorders caused by the use of other specified psychoactive substances, including drugs (combination drugs with narcotic drugs, psychotropic substances and precursors as active pharmaceutical ingredients, e.g., corvalol, codeterpine)
	6C4G Disorders caused by the use of unknown or indeterminate psychoactive substances
F55. Abuse of non-addictive substances	6C4H Disorders caused by the use of non-psychoactive substances (e.g., analgesics)
	6A41 Catatonia caused by substances or drugs
	6C4Y Other specified disorders, caused by the use of psychoactive substances

Thus, the Table 1 shows that in ICD-11 code 6C "Disorders caused by the use of surfactants" no longer has the code F "Mental and behavioral disorders….".

The names of the sections of ICD-11 are abbreviated and concise, the diagnoses are given in essence.

The diagnoses of mental and behavioral disorders due to cannabinoid use have been expanded:

- ✓ 6C41 Diseases caused by cannabis use and 6C42 Diseases caused by synthetic cannabinoid use
- ✓ Anxiolytics added to ICD-10 F13 diagnosis: 6C44 Disorders caused by sedatives, hypnotics, or anxiolytics

- ✓ The diagnosis of ICD-10 F15 is expanded by positions on surfactant stimulants, including amphetamines, methamphetamine or methcathinone (6C46), synthetic cathinones (6C47)
- ✓ Psychoactive substance tobacco in ICD-11 was replaced by psychoactive substance nicotine (6C4A) and volatile solvents by volatile inhalers (6C4B)
- ✓ ICD-11 clarifies the diagnosis of multiple psychoactive substances. Code 6C4F indicates that disorders caused by the use of several of these psychoactive substances, including drugs, are classified
- ✓ ICD-11 adds diagnoses related to health disorders due to the use of methylenedioxymethamphetamine or related drugs, including tenamphetamine (6C4C); dissociative drugs, including ketamine and phencyclidine (6C4D); other psychoactive substances, including drugs (6C4E); unknown or undetermined surfactants (6C4G)
- ✓ The ICD-11 highlights section 6C4H – Disorders caused by the use of non-psychoactive substances (e.g., analgesics)
- ✓ Section 6C, Psychoactive Substance Disorders, of the ICD-11 also contains new diagnoses 6A41 "Substance or Drug Catatonia" and 6C4Y "Other Specified Psychoactive Substance Disorders".

The use of the ICD-11 contributes to the development of medical informatics new knowledge (informatics, librarianship and behavior studies)

Behavioral studies (from English) are behavioral sciences that study cognitive processes within organisms and behavioral interactions between organisms in the natural world.

The prospects for the ICD-11 classification system are emerging:

- ➢ communicative value between clinicians and their patients, as well as between clinicians and the families of their patients;
- ➢ ease of use;
- ➢ clinical value from practical application.

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