

Speech and Language Therapy in Mental Health Care of Children. Part 1: the areas of research and practice

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Summary

Aim. The article is the first part of a study aimed at characterizing speech-language therapy care in mental health care of children. It concerns the areas of research and practice.

Material and methods. The research has an exploratory character. The secondary qualitative analysis of archive data collected from my SLT practice with preschool age children was used.

Results. Preschool children experience a variety of speech, language and communication disorders associated with mental health problems. SLT needs may result from: mental disorders in various stages of their course, prodromal and subclinical states; psychological traits; family history of mental disorders; environmental conditions; migration; other medical conditions; using pharmacotherapy.

Conclusions. Conducting research on speech and language disorders in psychiatry is necessary, but at the same time difficult, especially in the case of children. Interference of developmental, pathological and environmental factors, mutual overlap of symptoms resulting from various conditions, and co-occurrence of disorders must be taken into account. Moreover, great caution should be exercised in interpreting the results of less advanced studies. The area of SLT research and practice is wide and diverse. It is defined by nosological and functional criteria. Cooperation between psychiatrists, psychologists, psychotherapists, and speech-language therapists is needed, both from a research and practical perspective.

Key words: speech-language therapy, mental health, children

Introduction

Mental disorders – understood here as a number of conditions addressed by psychiatry – are manifested among others in speech, language and communication. People with mental disorders and, more broadly, with mental health needs, besides psychiatric, psychotherapeutic and psychological care, are also offered various forms of support,

including speech-language therapy (SLT). The area of speech-language therapy care includes description, diagnosis of speech, language and communication status, as well as therapeutic treatment. Interest in SLT in mental health care has been growing noticeably in recent years in many countries. In order to develop further research in this area, discussions and cooperation in an interdisciplinary forum between psychiatrists, psychotherapists, psychologists, and speech-language therapists are crucial [1]. Since understanding mental health issues and implementing therapeutic interventions are, to some extent, determined by external factors, the local perspectives referring to different countries, various linguistic and cultural communities, and diverse conditions and workplaces of speech-language therapists, appear to be necessary.

This article is the first part of a study aimed at characterizing speech-language therapy care in the mental health care of preschool children. It concerns the areas of speech-language therapy research and practice.

As Pilecki et al. write [2, p. 214]:

mental and emotional disorders of preschool children are increasingly becoming the subject of interest for both clinicians and researchers. The way they are perceived is also changing. They are increasingly considered to be more clinically significant than previously believed. Even less clinically significant symptoms may persist or intensify later in life. They also pose a risk of emotional, school and interpersonal problems or serious mental disorders in the future. The early developmental period also seems to be a good time to take actions to prevent the occurrence of mental disorders and emotional problems in the subsequent decades of life. Mental disorders and emotional problems in the preschool period are a relatively new area of scientific inquiry, therefore it is important to conduct research on their various aspects.

The current knowledge about the possibilities of SLT care is diverse, both in terms of quantity and degree of advancement¹. The mental disorders of children and adolescents are included in the DSM-5, ICD-11 and IFC classifications [3]. I base on the DSM-5 classification.

1. Theoretical introduction

1.1. Neurodevelopmental disorders

As regards intellectual disorders, communication disorders (a new diagnostic entity: social communication disorder has been distinguished among communication disorders) and autism spectrum disorder, the literature on speech, language and

¹ This is not a complete literature review, it will be the subject of research in a separate study; here the main problems necessary to achieve the research objective are indicated.

communication disorders is abundant, both in quantity and quality (includes meta-analytic works). SLT in these impairments is a standard nowadays. Speech, language and communication disorders and SLT opportunities in ADHD constitute a relatively new but definitely developing field of research [4, 5]. Speech-language therapists are involved in special care for children with specific learning disorders: impairment in reading, writing [6] and some motor disorders: developmental coordination disorder [7]. Peltokorpi et al. [8] indicate that SLT can be useful in the treatment of one of the tic disorders: Tourette syndrome.

1.2. Other mental health disorders

In some of these disorders, manifestations in speech, language and communication are also clearly present. They can be permanent or can subside after a disease episode (affective, psychotic) has been managed, or persist in the form of residual symptoms. Problems in speech, language and communication can be either criterial symptoms or additional features, characteristic of a given population. In the course of psychotic disorders, especially schizophrenia, problems in language communication are clinically significant and are widely described regarding adults. The literature on speech, language and communication disorders in childhood-onset schizophrenia, occurring and diagnosed very rarely [9], is relatively scarce but promising [10, 11]. SLT for children with this mental disorder is needed, it should aim to develop systemic, dialogic, narrative skills, etc. [12]. Identification of language and communication impairments in premorbid cases of schizophrenia is an important element in early detection of the psychotic disorder process [13].

