

CLASSIFICATION BASED ON DYSFUNCTION AS A BASIS FOR PROVIDING SPEECH THERAPY SERVICES

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ABSTRACT

At present, the legal acts in force in the Republic of Armenia, the approaches enshrined in them, which refer to children with various developmental disabilities, the provision of equal social living conditions for the disabled, are not a necessary basis for effectively and objectively solving the many problems arising from the above reasons.

Existing criteria are not decisive in terms of the impact of educational, social, and environmental factors and do not summarize all components of function and disability. Whereas an individual's participation in public life is conditioned not so much by his or her health condition as by all the surrounding circumstances that positively or negatively affect the person's activities.

Taking into consideration all this the main aim of this paper to describe the existing classification and criteria in regards to its influence on speech therapy service provision.

Key words: speech therapy, International Classification of Functioning, Disability and Health, dysfunction, health condition, speech disorder, speech therapy service.

LITERATURE REVIEW

The attitude towards stereotypes of children with various developmental disabilities in Armenia is a serious problem from the point of view of organizing their full participation in public life. The results of a study conducted by the United Nations Children's Fund (UNICEF) in cooperation with the Ministry of Labor and Social Affairs of the Republic of Armenia have revealed that children with physical and mental disabilities face serious obstacles in Armenia in regards to using different services, inclusion in mainstream schools, having sufficient habilitation and rehabilitation intervention, and participating in community life (Harutyunyan & Hovyan, 2013).

Moreover, in addition to having qualified, trained professional staff, the priority in Armenia is to ensure access to the physical environment available in institutions of inclusive education, in particular, in schools, universities, and various institutions for those with special educational needs who may have different problems and difficulties in daily activities and while adapting the environmental conditions (Harutyunyan & Hovyan, 2018).

The legislative changes made in the framework of educational reforms in 2017 in terms of current speech therapy assessment (based on the law on social protection of the disabled in the Republic of Armenia, article 5.1) plan to improve the work of specialists of pedagogical-psychological support centres, multidisciplinary teams of schools, increase the efficiency of inclusive education within the framework of educational reforms, as well as select more effective ways of organizing teamwork with children with special educational needs and their families.

Naturally, such decisions are the cause of certain problems in the process of educational needs assessment and have their impact on the application of pedagogical-psychological assessment criteria at the school level and the organization of education for children with speech disorders.

Already in 2018, in connection with the introduction of the program provisions of universal inclusive education, certain problems arose in the process of carrying out special rehabilitation works, which were addressed by special educators and psychologists, speech and other rehabilitation field specialists.

It should be noted that Armenia adopted the International Classification of Functioning, Disability and Health developed by the World Health Organization (WHO ICF, 2008; WHO, 2001) in 2014 as a national standard. This model, as a universal model emphasizes an individual's strengths, preserved abilities, promoting his/her more active participation in community and social life, including productivity and leisure. International Classification of Functioning, Disability, and Health developed by the World Health Organization (WHO ICF) enables a unified, coordinated, comprehensive approach to individual needs assessment policies to provide a variety of services (Harutyunyan, 2017). WHO ICF acts as the basis to evaluate or assess both a person's disability and the level of disability in the current population. As a model, it provides a description of human functions in situations related to their limitations as well as the basis for the coordination of this information. It divides the information into two parts:

- 1) structure of the body and function, activity and participation;
- 2) environmental factors (WHO, 2001).

As a result of a comprehensive assessment of the person, in accordance with his/her individual abilities and needs, it will be possible to provide appropriate and targeted services to ensure the

participation of children with speech disorders in the educational process and social inclusion, which will be a guarantee of their full inclusion in society (Harutyunyan & Hovyan, 2017).

AIM OF THE RESEARCH

Based on the primary goal of the speech therapy intervention organized in general education, the following issues for the research have been set:

1. to study the peculiarities of organizing speech therapy intervention in inclusive schools;
2. to study the peculiarities of organizing speech therapy assessment in inclusive schools;
3. to investigate the classification of function-based classificators, the provision of speech therapy services organized accordingly, as well as the impact of the above services on the organization of education processes for children with speech disorders;
4. to analyze the effectiveness of support services in mainstream education as part of educational reform (cooperation between regional pedagogical - psychological support centres - multidisciplinary team - parent);
5. to analyze the practical significance of the WHO ICF and its effectiveness in the organization of the speech therapy intervention process.

