

**CHARACTERISTICS OF COOPERATIVE WORK OF THE PEDAGOGICAL-
PSYCHOLOGICAL GROUP IN THE PROCESS OF OVERCOMING ORAL-MOTOR
DYSFUNCTION**

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ABSTRACT

The study aimed to describe the characteristics of cooperation among the pedagogical-psychological group members while dealing with the issues of oral-motor dysfunction. The research was conducted using a qualitative methodology. A semi-structured interview method was used for data collection with speech therapists, psychologists and occupational therapists (in total 6 specialists) to highlight the features of group work cooperation in the process of overcoming oral-motor problems. The analysis of the research data was carried out based on the descriptive method.

The results of the research proved that during oral-motor dysfunction, the implementation of joint and mutually agreed activities, preliminary discussions of rehabilitation intervention planning and the ways of its implementation, and synchronizing the main approaches used by different professionals were important prerequisites for the cooperative work among the pedagogical-psychological group members. In addition, the desire of specialists to collaborate, the need to use complementary approaches and the planning of systematic group work discussions also determined the effectiveness of the rehabilitation process and ensured a positive result.

Keywords: oral-motor dysfunction, collaboration, pedagogical-psychological group, occupational therapy, participation.

INTRODUCTION

Taking into account the characteristics of oral-motor problems, pedagogical-psychological group work was very important, because during oral-motor problems both speech disorders and sensory

disorders were observed. Therefore, only the speech therapist's intervention could not overall contribute to the recovery of oral-motor dysfunction, because in the case of oral-motor dysfunction, there was sensitivity, oral dyspraxia, the presence of reduced sensitivity, lesions of jaw, lip, tongue, and cheek movements (Ekici, et. al, 2016). For this aim multidisciplinary group work is required for overcoming the problems connected with oral-motor dysfunction and its influence on participation in daily activities (Howe, & Wang, 2013).

Emphasizing the use of systematic intervention approaches by the pedagogical-psychological group members, the demonstration of cooperative skills of each specialist in the process of overcoming oral-motor problems was also of particular importance. The goal of the cooperation of the pedagogical-psychological group was to be child-centred, as well as work-centred so that different specialists can combine their professional knowledge and skills (Harutyunyan, 2016).

Pedagogical-psychological group work, especially in the case of oral-motor dysfunction, allowed us to evaluate the needs of each child from his/her professional point of view while emphasizing the use of general approaches that had a positive effect on the development and mastery of the child's abilities.

LITERATURE REVIEW

Nowadays, worldwide implementation of an inclusive education strategy, first of all, required the use of coordinated approaches of the multidisciplinary team, which included various specialists interested in the education of the child (general education teacher, special education teacher, occupational therapist, physical therapist, psychologist, speech therapist, and coordinator) and parents of the child (Inclusive Education Strategy, 2019; Barnes, & Turner, 2001). The use of intervention approaches by each specialist had a separate meaningful role in the child's educational process and aimed to ensure a natural process of inclusive education (Saratikyan, Harutyunyan, 2017).

The literature review of the current study approved that in the context of inclusive education, pedagogical-psychological group members worked for helping children with special educational needs deal with the issues in the educational process (Harutyunyan, Hovyan, 2013). Many studies highlighted that the work of the pedagogical-psychological group members was a dynamic process that involves the work of two or more specialists serving one purpose (Azatyan, Harutyunyan, Svajyan, 2019).

The most important link in the organization of inclusive education was the pedagogical-psychological group members to effectively organize the educational process of children with special educational needs, in addition to individual work, closely cooperated and provided advice to teachers for developing more favourable and effective working approaches with these children. It should be noted that each educational setting, or institution, depending on its scope of service provision, can form a pedagogical-psychological group, utilized and developed its comprehensive approaches and regulations

of group work structure, and set the fundamental principles of intervention (Harutyunyan, 2016; Sass, 2000). Many other studies emphasize the benefits of pedagogical-psychological group work for children having oral-motor dysfunction since the rehabilitation process could include unified approaches that are directed to overcome not only oral-motor dysfunction but as well as enhance their participation in educational activities and daily life (Manno, Fox, Peggy et. al, 2005; Domaracki, Sisson, 2001; Ferigollo, Kessler, 2017).