Speech, language and communication are affected – to varying degrees – by anxiety disorders, including selective mutism. When it comes to selective mutism, speech-language therapists provide – mainly using indirect methods – assessment of speech (in the population of children with selective mutism, language and communication disorders are more common) and – if it is necessary – provide therapy for speech, language and communication disorders in children with selective mutism, mainly through indirect methods [14]. Speech-language therapists can participate in selective mutism treatment in various manners [15] and contribute to the prevention of this disorder [16]. There are preliminary reports that children with separation anxiety disorder might have problems with language and communication, breathing while speaking, and speech fluency disorders due to pathophysiological changes in the brain. Speech, language and communication deficits are often overlooked in this population. SLT can be a form a support for children with this disorder [17]. Speech-language therapists are also interested in social phobia and the state of fear and discomfort in public speaking in people who do not have phobia [18].

Bipolar disorder is also characterized by specific features of speech and communication. According to preliminary reports, the following disorders can occur in children with BD: language disorder, difficulties in: finding words, interpreting and responding

to social cues, as well as relationship building. Children from families diagnosed with bipolar disorder may have communication problems which can be caused by the communication model in the family [19].

Changes in speech (especially voice) and communication occur in the course of affective disorders (especially major depressive disorder). When it comes to children, a speech-language pathologist can use special communication strategies [20].² SLT aimed at supporting the interaction and communication can be offered in cases of maternal postpartum depression, in the form of infant-mother pairs [21].

If trauma occurs at an early stage of child development, it influences language development [22]. SLT for children with trauma may be needed. In Yehuda's research [23] it was based on the development of lexical, narrative and communication skills.

In somatic symptoms and related disorders, if the symptoms concern speech, voice and swallowing, SLT can also be offered as a part of interdisciplinary treatment [24]. In obsessive-compulsive disorders some pragmatic difficulties may occur but not necessarily. Utterances of people with OCD include characteristic semantic features. There is not enough data to state whether and how a speech-language pathologist can participate in responding to possible communication needs resulting from this disorder. However, there are theoretical grounds to leave this question open and to conduct further research in this field. The same applies to personality disorders.

1.3. Psychological traits and characteristic features

Certain psychological traits and characteristic features may be associated with language and communication difficulties. For example, some children with high intellectual potential may experience pragmatic difficulties, similar to those occurring in high functioning autism/Asperger syndrome [23]; according to some researchers they are not identical with autism. This area requires further research [24]. There is some speculation that children who experience their gender as different from their biological sex may likely have variously conditioned difficulties in social communication [25], but research in this area is limited [26].

1.4. Other conditions that may be a focus of clinical attention in psychiatry

Some of the conditions listed in that last part of DSM-5 can negatively impact language development and communication skills: e.g. parent-child relational problems, abuse and neglect, educational problems, economic problems, migration, imprisonment or other (long-term) deprivation of liberty, borderline intellectual functioning.

² For adults voice therapy is offered.

1.5. Other medical conditions

Speech and language disorders and psychiatric symptoms that may additionally impact the clinical presentation of these disorders occur in the course of diseases of the central nervous system, such as: head injuries, brain tumours, inflammations, epilepsy; genetic disorders; systemic diseases that indirectly affect the central nervous system; and also in hearing and vision disorders and in developmental delays.

1.6. Pharmacotherapy

Pharmacotherapy may also have an impact on language development and speech (positive or negative), but it is very rarely used in psychiatry in younger children.

2. Material

The empirical base consists of my own experiences of work with preschoolers as a speech-language therapist. The research material is archive data collected between 2014 and 2022, which includes descriptions of diagnosis and therapy from my SLT practice in three mainstream kindergartens³. SLT covered 93 children with speech, language and communication disorders associated with mental health conditions. I had direct, mostly long-term relationships with the children and our contact was regular. The material was anonymized. I did not conduct experiments or other research beyond standard SLT, to which the children's parents gave their consent in each case. The data will be presented in a general manner, without using elements that would enable the identification of participants. The benefits of describing a little-recognized, but interesting and up-to-date issue for practical reasons significantly outweigh the risk of damage, which is minimal.