ANALYSIS OF THE SITUATION

Current reforms in Armenia provide an opportunity to review the disability assessment system for children with speech disorders. This will allow the latter to ensure equal social life and educational conditions, opportunities, apply a new model of a comprehensive assessment of individual needs and capacity, based on the ideology and principles of the WHO ICF. The new approach makes it possible to more objectively, comprehensively assess a person's abilities, define disability, taking into account not only the health problem, diagnosis, ability, but also the environmental factors that affect the activity in one way or another (Harutyunyan, 2017; WHO, 2008; WHO, 2001). The main purpose of the model is to provide rehabilitation services that meet the needs of a person based on comprehensive assessments.

The issues of protection of the rights of children with developmental disabilities in the Republic of Armenia, including the social inclusion of such persons, promotion of equality, and equal opportunities, have always been under the state's attention. Despite this fact, many of the provisions of the law are no longer in line with the nature of the existing legal relationship. Although the law and the articles regulating the employment of the disabled have undergone many changes, however, certain issues related to disability have not been resolved. Moreover, there are contradictions and gaps in the

Republic of Armenia (RA) legislation regulating the field of disability, which significantly reduce the effectiveness of law enforcement. It should be emphasized that the fact that there are no guarantees for their implementation, especially material guarantees, hurts the effectiveness of the implementation of the RA legislation in this field. Objectively, there is a need to develop and adopt new laws and legislative norms. Steps are currently being taken to bring the legislation of the Republic of Armenia in this area in line with the international conventions. For that purpose, the draft law of the Republic of Armenia “On Protection of the Rights of Persons with Disabilities and Social Inclusion in the Republic of Armenia” was developed.

Educational need assessment and special educational conditions at different stages of a child’s development is a process of collecting and coordinating a variety of information about the child, which is carried out in the child’s usual environment to ensure proper planning of the child’s curriculum, necessary professional services, as well as speech therapy assessment (Avagyan, et. al., 2017; BHMKG, 2011).

Within the framework of a current research paper, the peculiarities of speech therapy assessment are presented, in the process of determining the type of speech disorder and speech therapy intervention so far. Within the structure of WHO ICF, the general qualifier showing the severity of the problem in all areas consists of five levels with a numerical value of 0-4 ((0) – no problem, a person can complete the task without any difficulty; (1) - mild, a person can perform this operation independently, but with difficulty; (2) - moderate, a person can perform this action in case of certain support, in the presence of a suitable object or with the partial support of another person; (3) - severe, when the complexity/problem is serious, and a person can do it only with the help of another person; (4) - complete, when a person cannot perform an action at all or does not participate at all in the action, even in the case of assistance (Harutyunyan, et. al., 2018; WHO ICF, 2008). The analysis includes an assessment of voice and speech functions, voice pronunciation, sound pronunciation, bradylalia and takhilalia, stuttering, rhythm and slowness, speech fluency, speed, and melody functions according to WHO ICF. Within the framework of the definition of the problem, the peculiarities of speech therapy assessment according to the type of speech disorder were studied and determined (based on the existing standards).

As it is known, the precise position of the speech therapy intervention and work in the educational institutions of the Republic of Armenia is the prerequisite for organization and overcoming the verbal problems of the children with speech disorders and their full inclusion in the educational process (Hovyan, 2015; Paylozyan & Tadevosyan, 2007; Kalyagin, 2004). Speech therapy work carried out in these institutions pursues one important goal - the development of the ability and skills to reproduce the sounds of speech correctly.

Studies conducted in mainstream schools show that many speech therapists find it expedient to apply the psychological-pedagogical classification of speech disorders in their work, according to which there have developed perspective plans. According to that classification, the following points are separated:

- Sound underdevelopment (SU),
- Phonological underdevelopment (Phu),
- General speech underdevelopment (CSU).

Before the adoption of the WHO ICF, speech disorders were described in the 10th International Classification of Diseases (ICD 10). Those were codes as follows: F 80-89, F 98.5, F 98.6, R 47.1, etc. (Paylozyan & Tadevosyan, 2007).

