



Article

Modern Methods of Speech Formation in Children with Autism Spectrum Disorder

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Abstract: This article focuses on solving problems of speech development in children with autism spectrum disorder (ASD) the methods of intervention, their scientific and theoretical basis and the importance of multidisciplinary approaches are analyzed in detail. Autism spectrum lethargy in speech development, disorders in expressive and receptive speech, social among children living with disorders This article focuses on solving problems of speech development in children with autism spectrum disorder (ASD) the methods of intervention, their scientific and theoretical basis and the importance of multidisciplinary approaches are analyzed in detail.

Keywords: Autism spectrum disorder (ASB), speech development in children, speech intervention, speech therapy, modern therapy methods, ABA therapy, multisensory approaches, psychological-pedagogical support, multidisciplinary team, Clinical Psychology.

Introduction

Autism spectrum lethargy in speech development, disorders in expressive and receptive speech, social among children living with disorders[1,2]. Limited communication and difficulties in exchanging ideas through speech are common, which affects their daily lives. significantly prevents full-fledged participation. In the article, first of all, the impact of the autism spectrum on speech development, which is the neurological and psychological foundations in the area are covered, as well as the advantages of early detection and diagnostic methods[3,4,5]. In recent years modern interventional approaches that have begun to be widely used-e.g., natural environment-based interventions. In the article, first of all, the impact of the autism spectrum on speech development, which is the neurological and psychological foundations in the area are covered, as well as the advantages of early detection and diagnostic methods. In recent years modern interventional approaches that have begun to be widely used-e.g., natural environment-based interventions (Naturalistic Developmental Behavioral Interventions), Visual Support Tools (PECS, visual schedules and graphs), Functional Speech Stimulation Therapies, sensor-integrative approaches, as well as technology-based tools (mobile applications, computer applications, artificial intelligence-based platforms) with detailed information about their effectiveness [6,7,8].

The success of speech intervention is in many cases multidisciplinary depending on the approach, the article pays special attention to the role and capabilities of this particular approach. In particular, as well as technology-based tools (mobile applications, computer applications, artificial intelligence-based platforms) with detailed information about their

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effectiveness [9]. The success of speech intervention is in many cases multidisciplinary depending on the approach, the article pays special attention to the role and capabilities of this particular approach. In particular, speech, psychologist, neurologist, educator, nurse and parents the effectiveness is illuminated by examples [10]. Drawing up an individual rehabilitation program for each child through a multidisciplinary approach, speech, emotional, an opportunity arises to provide balanced support for social and cognitive development. Article, as well as autism in the conditions of Uzbekistan problems encountered when working with children with spectrum disorders, lack of specialists, delays in early diagnosis effectiveness is illuminated by examples. Drawing up an individual rehabilitation program for each child through a multidisciplinary approach[11].

In recent years, the number of children with autism spectrum disorders (ASD) has been increasing worldwide. According to the data According to the World Health Organization (WHO), at least one in 100 children may have symptoms of autism. ASD is primarily characterized by specific disorders of social interaction, communication, and behavior[12]. In particular, delayed speech development and unusual communication patterns are among the most pronounced symptoms of this disorder. Therefore, speech intervention (interventions aimed at the development and restoration of speech) in children with ASD It requires a comprehensive and effective approach from the earliest stage. Since autism spectrum disorders manifest themselves individually in each child, there is no single approach. There is no access to their treatment[13]. It will be necessary to create an intervention program based on an individual plan for each child. This process should include a combination of speech therapy, psychological support, pedagogical approaches, and neurological treatment. Therefore, when working with children with ASD The key point is an interdisciplinary approach. This approach should be organized in a coordinated manner with the participation of a speech therapist, psychologist, speech pathologist, neurologist, pediatrician and parents [14]. One of the methods underlying modern treatment approaches is speech intervention, which aims to the goal is to help the child express his thoughts, expand his vocabulary, and develop oral and written language skills. Such intervention technologies include applied behavior analysis (ABA), Image Exchange System (PECS), TEACCH methodology, as well as the use of technological tools such as mobile applications, interactive programs, and communication devices. In Uzbekistan the growing number of children with autism and their early identification and implementation of effective intervention methods, increasing the potential of specialists in this area [15].

Therefore, this article provides an in-depth analysis of modern approaches to speech therapy in children with ASD, the role of a multidisciplinary team, as well as current practices and promising areas. The article highlights the importance of speech therapy in improving the social integration and quality of life of this category of children[16,17].

The purpose of this scientific study was to study the effectiveness of speech intervention in children with disorders autism spectrum disorder (ASD), an analysis of modern approaches to treatment and definition of the role of a multidisciplinary team.