3. Method

The research has an exploratory character, qualitative secondary analysis of the material was used. As a result of the analysis, the following categories were distinguished: scope of research and SLT interventions, competences of speech-language therapists in an interdisciplinary team, speech-language diagnosis (specificity of assessment, problem of norms, functions of speech-language assessment, speech-language assessment and diagnosis in the diagnosis of mental disorders), speech-language therapy (its functions and goals, planning and implementation, methodology of therapeutic procedures, effectiveness, therapist's skills).

³ The material from individual institutions is uneven, because I worked in each of them for a different period of time, and each of them had a different organizational system.

4. Results

The group of preschool children was very diverse⁴. Inclusion of a child to this group was based on nosological and – above all – functional criteria (more information in the second part of the study).

4.1. Neurodevelopmental disorders

This group included children diagnosed with or suspected of neurodevelopmental disorders. They had most often significant speech, language and communication problems. SLT was regular and intensive. The most represented were communication disorders: language disorders, speech sound disorders (phonological disorders, rarely verbal dyspraxia), rarely childhood-onset fluency disorder. The category of social (pragmatic) communication disorders was not distinguished at that time, but in some children semantic-pragmatic difficulties/disorders were observed. Diagnosis or suspicion of autism spectrum disorders were well-represented, however, there were often discrepancies in the multidisciplinary diagnostic process. Diagnosis of attention deficit disorder with hyperactivity was rare (this disorder is diagnosed more often in school-age children, when inattention is presented more evidently), but teachers often observed hyperactivity and attention problems as a worrying behaviour. Within this group there were also children with coordination disorders, risk of writing and reading disorders; very rarely with intellectual disability, which could result from the publicly accessible nature of the facility.

4.2. Other mental disorders

This group included children diagnosed with or – most often – suspected of other mental disorders or problems. The SLT needs and the frequency and intensity of SLT care (therapy and support) in this group varied. The group included: children with suspected selective mutism and less often a diagnosis of this disorder, with suspected separation anxiety disorder, with experience of postnatal trauma, with family history of mental disorders. Emotional and behavioural problems and the accompanying language and communication deficits were observed, indicating the need for psychological and/or psychiatric consultation, which was recommended⁵. Below there are some examples of configurations of these symptoms:

- subtle symptoms of less developed language skills; peculiar content of utterances not resembling children's confabulation; atypical language features such as: numerous persistent neologisms (also non-systemic neologisms), nu-

⁴ At the stage of preparing the article, I have tabulated figures showing this diversity. For ethical reasons, I will not provide numerical data in the text of the paper.

⁵ The children had no hearing disorders, no serious anatomical defects, no neurological disorders or intellectual disabilities were suspected.

merous emotionally charged vocabulary, combining words in terms of sound similarity, and difficulties in formulating semantically and formally coherent utterances; subtle social communication limitations, emotional and behavioural problems occurring in the preschool and home environment, including irritability, strong and long emotional reactions difficult to suppress, impulsiveness, hyperactivity;

- communication difficulties, impoverished mimic-gestural organisation of speech, significantly lower mood that lasts for a long period, self-isolation, slowdown in movements, disturbing statements about death, probably low self-esteem;
- semantically fluent utterances; word-finding difficulties, semantic errors, difficulties in effective communication, limitation in communication and relations with peers, rapid and intense mood changes, loud speech;
- subtle difficulties in communication, especially in expressing and understanding emotions, lack of semantic fluency in longer utterances, strong emotional reactions, attachment to rules, apprehensiveness, a strong need for reassurance, repetitive body movements in different situations;
- language delay, difficulties in interaction and communication skills, lagging behind, increased level of anxiety.

In children with mental disorders – neurodevelopmental and other – pharmacotherapy was used very sporadically.

4.3. Psychological traits and characteristic features

The study group included children with psychological traits which hinder development in some area or areas and are associated with an increased risk of mental disorders. Communication problems in this group of children were not severe. These children received SLT care of varying frequency and intensity. The majority of the children did not undergo psychological diagnosis, the results of which would have contributed to better description and differentiation of this group. However, the group also included children consulted psychiatrically and/or psychologically, in whom disorders were ruled out, but further observation was recommended. This group included children with high intellectual potential, borderline intellectual functioning, etc.