The perspective plans for the correction of speech disorders in elementary school students are detailed in the sequence, content, shapes, and accessories of the speech therapy intervention with children with speech disorders. Plans can be applied to both individual and group exercises and intervention forms. The length of work on each topic depends on the child's knowledge and abilities, the next topic is passed only if the previous one is fully mastered. Experience analyses show that the correction of SU takes one academic year on average (Paylozyan & Tadevosyan, 2007; Chirkina, 2005). The speech therapist working in schools, to organize the speech therapy work in the educational institutions, first of all, use the perspective plans for the organization of that work. At the same time the development of the abilities of learners with speech disorders as a result of targeted speech therapy, according to which they should be able to perceive and distinguish sounds according to acoustic features, master the sound regulated for the given language, as well as exercise auditory control over their own pronunciation and assess the pronunciation of their own speech (Hovyan, Vardanyan, Amirbekyan & Grigoryan, 2008; Paylozyan & Tadevosyan, 2007; Hovyan & Karapetyan, 2001).

The issue becomes more complicated when it comes to the organization of speech therapy intervention in the regions of the RA, to the existence of appropriate programs for the development of children's speech, the provision of sufficient professional level of speech therapists, and Armenian language teachers. As the speech development of children with speech disorders is often complicated by a variety of external organ problems, many authors recommend the use of expressive exercises in speech therapy, which mainly help to strengthen the position of the external organs, their participation in each expression of sound, as well as the implementation of conscious actions aimed at sound analysis in the development of this or that property of sounds (Babina, 2014; Saratikyan, 2011; Hovyan, Vardanyan, Amirbekyan & Zohrabyan, 2007).

The analyses of existing data allowed us to find out how speech therapy assessment is done, what criteria are used to assess, and how to determine the type of speech disorder and the degree of

impairment. During the research, information was also collected on the assessment of the special educational needs of the child, in regards to the peculiarities of speech therapy assessment.

It should be noted also that the work of a school speech therapist is significantly different from the work of speech therapists in a pre-school educational institution or polyclinic. The school speech therapist deals not only with oral but also with written word correction, that is, he/she works on the specific mistakes of writing and reading. Thus, the work of a mainstream school speech therapist is very extensive. Speech disorders of preschool junior students can be a barrier to mastering the school material. At school, the child has to overcome many difficulties based on different factors, for example, talk and answer the questions in front of the whole class, ask questions, read aloud. Under these conditions, speech disorders are immediately revealed. Too often, children with speech disorders are painfully aware of their problem, becoming impulsive, self-contained, shy, and somehow irritable. The main task of the school speech therapist is to identify and overcome written and speech disorders in time. The collaborative work of speech therapists and the class teacher plays an important role in the prevention of written and speech disorders. In fact, children should be involved in preventive care before they go to school in first grade, but not all children go to preschool. And at the same time, parents do not have the relevant knowledge regarding these issues, so the school speech therapist corrects written language disorders (dysgraphia) too. Corrective speech therapy work at the school can lead to positive correction of dysgraphia of junior high school. The speech therapy room in mainstream education institutions is established to provide assistance to students with oral-written (primary) developmental disabilities. With the accurate organization of speech therapy work, the speech therapist helps children to overcome existing speech disorders, to master the school program equally with other students.

The main problems of speech therapist working in a mainstream school are:

- timely diagnosis of students' speech development disorders;
- correction of oral-written disorders aimed at overcoming difficulties in mastering the school program;
- prevention of speech disorders;
- awareness of parents and teachers about speech therapy knowledge.

Directions of speech therapy work:

- proper sound formulation;
- development of sound perception;
- development of phonetic analysis and combination skills;
- strengthening the pronunciation skills of words with different phonetic structures;
- word vocabulary;
- joint speech improvement;

- correction and prevention of writing a speech and reading disorders;
- development of fine motor skills.

Registration at the mainstream school speech therapist's office is based on students' speech examinations, which are held on September 1-15 and later on May 15-30. The work loading of a speech therapist in school is 20 academic hours per week. The speech therapist fills in a speech card for each child registered at the speech therapy office. After the elimination of written-oral speech disorders, the learner is discharged from the speech therapy service. Intervention sessions with children are conducted both individually and in groups. The main activities are group lessons, as a rule, they are held in extracurricular hours. The frequency of training is determined by the severity of the speech disorder. The duration of group exercises is 40 minutes; the duration of individual lessons is no more than 20 minutes usually.

