Criteria and Innovations in Diagnostics of Autism Spectrum Disorder According to the International Classification of Diseases (ICD – 11) and the Use in Special Pedagogy Field.

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CRITERIA AND INNOVATIONS IN DIAGNOSTICS OF AUTISM SPECTRUM DISORDER ACCORDING TO THE INTERNATIONAL CLASSIFICATION OF DISEASES (ICD – 11) AND THE USE IN SPECIAL PEDAGOGY FIELD.

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Abstract.

In connection with the release of the international classification of   diseases (ICD – 11) in 2022 on mental health and the diagnosis of autistic spectrum disorder is finding more and more discussion on the part of an interdisciplinary team of specialists.

Significant differences in the treatment, therapy, and prognosis of a wide spectrum of autistic disorder, including motor activity of endogenous - procedural genesis, Kanner's and Asperger's syndromes, autistically similar disorders of organic and chromosomal origin, requires the solution of rather complex issues of a differential diagnostic nature.

This primarily is due to the versatility of the criteria for the diagnosis of autistic disorder and behavioral symptoms - they complicate the differential diagnosis both within the group of autism spectrum disorders and with other developmental disorders and comorbid mental illnesses. Certain difficulties in the completeness of the coverage of diagnostic signs are created by the distorted autistic dysontogenesis itself, which combines the phenomena of underdevelopment and acceleration of the same mental functions.

Examples of such "comorbidity" are the coexistence of painful hyperesthesia with an urge to self-stimulation, a combination of complex games - fantasies with the primitiveness of non-play objects, early mastery of little-used words, and the richness of spontaneous verbalization with the poverty of everyday speech and a delay in the operation of personal places with hypnosis. For these reasons, it is difficult to diagnose, assess the dynamics of individual symptoms necessary for the construction of a successful psycho - pedagogical correction.

Despite the more than seventy-year history of studying autistic disorder in children, many issues - etiopathogenetic mechanisms, psychopathological structure, isolation of primary and secondary disorders, nosological interpretation - remain insufficiently defined, contradictory, complicating timely diagnosis and adequate correction.

Keywords: autistic spectrum disorder, autism, diagnostic criteria, multidisciplinary diagnosis, psychophysical adaptation and rehabilitation.

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Differential diagnostics of autistic disorder

The importance of this problem lies in the fact that autistic disorder and autistic spectrum disorder of children diagnosed with is over the past decades have attracted more and more attention of specialists in various fields such as psychology, special pedagogy and last but not least psychiatry. Interest in this problem is due both to certain achievements in the field of clinical study of children with autism and ASD, and to the lack of knowledge of the practical issues of therapy and psychological and pedagogical correction.

Significant differences in the course of treatment, therapy and prognosis of a wide range of autistic dirorder, including autistic spectrum disorder of endogenous - procedural genesis, Kanner and Asperger syndromes, autistically similar disorders of organic and chromosomal origin, requires a solution of rather complex issues of differential diagnostic nature [Basina, 2010, p. 20]. The pivotal core of diagnose "autism" as a clinical syndrome is lack of communication, lack of contact.

The scientist in psychiatry L. Kanner was the first who pointed to the following diagnostic criteria for the autistic disorder described by him [Kagan, 1981, p. 13]. These criteria are: 1) the inability to establish relationships with people from the beginning of life; 2) extreme isolation from the outside world, ignoring stimuli until they become painful; 3) lack of acceptance of the readiness posture when picking up; 4) lack of communicative use of speech; 5) brilliant mechanical memory; 6) echolalia; 7) extreme literalness in the use of words; 8) perverted use of personal pronouns; 9) digestive disorders in the 1st year of life; 10) a sharp fear of certain loud sounds and moving objects; 11) monotonous repetition of sounds and movements; 12) fear of changes in the environment; 13) the monotony of spontaneous activity; 14) monotonous mechanical games with non-game objects; 15) an impression of good intelligence due to success in specific skills and smart facial expressions; 16) a serious facial expression, tense in the presence of other people and satisfaction at their departure; 17) good physical health.