Over the past few years, other researchers demonstrated a strong connection between Physical, Occupational and Oral Motor therapy, based on a correlation between postural control and establishing reciprocal influence between corporal positioning and oral-motor structures and functions (Alghadir et al., 2014; 2015a). Because oral-motor skills represented a sequential progression of increasingly complex movement patterns and were integrally linked with increasingly complex tongue movements any disruption in practice can interfere with or limit the positive oral motor practice, resulting in the loss of advancement in skill development and the learned behaviours. These effects may include difficulties in sucking, swallowing, chewing, breathing and speaking, pronouncing sounds correctly, and other speech and phonetic disruptions (Barton, Bickell, & Fucile, 2017). Apart from this, the oral breathing pattern and neck extension reduce the strengthening of abdominal muscle control. Reduced expiratory muscle strength may negatively affect the child's ability to generate adequate expiratory pressure for voice production, which limited the possibilities of verbal communication, and also result in ineffective cough, placing the child at risk of not being able to clear the airway if aspiration occurs (Brooks, McLaughlin & Shields, 2017).

Children requiring early, intensive intervention often has complex feeding and swallowing issues that required a group work approach to fully evaluate and treat the underlying issues. Low tone, abnormal sensory processing, altered postural alignment and movement patterns were often present in these populations (Steel, & Miller, 2010). When a child presents with a feeding problem, a comprehensive assessment is needed to evaluate what oral-motor pattern the child was using, and also what factors (medical, motor or learned patterns of behaviour) were contributing to maintaining the child's use of that pattern. Once medical stability and postural alignment had been obtained, oral stimulation can be an effective adjunct to feeding treatment. Oral stimulation should provide the child with the necessary sensory and movement input to adequately prepare the child for controlled practice with food (Hodge, 2002; Fucile et. al, 2011). These issues required the strong collaboration of multidisciplinary team members to ensure comprehensive treatment for overcoming difficulties due to oral-motor dysfunction.

Accordingly, a collaborative approach between speech and occupational therapists was a highly effective treatment strategy for oral-motor dysfunction because both speech disorders and functional dysfunction in performing educational and daily activities could be observed. Due to the integration of

sensory and motor abilities into the development of speech, language, cognitive, and swallowing skills, a natural connection between these group members could be organized. Occupational therapy (OT) practice often prioritized self-care, work, play, psycho-social function, motor skills, sensory integration, and related functional issues that impact participation in daily activities (AOTA, 2010). Speech therapy prioritizes functions of communication, cognitive ability, oral motor skills, and swallowing ability that allow individuals to participate in daily activities as well (Howe, & Wang, 2013).

The purpose of this professional collaboration in oral-motor dysfunction directed to explore common ground, work collaboratively with each other to develop a patient/family-centred plan of care and execute a course of treatment. A collaborative session between disciplines, or co-treatment, allows specialists from both professions to use their professional skills to address complementary components of skill development. The successful collaboration allowed the children to also generalize the skills taught within the therapy session into their home, classroom, or daily life (King, et. al, 2009).

Since children with oral-motor dysfunction could have problems in speaking and swallowing as well as a wide range of difficulties in performing their daily and school activities, OT intervention together with speech therapy aimed at providing professional support to children with special educational needs for free and independent participation, both in the educational process and in everyday activities (AOTA, 2010; Harutyunyan, Harutyunyan, Hovyan, & Saratikyan, 2017).

Thus, the study aimed to describe the characteristics of cooperation among the pedagogical-psychological group members while dealing with the issues of oral-motor dysfunction. The research question of the work received the following formulation: how was the cooperation of the pedagogical-psychological group work organized during oral-motor dysfunction?

