
КОЛОНКА ТЕМАТИЧЕСКОГО РЕДАКТОРА
THEMATIC EDITOR NOTE

A Multidisciplinary Approach to the Diagnosis, Treatment and Prevention of Developmental Disorders of Children in the First Years of Life

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Objectives. The early detection of deviations in the child development is an important task – both in medical and psychological and pedagogical practice. As a result of the variety of specialized approaches to the development of children in the first years of life, a general idea of the health and development of a young child is often obscured by numerous private assessments. The task of developing a unified synthetic approach towards understanding and assessing development by specialists of different profiles seems very difficult.

Methods. A brief comparative-historical analysis was performed of trends in the change of modern approaches towards the diagnosis, therapy, and prevention of developmental disorders in children in the first years of life.

Results. Arguments are made for the predominant influence of multidisciplinary in theoretical thinking and clinical practice. At the same time, there has been a tendency towards increased demand on the part of specialists for interdisciplinarity when constructing an overall picture of development, the state of mental health and diseases in a child. The shift in priorities when assessing the development of children by modern researchers is shown – from the levels of formation of cognitive, motor, speech or everyday skills towards the emotional and social levels. There has been a growing understanding among specialists of various profiles of the fundamental importance of relationships with close adults for the development and mental health of an infant and young child. A brief review of the articles included in the thematic issue is made, convincingly illustrating interdisciplinarity and multidisciplinary in modern diagnosis, therapy, correction and the prevention of childhood developmental disorders.

Conclusions. The situation of the insufficient provision of Russian specialists working with children in the first years of life with psychodiagnostic tools and scientifically grounded correctional practices remains, the attention of science organizers in the field of medicine, psychology and pedagogy to this has been drawn.

Keywords: interdisciplinary approach; multidisciplinary approach; infancy; early age; diagnosis of developmental disorders; early help

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Мультидисциплинарный подход к диагностике, терапии профилактике нарушений развития у детей в первые годы жизни

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Актуальность. Раннее выявление отклонений в развитии ребенка представляет собой важнейшую задачу — как в медицинской, так и в психолого-педагогической практике. Вследствие многообразия специализированных подходов к развитию детей в первые годы жизни общее представление о здоровье и развитии маленького ребенка нередко оказывается размытым многочисленными частными оценками. Задача выработки единого синтетического подхода к пониманию и оценке развития ребенка специалистами разного профиля представляется весьма сложной. Недостаточно четко разграничены понятия «междисциплинарный» и «мультидисциплинарный» в подходах к изучению и оценке развития детей первых лет жизни.

Методы. Проведен краткий сравнительно-исторический анализ тенденций в изменении современных подходов к диагностике, терапии и профилактике нарушений развития у детей в первые годы жизни.

Результаты. Приведены доводы в пользу преобладающего влияния мультидисциплинарности в теоретическом мышлении и клинической практике. При этом отмечена тенденция к усилению запроса со стороны специалистов на междисциплинарность при построении общей картины развития, состояния психического здоровья и заболеваний у ребенка. Показано смещение приоритетов при оценке развития детей современными исследователями — от уровней сформированности познавательных, моторных, речевых или бытовых навыков к эмоциональным и социальным уровням. Отмечено растущее понимание специалистами разного профиля принципиальной важности отношений с близкими взрослыми для развития и психического здоровья ребенка младенческого и раннего возраста. Сделан краткий обзор вошедших в тематический номер статей, убедительно иллюстрирующих междисциплинарность и мультидисциплинарность в современной диагностике, терапии, коррекции и профилактике нарушений детского развития.

Выводы. Сохраняется ситуация недостаточной обеспеченности российских специалистов, работающих с детьми первых лет жизни, психодиагностическими инструментами и научно обоснованными коррекционными практиками, к чему привлечено внимание организаторов науки в области медицины, психологии и педагогики.

Ключевые слова: междисциплинарный подход; мультидисциплинарный подход; младенчество; ранний возраст; диагностика нарушений развития; ранняя помощь

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Introduction

The earliest possible detection of deviations in child development is the most important task in both medical and psychological and pedagogical practice. More than a hundred years ago, A.L. Gesell [5] laid the foundation for the scientifically based diagnosis of early childhood development by developing a system of standardized tests and age norms for assessing the mental development of children from three months to six years of age. It was he who proposed to divide the assessment of a young child's development into several separate areas — speech, motor skills, adaptive, social and personal behavior. Later, the technique of dividing a single de-

velopmental process into a number of spheres for the purpose of their parallel assessment acquired the status of scientific tradition and formed the basis of most subsequent approaches to diagnosing the mental development of infants and young children. The number and content of the developmental spheres have changed, but in general, this analytical approach has been retained to this day.