The overwhelming majority of the signs described by L. Kanner (14 out of 17) can be identified by direct observation of the child's behavior and his ability to perform motor acts when executing various types of activity.

In addition to these specific diagnostic features, children diagnosed with autism often display a range of other non-specific problems, such as fears, eating disorders, outbursts of anger, and aggressive behavior. Harmful behavior itself is quite often observed (for example, as a result of biting hands, hitting the head), especially with concomitant severe mental retardation.

Classification of autistic disorder

Without the classification of autistic disorder is impossible, since the differentiation between schizophrenia and childhood autism is a complex and not completely solved problem. The reduction of all or almost all autistic children to the group of schizophrenia or, conversely, the fundamental avoidance of this diagnosis reduces the possibilities of individual rehabilitation measures and adaptation of patients [Kagan, 2001, p. 34].

Described by Russian specialist in child's psychiatry V.M. Bashina, signs of asynchronous development of children with Kanner's syndrome, manifested, as already mentioned earlier, in a violation of the hierarchy of mental, speech, motor, emotional maturation, a violation of ontogenetic repression of primitive functions by complex ones. This phenomenon of "layering" of primitive functions by complex ones, according to the author, is one of the main differences between Kanner's syndrome from all other types of impaired development with symptoms of autism of a different origin [Bayenskaya, 2014, p. 18].

The other Russian scientist V.E. Kagan maintains the idea that the clinical picture of schizophrenia in early childhood is so close to Kanner's syndrome that many specialists - psychologists believe the retention of the term "childhood autism" is useful only in terms of contrasting schizophrenia in adults [Kagan, 2001, p. 35]. The clinical features of autism in early childhood schizophrenia consist in the presence of residual positive psychopathological (catatonic, hallucinatory – delusional and affective) symptoms, the prevalence of more complex motor stereotypes.

To improve the quality of differential diagnosis of autism in children, classifications of autistic disorder in children were created, and not least, the psychological classification of autism by O.S. Nikolskaya, that helps to multidisciplinary group of specialists to understand the problem and draw up an accurate psychological and correctional picture. The main factor in its classification is the concept of autism as, first of all, a violation of emotional development. The mentioned author identified 4 groups:

1. Complete detachment from what is happening (corresponds to the level of assessment of the intensity of environmental influences, or the level of field behavior).

2. Active rejection of the environment (corresponds to the level of affective stereotypes).

3. Seizure by autistic interests (corresponds to the level of affective expansion).

4. Difficulties in organizing communication and interaction (corresponds to the level of basal affective communication) [Bashina, 2010, p. 22].

In accordance with the international classification of disorders, which is nowadays is still used by specialists (ICD – 10) autism spectrum disorders are included in heading group named as F 84 "General disorders of psychological development" and include:

F 84.0 Childhood autism: 1) Autistic disorder; 2) Childhood autism; 3) Childhood psychosis; 4) Kanner's syndrome.

F 84.1 Atypical autism: 1) Atypical childhood psychosis; 2) Mental retardation with features of autism.

F 84.2 Rett's Syndrome.

F 84.3 Other childhood disintegrative disorder: 1) Childhood dementia; 2) Geller's syndrome; 3) Symbiotic psychosis.

F 84.4 Hyperactive disorder associated with mental retardation and stereotyped movements.

F 84.5 Asperger's Syndrome: 1) Autistic psychopathy; 2) Childhood schizoid disorder.

F 84.8 Other general developmental disorders.

F 84.9 General developmental disorder, unspecified [Pyatnitsky, 2017, pp. 61].

The aspects of international classification of deseases

The British scientist in psychiatry L. Wing in 1972 classified children with autism into passive, indifferent, active [Morozov, 2014, p. 87] and based on L. Wing's "triad" [Wing, 1981, p. 31], sections of the official diagnostic classification of ICD – 10 were developed, since historically, the World Health Organization (WHO) proposed to develop its own classification system for mental disorders, which was mainly used for the purpose of insurance payments, professional support and collection of national and international statistics.