The content of the speech therapy intervention session includes the following directions:

1. Development of general speech skills (breathing exercises, exercises aimed at the development of voice strength, tempo, rhythm, expressive side of speech);
2. Development of general mobility - the balance of movements (combining speech with movements);
3. Development of fine motor skills (massage, self-massage, finger training, mosaic work, plaster, glue, etc.);
4. Development of higher mental functions (attention, memory, thinking);
5. The compulsory set of general pronunciation exercises;
6. Work with the word syllable structure;
7. Development of sound analysis and combination skills;
8. Vocabulary development;
9. Coherent speech development;
10. Development of speech grammatical structure;
11. Dysgraphia and Dyslexia prevention and treatment tasks and exercises;
12. Graphomotor skills development with junior school students.

It is recommended to include no more than 5 types of work in one session while working with children of elementary school, and 6-7 activities with secondary school students. The peculiarity and strong point of the work is the maximum involvement of all analyzers. Frequent repetition of speech therapy exercises is typical while intervention.

CONCLUSION

Summing up the analysis of the provision of speech therapy services, it is important to state that the current criteria do not take into account the role of social and environmental factors in the assessment of speech disorders, while the individual's participation in public life is due not so much to his speech disorder as to all circumstances surrounding him. have a positive or negative impact on his educational activities.

The lack of experimentally developed means, methods, and pedagogical conditions for the implementation of speech therapy work in this context significantly complicates the solution of the above-mentioned important problem. Therefore, the research analysis of the speech therapy intervention attitude in mainstream schools allows to identify the existing problems related to the classification based on the dysfunction, to develop ways of optimizing speech therapy, and, accordingly, speech therapy intervention and the structure of the latest.

In terms of theoretical-practical applicability, we believe that pedagogical assessments and observations to increase the efficiency of speech therapy intervention work with children with special educational needs in mainstream schools provide an opportunity to coordinate the direction of the speech therapy work process. This is also important for the determination of the increased amount of funding for the organization of children's education in mainstream schools.

According to these criteria the WHO ICF-based assessment conducted in regional pedagogical - psychological support centres having the purpose to determine the increased amount of funding for organizing the education of children with special educational needs. Still, this assessment might be used for the identification of special conditions of the child's education and can be applied by clarifying the defined characteristics of the speech disorders, more precisely, as it was mentioned before.

Thus, the classification based on functional disorders needs to be amended from a professional point of view, as it can be a basis for increasing the efficiency of speech therapy work with children with special educational needs in mainstream schools. And the systematic speech therapy evaluation, the speech therapy work organized according to that evaluation contributes to the increase of the efficiency of the educational process of the children with speech disorders.

Summarizing, analyzing the conducted, the following conclusion and findings are described as key elements:

1. In case of introduction of multidisciplinary services in the system of inclusive education, in particular, speech therapy and organization of the service, it is possible to register positive changes in terms of the effectiveness of the students' organization of educational activities to ensure their participation in school activities as independently as possible.

2. It is already obvious that each speech therapy professional intervention has its own role and importance for ensuring the normal path of the child's educational process. Accordingly, speech therapy assessment provides an opportunity to effectively organize the work of speech development and correction, which allows reducing the barriers that arise as a result of physical, mental limitations, unfavorable environmental conditions of students with special educational needs, which have affected the child's normal participation in education.
3. In mainstream schools, it is necessary to evaluate and use all possible means of support and ways to maximize the independent, free participation of students with special educational needs in both the educational process and community life.
4. The analysis revealed that by combining WHO ICF model, which is the basis for speech therapy assessment, with the classification of speech disorders established in modern speech therapy, it is possible to record positive changes as a result of cooperative and supportive work.
5. Within the frame of speech therapy assessment and speech therapy work organized accordingly, through establishing cooperation with the members of the multidisciplinary team, it is possible to assess the educational needs of each student with special educational needs from his/her professional point of view (speech therapy in this case), at the same time giving high value to child's health and social needs, which directly influence education process.

REFERENCE LIST

1. Avagyan, A., V., Grigoryan, A., G., Tadevosyan, E., R., Karapetyan, S., G., Kirakosyan, A., A., Hovyan, G., R., Charchyan, A., R., & Paylozyan, Zh., A. (2017). Logopedian gorcnakanum; Usumnamethodakan dzernark; Heghinakajin hratarakchutyun, Yerevan.
2. Babina, G., V. (2014). Materiali i model obsledovaniya intonacionnikh kharakteristik chitaemogo teksta u shkolnikov s narusheniyami rechi /G.V. Babina, A.S. Sobol// Logopediya. - 2014. - № 1. - s. 39-45.
3. Bzhshkahogebanamankavarjakan gnahatman kentron (BHMGGK) mardik, tver, paster. (2011). Hatuk krtutyun gitametodakan teghekatu.- Mas 5.- 108 ej.
4. Chirkina, G., V. (2005). Osnovi logopedicheskoy raboti s detmi /Pod obshey redakciey G.V. Chirkinoy. M.
5. Harutyunyan, M., Ghazaryan, T., Malkhasyan, A., Avetisyan, M., Meliqyan, N., Avagyan, A., & Harutyunyan, L. (2018). A toolkit for assessing the activity performance, participation, and environmental factors of children aged 2 to 18 years with disabilities based on WHO ICF, Full Life NGO, and Unicef, Yerevan.