In modern practice, the processes of the development of speech, movements, emotions, sensorics, communication, activity, and certain specific skills in children in the first years of life are of interest not only to developmental psychologists, but also to a number of other specialists. Among them are doctors — pediatricians, neonatolo-

gists, child neurologists, child psychiatrists; correctional pedagogues – speech therapists, sign language therapists, typhlopedagogists; preschool teachers; psychologists – child, family, perinatal, neuropsychologists, and other specialists. In a situation of the underdevelopment or health impairment of a child, each specialist needs to solve their professional tasks and apply diagnostic methods relevant to them. Thus, special (correctional) teachers use the methods of pedagogical examination of hearing and vision in children with sensory deficits; the methods of studying thinking, attention and memory – in children with intellectual disabilities; the methods of studying motor development – in children with motor disorders. A doctor in a situation of sensory deficiency or intellectual disability in a child will apply a different system of assessment, a family psychologist will use another one.

As a result of this diversity of approaches, a situation has developed where the overall picture of a young child's health and development is often vague because of numerous private assessments that are not always clear to all the professionals involved in the process of providing care. At the same time, professionals of different profiles, as a rule, strive to be aware of the diagnostic assessment and therapeutic possibilities of representatives of related professions. However, it should be noted that the organizational principles of the Russian system of help to the child and his/her family often hinders the convergence of the professional positions of different specialists. This is especially noticeable in the case of their different affiliations.

Methods

The article presents a brief comparative historical analysis of changes in the existing approaches towards the diagnosis of developmental disorders in children in the first years of life, their therapy and prevention.

Results

When speaking about the modern changes in approaches towards assessing the development of children in the first years of life, it is impossible to ignore at least two significant and striking points. First, it is the shift of emphasis from the indicators of cognitive development of a young child to the parameters of emotional and social development. Until recently, the tradition of focusing on the intellectual abilities of a child in the first years of life as a basic indicator of his or her overall mental development persisted. An example is E.A. Strebeleva's "Diagnostics of cognitive development of young children" method [6], which is usually used in Russian kindergartens to assess the lev-

el of mental development of pupils. However, in recent decades, there has been a steady tendency to emphasize areas of emotional, social and communicative development rather than cognitive development as the basic areas of development in infancy and early childhood. Thus, in Russia in the year 2000, a team of authors of the Psychological Institute of the Russian Academy of Education developed the "Diagnosis of mental development of children from birth to three years of age" method [4], where the indicators of children's general mental development are the levels of the development of communication and joint object activity with an adult. In Western countries, this trend was clearly manifested during the third revision of the "Bayley Scales" in 2006 – perhaps the most popular instrument for assessing the development of children in the first years of life [1]. It included the "Social-Emotional Growth Chart" developed by famous child psychiatrist and psychologist S. Greenspan [8] as an independent scale. According to his concept, it is emotions and the experience of early social relationships that are the basic components of development, that in turn affect the possibilities of intellectual development and learning [3]. Thus, we are witnessing a shift in priorities from cognitive, motor, speech, or everyday skills towards emotional and social levels. Progress in development is now increasingly judged not by the ability to draw a circle or fasten buttons, but, for example, by the ability to express wants and needs clearly to another or the ability to act together. It should also be noted that the lag in the child's social-emotional development stages or a decrease in the level of communication are very informative indicators in the diagnosis of mental disorders, in particular, autism spectrum disorders [2].

Secondly, the understanding of the fundamental importance of relationships with close adults for a child's development and mental health is firmly established among modern infancy and early childhood specialists. The importance of parents and the entire family environment is enormous for a child of any age, but in the first years of life it reaches a vital level. Modern clinical psychodiagnoses of infancy and early childhood necessarily include the study of a young child's relationships with his or her closest family environment, primarily with the mother (or a person who acts as her substitute) [7; 9]. Within the framework of different concepts of development, researchers identify certain characteristics of a parent that determine the quality of his or her relationship with a young child. In some of them it may be the parent's emotional availability for the child and the ability to correctly understand the signals coming from him/her and adequately respond to them. In others, the recognition of the individuality and subjectivity of the infant or young child is considered determinant. The parent's competence in caring for a child, especially a child with health and developmental disorders, the parent's abil-

ity to neglect part of his or her needs for the sake of the child's interests, etc. are considered. Recently, in scientific literature, a new concept appeared – the “adaptability of relationships”, which allows to give an integrative assessment of the entire variety of diagnosed parameters. At the same time, the complexity of parental attitude and the ambiguity of its manifestations oblige the specialist to approach with caution both the procedure of the assessment of relations and the interpretation of the obtained results.

It seems to make sense to more clearly distinguish between two concepts related to diagnostic, therapeutic and preventive tactics – the “interdisciplinary” and “multidisciplinary” approaches. The first one implies the interpenetration and integration of the assessments of specialists from different fields, accompanied by the building of a common picture of development and existing problems, understood by all those involved in the assessment process. The second reflects the situation when each specialist sees and evaluates only “his/her own”, taking into account to a greater or lesser extent the vision of the situation of a representative of another profession or specialization. Admittedly, developing a single synthetic approach to understanding development is a very difficult task, especially given the analytic tradition that has developed over more than a century. Multidisciplinarity remains strong in theoretical thinking and clinical practice. Nevertheless, it is possible to speak about the formation of an increasingly distinct demand from specialists to obtain some general picture of child development, health status and existing diseases, formulated in generally accepted and commonly understood terms.