Speaking about the classification innovations in the world of neuropsychiatry and psychiatry, let us dwell on the changes affecting the pediatric contingent. The main changes related to the problem of diagnosis and monitoring of patients with autism and autistic spectrum disorder:

1) the severity of neurodevelopmental disorders is determined not by IQ, but by the level of adaptive functioning;

2) speech disorders have entered a new category "social communication disorder", in which some of the syndromes coincide with "autism spectrum disorder";

3) the category of autistic spectrum disorder appears to replace the existing diagnoses of autism, Asperger's syndrome, disintegrative disorder of childhood and unspecified general developmental disorder – all of them cease to exist as independent diagnoses;

4) learning and movement disorders are reorganized and partly combined.

Innovations and changes in the classification of mental, behavioral and developmental disorders of the nervous system

In June 2018, the World Health Organization (WHO) released for its 194 member states the pre-final version of the 11th International Classification of Diseases and Health Problems (ICD – 11) for the maintenance of mortality and morbidity statistics, for consideration and preparation of this project for implementation. The World Health Assembly, which includes ministers of health from all member states, is expected to endorse ICD – 11 at its May 2019 meeting. Upon approval, Member States will begin the process of moving from ICD – 10 to ICD – 11 and, starting January 1, 2022, will submit health statistics reports to WHO using ICD – 11 [Pyatnitsky, 2017, p. 65].

The chapter on mental disorders of the current ICD – 10 is the most widely used classification of mental disorders worldwide [Reed, 2011, p. 120]. During the development of ICD – 10, the WHO Division of Mental Health and Narcology believed that differing classification options should serve the interests of different users. The ICD – 10 version for statistical reporting contains concise, glossary-like definitions for each category of disorder, but this was considered insufficient for use by mental health professionals in a clinical setting [WHO, 2016, p. 41].

For mental health multidisciplinary professionals was developed the Clinical Descriptions and Diagnostic Guidelines (CDDGs) for chapter on mental disorders of ICD – 10, which are intended for general clinical, educational and service use. Each disorder described in its major and associated manifestations has been provided with more detailed diagnostic guidelines that have been developed to help mental health physicians make more accurate diagnoses.

The innovations in ICD – 11 is an approach to describing the main characteristics of each disorder, representing symptoms or signs that can be clinically found in all cases of the disorder. Although the lists of essential signs in the CDDG superficially resemble diagnostic criteria, arbitrary limits and precise requirements regarding the number of symptoms and duration are generally avoided, unless they have been established empirically in different countries and cultures, or not another compelling one. This approach is designed to match the way clinicians actually diagnose. It introduces flexibility in clinical judgment and increases clinical benefit as cultural differences in presentation, as well as contextual and health system factors that may influence diagnostic practice are tolerated [Evans, 2013, p. 183].

This flexible approach is consistent with the results from interviews with psychiatrists and psychologists conducted early in the ICD – 11 development process regarding the desirable characteristics of a mental disorder classification system [First, 2018, p. 188]. Field studies in a clinical setting in 13 countries have confirmed that clinicians value the clinical usefulness of this approach [Reed, 2018, p. 314]. Note that the diagnostic reliability of ICD – 11 guidelines appears to be at least as high as when using another approach based on strict criteria [Reed, 2018, p. 177].

The age-specific approach adopted in ICD – 11 is that a separate group of behavioral and emotional disorders with onset usually occurring in childhood and adolescence has been eliminated. These disorders have been categorized into other groups with which they share the most common symptoms. The most important innovation in ICD - 11 is the inclusion of a dimensional approach in the context of an explicitly categorical apparatus with precise taxonomic constraints. This approach was stimulated by evidence that most mental disorders can be better described by several overlapping

dimensions rather than discrete categories [Krueger, 2018, p. 286], [Markon, 2010, p. 278], and this led to changes in the approach to the coding structure in ICD – 11.

The advantage of the dimensional system is that it eliminates the artificial comorbidity of personality disorders and the diagnosis of an unspecified personality disorder, and also provides a basis for the study of basic characteristics and their interactions in various personality disorders.