Material and methods

The study used an integrated approach, including theoretical, empirical and statistical methods. A descriptive analytical approach was chosen as the design of the study. This approach allowed us to identify existing forms of therapy for children with ASD, the level of their application in practice, effectiveness and achievable the results are based on integrated approaches. The study examined intervention methods based on medical, psychological, pedagogical and linguistic criteria. The study involved 60 children diagnosed with autism spectrum disorder between the ages of 3 and 10. They are registered in specialized centers for the disabled, speech therapy centers and inclusive educational institutions. The children were divided into three groups: Group 1: those who received only speech therapy (n=20 people); group 2: those who received speech therapy

+ ABA (applied behavior analysis) therapy (n=20 people); group 3: those who worked with a speech therapist + a multidisciplinary approach (psychologist, occupational therapist, together with parents) (n=20 people). Before starting work with all participants, written parental consent was obtained, as well as ethical principles were observed. The following tools and methods were used to collect data: observational and diagnostic tests – adaptive scales were used to assess the child's initial level of speech and the changes achieved during therapy. Vineland Behavior, CARS (Child Autism Assessment Scale), and the receptive-expressive developing speech scale. Analysis of speech therapy sessions: speech therapy sessions with each child were recorded and analyzed linguistically (vocabulary, grammatical constructions, number of communicative intentions). Questionnaires and interviews with parents and specialists: The effectiveness and complexity of the intervention were studied through semi-structured interviews with parents, speech therapists, psychologists, and educators. The data obtained was analyzed qualitatively and Quantifiably: descriptive statistics were used to determine the participants' overall speech performance, age, and level of response to the intervention; the results obtained between the three groups were compared using analysis of variance (ANOVA) and evaluated the statistical significance of the differences; the strengths and weaknesses of the interdisciplinary approach were identified based on interviews using the thematic analysis method. But it is worth noting that this study has the following limitations: a relatively small number of participants It limits the possibilities of generalization; the study was conducted only in a few institutions and does not cover all regional contexts; individual factors (genetic, neurological, family environment) in the development of some children may directly affect the outcome of the intervention.

Results and discussion

Confidentiality of personal information of all participants were provided throughout the study. During the therapy, attention was paid to the psychological state of the children, and the interventions were organized in such a way that they did not harm the child and were voluntary. and they were based on individual needs. Results and discussion. Based on research and analysis, it has been found that modern approaches to speech therapy are very effective in supporting speech development in children with autism spectrum disorders (ASD). In particular, rehabilitation work based on an interdisciplinary approach, that is, close cooperation between a speech therapist, psychologist, neurologist, speech pathologist, teacher and parents, plays an important role in the development of these children's communication skills.

Difficulties: coordination of specialist schedules: sometimes there were difficulties in synchronizing schedules; psychological burden on parents: especially in group 3, where a lot of involvement was required. During the discussion, a number of limitations and problems were also identified, including: lack of digital technologies and modern therapeutic tools in some medical and pedagogical institutions; lack of qualified specialists in some regions; parents sometimes deny the features of their children's disorders or realize the need for therapy later; insufficient development of a system of national standards and guidelines for work with children with ASD. Generalized conclusions based on the results. The multidisciplinary approach proved to be the most effective (group 3), which provided the maximum increase in speech development. Combination therapy (group 2) also showed significant improvement compared to isolated speech therapy. Parental involvement and interdisciplinary collaboration are key success factors for speech intervention in children with ASD. All of this provides an important analytical basis for future action. In conclusion, it is concluded that speech intervention methods based on modern individual approaches and interprofessional cooperation are highly effective in working with children with autism spectrum disorders. In particular, rehabilitation systems based on interdisciplinary potential serve to integrate these children into society, prepare them for independent living and their socio-emotional development. This is an important strategic decision.

Children with autism spectrum disorders (ASD) have speech delays, limited communication and social interaction. significant impact on their overall development. Therefore, speech intervention is crucial to support this category of children. In recent years, modern approaches to treatment and the active participation of multidisciplinary teams led to significant positive changes in this area[18].

Research and practical experience show that a unified approach to speech development in children with autism spectrum disorders is not enough. Since each child has individual needs, intervention strategies should be individual, flexible and comprehensive. In particular, comprehensive programs including modern technologies, visual approaches, alternative and complementary communication (AAC) methods, sensory integration training, and behavioral therapy (ABA) have been shown to significantly increase effectiveness[19]. Also, an important factor in improving the effectiveness of an interdisciplinary approach, that is, joint intervention., coordinated work of a speech therapist, speech pathologist, and psychologist, neurologist, teacher, and parents. This approach creates the basis for the comprehensive development of the child: not only speech, but also socio-emotional, cognitive and physical development is supported. Encouraging parents to actively participate in the therapeutic process will ensure the child's education at home and stabilize the results. Modern scientific research It is shown that early diagnosis and early intervention significantly increase the chances of speech development in children with ASD.

Conclusion

Therefore, the strengthening of close cooperation between medical and educational institutions, professional development Raising the awareness of specialists and society are urgent tasks. In particular, a scientific and methodological approach is needed to adapt modern methods. Interventions for national practice and their implementation in practice. In conclusion, it should be noted that speech intervention in children with autism spectrum disorders requires a comprehensive but effective approach. Thanks to comprehensive support and treatment methods, including modern technologies, as well as the close cooperation of a multidisciplinary team of specialists, it is possible to ensure References: successful integration of these children into society. Also, based on advanced scientific approaches in this field, it is necessary implement system planning, social support and consistent measures at the level of public policy. This is the only way to unlock the speech and communication potential of children with autism and integrate them into society as full-fledged individuals.

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