6. Harutyunyan, M. (2017). WHO International Classification of Function as a disability determination model in Armenia, ISSN 2518-167X Multidisciplinary scientific edition international academy journal Web of Scholar 5(14), August 2017, p. 54-57.
7. Harutyunyan, M., & Hovyan, G. (2017). Discussion of required reforms in the field of disability in Armenia and the first steps of their implementation, Proceeding of the International Scientific Conference "Science of the XXI century: problems and prospects of researches", August 17, Vol.3, p.48-51.
8. Harutyunyan, Z., & Hovyan, G. (2013). Bazmamasnagitakan timayin ashkhatanqy vorpes nerarakan krtutyun ardyunavet kazmakerpman nakhapayman. Mankavarjutyun, gitametodakan amsagir N7, ej 21-25.
9. Harutyunyan, Z., & Hovyan, G. (2018). Krtutyun kazmakerpumy nerarakan hamateqstum, Mankava8jakan mitq, Tatev gitakan hamalir, Zangak hratarakchtyun, 4 (71), ej 15 - 21.
10. Hovyan, G. (2015). Logopedakan ashkhatanqi arandznahatkutyunnery nerarakan krtutyun irakanacnogh dprocnerum, Nerarakan krtutyun. Zhamanakakic khndirnern u martahravernery, mijazgayin gitagorcnaakan gitazhoghovi hodvacneri zhoghovacui nyuter, Yerevan, ej 60.
11. Hovyan, G., & Karapetyan, S. (2001). Hayerenin bnorosh baghadzayneri shtkman arandznahatkutyunnery logopedakan gorcyntacum. HPMH profesoradasakhosakan andznakazmi, aspirantneri, haycordneri ev gitashkhatoghneri 51-rd gitajoghovi zekucumneri, zhoghovacu, Yerevan, Mankavarzh.
12. Hovyan, G., Vardanyan, A., Amirbekyan, G., & Grigoryan, H. (2008). Erekaneri hnchartaberman terutyunneri shtkman ashkhatanqner, HH krtutyun ev gitutyun nakhararutyun KAI, Dzernark logopedneri hamar.
13. Hovyan, G., Vardanyan, A., Amirbekyan, G., & Zohrabyan, Z. (2007). Gravor khosqi khangarumneri shtkmann ughghvac varzhutyunneri dzernark, HH krtutyun ev gitutyun nakhararutyun KAI, Usumnametodakan dzernark, Astghik gratun, Yerevan, 7.25 tpagrakan mamul.
14. Kalyagin, V., A. (2004). Enciklopediya metodov psikhologo-pedagogicheskoy diagnostiki lic s narusheniyami rechi /V.A. Kalqgin, T.S. Ovchinnikova. Posobie dlya studentov, pedagogov, logopedov, psikhologov. - SPB.: KARO.
15. Law on social protection of the disabled in the Republic of Armenia, 1994.
16. Paylozyan, Zh., & Tadevosyan, E. (2007). Hanrakrtakan dproci logopedakan ashkhatanki herankarayin planner, Yerevan, Nahapet hratarakchutyun, 22 ej.

17. Saratikyan, L., H. (2011). Nyardahogebanakan shtkoghakan varzhutyunneri nshanakutyuny khosqi khangarumner unecogh erekhaneri verakangnoghakan ashkhatanqnerum //Hatuk mankavarzhutyan ev verakangnoghakan hogebanutyun Gitakan handes 1(2), Yerevan, ej 50-57.
18. World Health Organization (WHO) (2008). International Classification of Functioning, Disability and Health, World Health Organization: ICF, 1 Lrg edition, 228p.
19. World Health Organization (WHO) (2001). International Classification of Functioning, Disability and Health developed by the World Health Organization, Geneva.