METHODOLOGY

The qualitative research method was chosen to carry out the study. Within the frame of research, a semi-structured interview was conducted with various specialists (speech therapist, occupational therapist, psychologist) working in the field of overcoming the issues of children with oral-motor dysfunction. The research was aimed at revealing purposeful and effective collaboration ways and means among the specialists, the important preconditions of cooperation of the pedagogical-psychological group members, what preparatory work they do, and with whom they cooperate more often. In particular, a descriptive qualitative approach was used for data analysis, as it enabled to highlighting of the point of view and perception of the sample group regarding the given phenomenon (Nayar, Stanley, 2015). Moreover, the results of the qualitative descriptive analysis were easily transmitted to the researcher and provided an opportunity to understand the interpretation of the situation from the perspective of the respondents (Trochim, 2006).

Participants

In total 6 participants were involved in the current research (2 occupational therapists, 2 speech therapists, 2 psychologists) with whom a semi-structured interview was conducted to highlight the main approaches and characteristics of collaborative work while dealing with the issues of oral-motor dysfunction. The ethical aspect of the research was preserved by providing the specialists with informed consent. The participants agreed to provide information for current research implementation by signing the informed consent which assured that provided information would be anonymous and the results would be used in a generalized way.

Data Collection

A semi-structured interview method was used for data collection, which was one of the most frequently used methods in qualitative research, and allowed to use of "open, direct, verbal questions" for obtaining detailed information (Whiting, 2008). A semi-structured interview was used when there was very little information about the research topic and its structure was considered to be the best way of making deeper understanding and discoveries. Semi-structured interviews were recorded and transcribed verbatim. Subsequently, the text of the semi-structured interview was read, and coded and descriptive analysis was carried out (Trochim, 2006). The questions were formulated according to the research question and in general 8 questions were identified and used for data collection. The questions were aimed at illuminating the characteristics of the collaborative work among the pedagogical-psychological group members and outlining the main approaches used by them in overcoming the issues of oral-motor dysfunction.

Data Analysis

The analysis of the research data was carried out based on the descriptive analysis method that helped to identify the patterns and links by utilizing recent data without going any further. It helped to carry out a comprehensive summary, describing in everyday terms, specific events experienced by individuals or groups of individuals (Creswell, 2015). This type of analysis was considered a better method for collecting information that described the collaboration relationships of different specialists in a natural way making this analysis very real and close to the research.

RESULTS

The analysis of the research results was aimed at highlighting the features of the collaborative work of the pedagogical-psychological group members and the main approaches used during the intervention in oral-motor dysfunction. The analysis of the information provided by the research participants made it possible to identify and explore the important and basic principles that were most effective in the collaborative work of the pedagogical-psychological group members.

Specialists noted that they gave great importance to the cooperative work of the pedagogical-psychological group members especially during dealing with the issues of oral-motor dysfunction, because, due to **joint work it could be possible to achieve positive**. Conducted intervention could bring desired outcomes when specialists cooperate, used coordinated approaches and provided an exchange of experience.

If there was no cooperation during the intervention process among pedagogical-psychological group members, done work would not have a constructive effect and outcome. According to the interviewees, the effectiveness and purposefulness of collaborative work in oral-motor dysfunction, in particular, is based on the usage of combined approaches of speech and occupational therapists since **they complement each other during the intervention process**.

Specialists jointly carry out children's need assessment and conducted structured observations to discover the problems connected with the performance of daily activities, and speech and communication issues due to oral-motor dysfunction. After need assessment and comprehensive observation of existing functional difficulties group discussion and negotiation of intervention approaches were identified mainly by speech and occupational therapists. According to the information provided by the study participants, in case of oral-motor dysfunction, the intervention work with the child is usually started by the occupational therapist based on the need assessment results.

Describing the opinion of the study participants, great attention had to be given to the psychological problems of the children having oral-motor dysfunction. In some cases, the initial stage of the intervention was carried out by the psychologist only, as the child refused to take part in the rehabilitation process and work with other specialists. And after dealing with the psychological problems the rehabilitation team could effectively start the intervention.