The general structure of the ICD - 11 sections devoted to mental, behavioral and mental development disorders

As it was mentioned ICD – 11 uses a flexible alphanumeric coding structure with the ability to create significantly more groups. This allowed for the development of diagnostic groupings with greater reliance on scientific evidence and the needs of clinical practice, which attracted mental health professionals from around the world and explored the possibilities of conceptualizing mental health views and the relationship between mental disorders. The organizational structure of ICD – 11 was also influenced by the efforts of World Health Organization (WHO) and the American Psychiatric Association (APA) to align the overall structure of ICD – 11 chapters on mental and behavioral disorders with the structure of Diagnostic and Statistical Manual of Mental Disorders (DSM – 5).

The principles guiding the organization of ICD – 11 included an attempt to streamline diagnostic groups in terms of their development accordingly, neurodevelopmental disorders are located at the beginning and end of the classification of neurocognitive disorders and to group disorders together on the basis of assumed common etiological and pathophysiological factors (for example, stress-related disorders), as well as general phenomenology (for example, dissociative disorders).

Major changes in ICD – 11 include the renaming of mental retardation in ICD – 10, which was an outdated and stigmatizing term that inadequately encompassed the range of forms and etiologies associated with the condition in intellectual disabilities. Disorders of intellectual development continue to be defined based on significant limitations in intellectual functioning and adaptability of behavior, ideally defined using standardized, appropriately normalized and customizable metrics. Considering that different regions of the world have traditionally used their own measurement standards or trained personnel, and because of the importance of determining the severity of the condition for treatment planning, the ICD – 11 CDDG provides a complete set of tables with behavioral indicators. The criteria of intellectual functioning and adaptive behavior are separated. The functional areas are divided into three areas: 1) conceptual, social, practical; 2) there are three age groups (early childhood, childhood / adolescence and maturity) 3) four levels of severity (light, medium, heavy, deep).

Autism spectrum disorder in ICD – 11 in what we are interested most includes both childhood autism and Asperger's syndrome from ICD – 10 within the same category, characterized by deficits in social communication and limited, repetitive and inflexible patterns of behavior, interests, or activities. The assessment criteria are designed to represent the degree of impairment in intellectual functioning and language skills, and covered all manifestations of autism spectrum disorder in a large number of dimensions.

The assessment criteria are designed to represent the degree of impairment in intellectual functioning and language skills, and covered all manifestations of autism spectrum disorder in a large number of dimensions. First, ADHD replaced hyperkinetic disorder in ICD – 10 and was moved to the group of disorders of the nervous system due to early onset. Second, characteristics disorders in intellectual, motor, social functioning and frequent combination with other disorders of the nervous system. [Reed, 2018, p. 310]. Both versions of ICD chapter 11, which will be used by WHO Member

States for health statistics and the Clinical Description of Diseases Guidance (CDDG) for clinical use by mental health professionals, are now largely complete [Reed, 2018, p. 314].

The involvement of a multidisciplinary team of specialists in the diagnosis of autistic disorder in children encompasses all types of classifications available to professionals. The use of International Classification of Functioning and Disability (ICF) is a classification of health and health – related conditions for children and adults that was developed by World Health Organization (WHO) and published in 2001.

The ICF framework consists of two parts: Functioning and Disability and Contextual Factors that also are consisting of two more structures. The Functioning and Disability includes: Body Functions and Structures – describes actual anatomy and physiology/psychology of the human body. Activity and Participation – describes the person's functional status, including communication, mobility, interpersonal interactions, self-care, learning, applying knowledge, etc. Contextual Factors include: Environmental Factors – factors that are not within the person's control, such as family, work, government agencies, laws, and cultural beliefs. Personal Factors – include race, gender, age, educational level, coping styles, etc. [WHO, 2016, p. 42].

Practically, in the process of psychological and special pedagogy work of the multidisciplinary team of specialists on correction of the autistic disorder of children the ICF classification gives an opportunity not only to acknowledge the problem, which makes it also possible to determinate the level of formation of psycho – motor (functional) activity and to prepare a special psycho – pedagogical program to train children form the skills of performing activity such as daily activity and academic performance.

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