

- Development of the system of early identification of ASD. Using of special questionnaires in primary health care to identify a risk group and risk factors. Special training for district pediatricians in the field of developmental disorders and ASD, focus of health care for this children.
- The development of personalized and multiprofessional approach and taking into account all the clinical signs.
- Comprehensive medical examination of children with developmental disorders (including ASD) in pediatric (non-psychiatric) medical services with the involvement of a multidisciplinary team of specialists.

The first step is the approval of the Ministry of Health of Russian Federation to conduct a project “The Model of multidisciplinary health care for children with ASD in paediatric setting” by National Medical Research Center for Children's Health (laboratory of social paediatrics).

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A MULTIDISCIPLINARY APPROACH TO THE MANAGEMENT OF PATIENTS WITH AUTISM SPECTRUM DISORDERS

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Background: According to the WHO, 1 child in 160 in the world has an autism spectrum disorder (ASD). Moreover, it is indicated that in some well-controlled studies, significantly larger numbers are reported.

In recent years, ASD studies have not being seen solely within the narrow framework of child psychiatry. There are number of works which indicate to concomitant (non-mental) disorders in patients with ASD, that have a significant impact on the behavior of patients (disorders of the digestive system, allergies, pain, physical discomfort etc.). The need for enhanced therapeutic approaches in the healthcare delivery to children with autism is becoming increasingly apparent. Despite significant efforts to improve the delivery of health-care services for children with ASD, there is still no proper continuity in work between psychiatric and pediatric institutions in provision of medical aid. As a consequence of this is an unacceptable gap in the health-care services delivery, creating potential problems of socialization and habilitation of such children.

Purpose: Justify approaches to the development of a model of multidisciplinary support for children with ASD.

Subjects and methods: The electronic databases of scientific information Medline, Web of Science, Scopus, PubMed, Cochrane Database of Systematic Reviews were used to search for articles published in peer-reviewed scientific journals devoted to issues of concomitant non-mental disorders in children with ASD. The existing domestic clinical guidelines and standards of specialized medical care for children with common disorders of psychological development (autism spectrum) were analyzed. The profile experts (pediatricians, neurologists, genetics, gastroenterologists, nutritionists, allergists, immunologists and psychiatrists) were involved to the evaluation of the received information. According to their assessments the approaches to the development of multidisciplinary support model for children with ASD have been developed.

Results: From the end of the twentieth century to nowadays, the growing interest in the problem of concomitant diseases connected with ASD is reflected in a number of scientific publications devoted to this topic. The direct connection of disorders (changes) of behavior in children with ASD has been demonstrated in studies that had been focused on such conditions as gastrointestinal disorders, allergy, premenstrual syndrome, otitis etc. There were indicated that behavioral disturbances often occur due to a pain and discomfort that accompany a somatic illness.

A high prevalence of epilepsy in patients with autism is well known. According to various studies these figures are from 20% to 50%. The high probability of such combination is taken into account in Russian clinical guidelines and standards of specialized medical care for children with common disorders of psychological development (autism spectrum).

Another situation arises in relation to the frequency of other comorbidities, which are not mentioned in the clinical guidelines and treatment protocols. For example, recent studies are increasingly pointed to metabolic abnormalities with ASD, primarily mitochondrial dysfunction, especially in cases of so-called regressive autism. It is important to emphasize that psychiatric diagnosis, which corresponds to ASD, does not exclude the presence of metabolic and other diseases. It must be remembered by all professionals involved in providing medical care to children.

The high prevalence of gastroenterological disorders in children with ASD (up to 84%) is confirmed by a large number of studies. Meanwhile, the existing clinical guidelines (treatment protocols) do not pay due attention to this. Moreover, eating disorders (“selective appetite”, “perverted appetite”, “light eater”) are often regarded as psychopathological symptoms. Consequently, additional studies are not conducted, concomitant disorders are not established, and patients do not receive adequate medical care. Meta-analysis published in 2014 in journal of pediatrics, shows that disorders of the digestive system are found in children with ASD 4 times more often than in “neurotypical” peers. The most common of them are diarrhea, constipation, gastroesophageal reflux, flatulence, pain or discomfort in the abdomen. All these disorders can significantly affect the behavior of a child with ASD.

Problems associated with digestion often involve the selection of special diets for children with ASD. Despite the fact that issues related to nutritional characteristics require additional scientific researches, parents of patients with ASD, getting acquainted with a few publications, often make their own decision on the use of a gluten-free and casein-free diet when feeding their children. Therefore, a psychiatrist and pediatrician (gastroenterologist, nutritionist) needs to have sufficient information on these issues to minimize the possible adverse effects of nutritional restrictions on the child and to promote family adherence to medical support for each case of ASD.

According to the experts, the underestimation by medical specialists of concomitant somatic diseases in children with ASD is due to the distorted ideas that any forms of these patients behavior are determined by their psychopathological features. In addition, some authors point to frequent atypical clinical manifestations of comorbidity in such children. It is also obvious that many patients with ASD simply cannot adequately express (due to the age, difficulty in communication, verbal or intellectual disorders) their complaints, to localize the pain or unpleasant sensations.

This leads to another problem: in medical institutions, doctors, in many cases, are not familiar with the specifics of examining children with ASD, find it difficult to establish contact with them. On the other hand, there is no system for preparing a child with ASD to undergo medical procedures and manipulations, which can make a diagnostic more difficult. The timely correction of concomitant somatic disorders can lead to reducing of the main symptoms of autism. A psychiatrist must be very careful about somatic deficiencies of his/her patients and insist on a thorough medical examination of every child with ASD, especially since many of these comorbidities can be cured.

Conclusion: Investigation of influence of a wide range of comorbidities on the symptoms of ASD remains the focus on extant and projected in the coming years research. The data obtained in the framework of these studies should be used in practical activities. It is necessary to develop the skills of recognizing signs of trouble, pain or discomfort in people with ASD by medical specialists of different profiles. At the present stage, it is necessary to take into account accumulated scientific information for the reorganization of medical care for children with ASD, to ensure a multidisciplinary personalized approach to diagnosis and treatment.

In the Federal State Institution "National Medical Research Center for Children's Health" of the Ministry of Health of Russia, as part of the state task for conducting applied research, a model of multidisciplinary support for children with ASD has been developed. This model is being tested in the conditions of the children's clinical and diagnostic center, with the involvement of a poly-professional team. The results of this work are planned to be used for clinical guidelines that define the main aspects of multidisciplinary medical support for children with ASD.