Since oral-motor dysfunction is characterized as a set of multiple limitations and constraints everyone needed unique and individual support from the specialists working with them. In particular, the occupational therapist worked to restore sensory problems during oral-motor dysfunction that could appear not only in the oral cavity but also in other parts of the body as well. Dealing with the proprioception issues that could be a result of muscle tone problems OT intervention had vital importance and was considered a starting point for other specialists since the child could not have imagined where the mouth was on the face.

In particular, in the case of oral-motor dysfunction, speech therapists and occupational therapists performed massages within the framework of individual intervention, but they were different from professional perspectives and had separate goals. Thus, the speech therapist performed a general massage of the face, gradually massaging towards the oral cavity contributing to the reduction of muscle tension during the formation of sounds and speech pronunciation in children. At the same time in the

framework of OT intervention, the facial muscle massages were aimed at regulating and overcoming the sensitivity problems to involve the child in performing self-care and other daily activities.

As a result of the data analysis, it was approved that overcoming the above-mentioned problems was largely possible due to both individual rehabilitation work and **the mutually agreed intervention approaches** used by the specialists. These were directed to deal with specific speech disorders and also to enhance the performance of daily life activities. According to the results of data analysis most often **separate and distinct approaches** were used by the pedagogical-psychological group members working with children with oral-motor dysfunction.

In particular, the speech therapist worked in the direction of correct mobility of the speech apparatus, and correct pronunciation of sounds. The psychologist's work was aimed at overcoming the psychological problems of the child, and the occupational therapy intervention was mainly aimed at regulating the sensitivity problems of the facial muscles. However, collaborative work required the application of universal approaches to problem-solving during the implementation of each professional intervention. The application of these universal approaches ensured the effectiveness of the rehabilitation process that aimed at overcoming oral-motor problems.

As a result of the research, the important preconditions of pedagogical-psychological group work cooperation were studied and described, which contribute to increasing the effectiveness of the intervention during oral-motor dysfunction. According to the specialists, **mutually agreed work and team discussions** were especially important, which outlined the directions, working procedures and professional approaches to **ensure the efficiency of the intervention**.

The description of data showed that in the case when a child had not a positive result for a long period, team discussions and analysis of rehabilitation work content made it possible to understand and specify what means and methods should be used to correct the problem, which specialists had to change the direction of intervention and carry out more therapy sessions. There should be cooperative work and group discussions throughout the rehabilitation work, after the work was completed, discussions should be held and an understanding of the results recorded. Collaborative work and group discussions should be present throughout the whole rehabilitation process as well as after the completion of the work for evaluation of the recorded results.

During the analysis of research results the obstacles encountered during the cooperation of the pedagogical-psychological group were also studied and described as follows:

- Lack of mutually agreed work during oral-motor dysfunction
- Absence of comprehensive discussions during the intervention process
- Non-specifying the use of professional intervention approaches

- Pedagogical-psychological group members did not aware of the use of similar intervention methods.

Summarizing the analysis of the results of the conducted research, it could be stated that especially in the case of oral-motor dysfunction, the work of the speech and occupational therapists was the most important and primary, because the occupational and the speech therapists complement each other during therapy intervention but the work of the psychologist should not be excluded as well. During the rehabilitative work of oral-motor dysfunction, group discussions were mainly carried out and led by the doctor, but other members of the pedagogical-psychological group also could hold the discussions. The schedule and duration of discussions were also related to the complexity of the presented problem and the specifics of the professional intervention.

Several important preconditions had to be taken into account while describing the cooperation features of the pedagogical-psychological group members. One of the important prerequisites was **the desire to do mutually agreed and cooperative work with each other**, to have the same knowledge (in the absence of which several problems may arise), to discuss the views of the work being done with each other, to plan the use of approaches while working with the child and to plan the preparations accordingly.