The selection of articles in this thematic issue of “Autism and Developmental Disorders” reflects the wide variety of approaches towards assessing the development of the young child. This applies both to understanding risk factors for developmental disorders and to diagnostic, therapeutic, and preventive options. Thus, twin birth is considered as one of the risk factors for optimal developmental progress. Among the medical and biological prerequisites of dysontogenesis are genetic factors, features of the intrauterine development of twin children, their gestational age and birth weight, the existence of an increased risk of traumatization in childbirth, and the features of the somatic condition in the first months after birth. At the same time, no less attention is paid towards psychological risk factors associated with the features of the formation of the system of “mother – twin” relations, the organization of care, interaction, upbringing and education of children in a family with twins.

A study of mothers of profoundly premature or severely impaired children revealed a high risk of neurotic states in women, which, in turn, become secondary

sources of risk for the development of their children. A clinically significant anxious, depressive or euphoric state of the mother in the postpartum period has a strong and lasting impact on the mental development of the child, in this regard, the author raises the question of the organization of specialized psychological assistance to mothers in the conditions of a long-term hospital stay together with the child in the neonatal intensive care unit. The results of another study, devoted to the dynamics of a parent's emotional state in the situation of an infant's illness and hospitalization, lead to a similar conclusion. Taking into account the high percentage of the hospitalization of children at this age, as well as the identified risk of changing the parent's attitude towards the child in the direction of the formation of overprotection, the feasibility of psychoprophylactic work with both the hospitalized child and his parent is undoubted.

The data of the complex medical, psychological and pedagogical examination of children conceived artificially showed the peculiarity of their neurocognitive development and the formation of higher mental functions. At the same time, no direct indications of the existence of risks of developmental disorders were found. It should be noted that, to date, the question of whether the use of *in vitro* fertilization has a negative impact on the subsequent development of children remains open worldwide.

Three clinical cases are presented in this issue to illustrate the possibilities of multidisciplinary developmental diagnostics. One of them is an example of the practical use of the international “Diagnostic Classification of Mental Health and Developmental Disorders of Infancy and Early Childhood (DC:0-5)”, another is an adapted version of the “Communication Matrix” method, and the third is a biochemical method for identifying serological markers associated with the development of autism spectrum disorders.

The practical application of DC:0-5 has shown that this diagnostic system allows for a clear structuring of information on the various aspects of child development, namely, the state of the child's physical health, the level of mental development, stress factors affecting the child and the family, the features of dyadic and family relationships, the cultural characteristics of the family, and the presence of mental health disorders in the child. The use of an interdisciplinary approach allowed the research team to see the clinical situation more fully, to assess both risk factors and aspects that are strengths – and on their basis develop a comprehensive program of support for the child and family.

The “Communication Matrix” diagnostic tool was used by the authors in diagnosing the communicative sphere of a child with a systemic underdevelopment of speech – primary and in the course of monitoring. The article emphasizes that the deficit of methods for the

examination of “speechless” children makes us turn to the search for new diagnostic possibilities. A thorough analysis of the results of using the “Communication Matrix” technique allowed the authors to evaluate the advantages and disadvantages of its use on a concrete example.

The search for the biochemical markers of dysontogenesis and their use as indicators of disorders of the functional state of the central nervous system is a new, dynamically developing direction of modern science. The study conducted by our colleagues showed that therapeutically determined changes in the clinical picture in children with ASD are accompanied by quantitative changes in the content of the marker protein in their blood. Supplementing the clinical diagnosis of neurodevelopmental disorders with molecular biological methods probably opens wide opportunities for the further improvement of the diagnostic process.

Two publications in this issue of the journal are devoted to the problems of organizing early help for children and their families. One of them is a review of studies evaluating the effectiveness of the ESDM Early Start Denver Model. Based on a large number of studies with different designs, it is shown that the ESDM model has a strong evidence base and can be considered an evidence-based practice of early help. At the same time, the insufficiency of works by domestic authors in this area is noted. The second article is a detailed analysis of the regional system of early help in the Yaroslavl region. The results of the monitoring of the early help service provided very valuable data

concerning the amount of assistance provided, the organizational approaches, types of disorders in children, forms of work and the degree of their demand among parents of children during the first years of life. It is emphasized that the use of a family-centered approach is an indispensable component of the early help system, due to the leading role of parents in corrective and developmental work with the child. One of the conclusions concerns the underrepresentation of infants in the service. The author explains this by the delayed detection of mental developmental disorders in children under one year of age. The absence of neuropsychiatric developmental disorders in part of cases, stated by the pediatrician during the examination, creates an incorrect idea about the level of the psychological and mental health of the infant.

Conclusion

Thus, the need for a broad interdisciplinary approach towards the study of the modern child during the first years of life is no longer in doubt, while the opportunities for it are still emerging. For domestic specialists working with infants and young children, the situation of a rather poor provision with modern psychodiagnostic tools and scientifically grounded correctional practices remains. This situation represents a serious scientific and practical problem and should become an object of attention for the organizers of science in the field of psychology, medicine and pedagogy. ■

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