DISCUSSION

The analysis of current research results highlighted the main approaches of pedagogical-psychological group work, which ensure the effectiveness of group work during oral-motor dysfunction. Conducted research convinced the fact that pedagogical-psychological group members' work was very important during oral-motor dysfunction. The cooperation of the pedagogical and psychological groups and the implementation of joint and mutually agreed works have given the opportunity to rich out positive results. Other studies had also addressed the importance of using joint and coordinated intervention approaches in oral-motor disorders since only the performance of united and mutually agreed work of specialists could lead to the desired outcomes (Heather, & Clark, 2005).

Current research again stated the need to use complementary approaches and a clear schedule for organizing group discussions during oral-motor dysfunction that determined the effectiveness of rehabilitation work and ensured desired changes. The rehabilitation work of oral-motor dysfunction required a long-term intervention and the use of special methods, so without the collaboration of multidisciplinary team members there could not be recorded positive outcomes (Lee, 2017; Tian, Yi, Zhang, et., al 2015).

The study emphasized the importance of collaboration between speech and occupational therapists since the provision of oral motor rehabilitation therapy aimed at reducing or eliminating swallowing

disorders and promoting functional feeding (Novak, Morgan, Fahey, et al. 2020). Some other studies suggested that intervention with oral-motor therapy conducted by speech and occupational therapists had a beneficial effect on enhancing functional independence and improving the quality of life (Ernsperger, & Hanson, 2004; Bailey, & Angell, 2005).

As a result of mutually agreed work and intervention, it would be possible to overcome the impact of delayed oral-motor skills, which could play a significant role in determining whether the child would be a successful eater and develop a positive experience with food. For this aim combined work of different specialists helped to consider whether the challenge had originated from a sensory processing perspective or oral-motor difficulty. More importantly, oral discrimination was essential for oral safety and function. When this poses a challenge, children were prone to experiencing food aversions, display sensitivities to textures, tastes, and temperatures and are unable to tolerate certain food types (Kumin, Von Hagel, & Bahr, 2000).

The results of the research showed that the use of mutually agreed approaches by different specialists was also very important during the treatment of oral-motor problems. Treatment plans could vary depending on each child's unique situation. If the child lacks the proper oral-motor skills, a speech therapist can lead him or her through exercises that build the mouth muscles and proper eating techniques (Jadcherla, 2019). If the child has a sensory problem, OT treatment might be recommended or suggested modifying what or how the child was fed (for example, changing the type of utensil or cup) until the child's feeding abilities improved. Hypo-sensitive children might need extra sensory information, such as extra flavouring, to recognize the presence of food. If there's a behavioural component to the child's feeding issue, the treatment plan could include cognitive behaviour therapy (Bala, et., al 2016; Ray, 2015). The analysis of the results of the research made it possible to determine the fact that during the treatment of oral-motor problems, it was very important to plan the direction of the intervention activities, methods, and approaches, and beforehand schedule the group discussions that can lead to creating a reliable atmosphere of cooperative work and establishing stable cooperation between pedagogical-psychological group members.

CONCLUSION

The conducted research allowed us to conclude that during the cooperation of the pedagogical-psychological group members in overcoming the issues of oral-motor dysfunction, many obstacles still existed that sometimes did not allow the group members fully implement the rehabilitation work and record a positive result. The studies carried out during the research work also allowed us to conclude that in the case of oral-motor dysfunction, the desire for the cooperation of specialists, planning the intervention methods, and discussions during the entire intervention were very essential. It was also

important to emphasize the fact that in the case of oral-motor dysfunction, the cooperation of speech and occupational therapists was considered primary. Therefore, taking into account the fact that the rehabilitation work and intervention during oral-motor dysfunction required the use of special approaches and a combination of methods, working cooperatively with the involvement of different specialists was considered to be vital.

Current research concluded that planning the intervention approaches and working methods was very important, also it was quite necessary to use an individual approach based on the degree of oral-motor dysfunction. The results of the study showed the importance of discussions among the pedagogical-psychological group members for identifying the existing problems and highlighting the most appropriate intervention approaches. The summary of research results made it possible to identify the obstacles that appear during cooperative work during oral-motor dysfunction, and the outlined problems were connected with the lack of group meetings, using not agreed intervention approaches, and not using similar methods in rehabilitation work.

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