4.4. Conditions that may be of clinical interest in psychiatry

The family circumstances of some children were difficult, but due to limitations in data collection in this area, it is not possible to determine the relationship between these conditions and the development of language and communication skills. Disturbing behaviour and blocks in the development of language and social communication have been noticed in children who have previously experienced coercive therapy.

Living and economic conditions were good or very good (the kindergartens were private institutions). As for children in migration situations, the group was not large but increased significantly after Russia's invasion of Ukraine. Not all children needed support in the field of language and communication development. This group included children with language disorders – migration was an additional factor that complicated their situation, and children without language disorders but needing subtle support in communication in their new environment.

4.5. Other medical conditions

4.5.1. Children with nervous system diseases

Within this group there were children with epilepsy, genetic disorders, metabolic and hormonal diseases, which have an impact on the functioning of the nervous system. Children presented with various speech, language and communication disorders of varying degrees. Children received regular and intensive SLT. The disorders were often accompanied by emotional and behavioural problems, which further affected communication skills.

4.5.2. Children with hearing and vision impairments

Speech disorders in this group of children, especially in children with hearing impairments, required regular therapy. Speech disorders were occasionally accompanied by emotional and behavioural problems, sometimes mistakenly associated with those typical of autism spectrum disorder. There were also children whose problems could best be explained in relation to the classic symptoms of risk of auditory processing disorder, but these were not many. However, it is known that auditory speech processing disorders may be a component of other frequently occurring disorders.

4.5.3. Children with developmental delay

A developmental delay is a common problem in preschool age children. SLT in this group of children was regular. Varying degrees of speech, language and communication problems and often some emotional and behavioural difficulties were observed in this group of children.

5. Discussion of results

In children's mental health care one of the members of the multidisciplinary team is a speech-language therapist. SLT needs in preschool children may result from:

- mental disorders in various stages of their course, prodromal and subclinical (subthreshold) states;

- psychological traits that hinder development in a specific area/areas, associated with an increased risk of mental disorders;
- family history of mental disorders (due to genetic conditions and/or communication patterns prevailing in the family);
- environmental conditions – family and living conditions – that to some extent limit the development of an individual, including the development of language and communication skills;
- migration;
- other medical condition causing psychiatric symptoms, as well as emotional and behavioural problems;
- developmental delays;
- using pharmacotherapy.

The above-mentioned sources of needs may co-occur in the history of a given child. The degree and type of difficulties experienced in speech, language and communication vary and are correlated with the type of mental state and the severity of a given disorder. Preschool children often do not receive a psychiatric diagnosis at this developmental stage. The process of psychiatric diagnosis of younger children can be difficult and lengthy. What is also characteristic of preschool age is that certain conditions are not yet expressed in such a way as to be able to diagnose or exclude a mental disorder. In addition there are mental health conditions that do not meet the criteria of a mental disorder, but – from the functional point of view – have a negative impact on everyday living and limit the child's development, lowering the quality of life. When assessing children's needs, it is important to take into account nosological and – above all – functional criteria. The possibility of collecting systematic data in the described group of children was limited. Problems in mental health and child's functioning in family are very sensitive issues. Children were not always consulted by a psychologist and/or psychiatrist.

Conducting research on broadly understood speech, language and communication disorders in psychiatry is necessary, but at the same time difficult, especially in the case of children. Speech development in preschool age is very dynamic, delays and disorders of this process are clearly due to the interference of developmental, pathological and environmental factors, mutual overlap of symptoms resulting from various conditions, co-occurrence of disorders and diseases. Great caution should be exercised in interpreting the results of less advanced studies. To further develop knowledge about speech disorders in psychiatry and improve the quality of services provided, cooperation between psychiatrists, psychologists, psychotherapists, and speech therapists is necessary, which is becoming an increasingly common practice around the world.

6. Conclusions

The area of speech-language therapy research and practice in the children's mental health care is wide and diverse. It is defined by nosological and functional criteria. In preschool children, various types of speech, language and communication disorders and difficulties associated with mental health conditions occur. They appear in the course of neurodevelopmental, psychotic, anxiety, (affective) bipolar, depressive, post-traumatic, dissociative, and other disorders, as well as in subclinical and prodromal states. In addition, children with mental health support needs may experience language and communication difficulties related to psychological traits, a family history of mental disorders, environmental conditions, migration, other health problems (e.g. epilepsy, hearing loss), developmental delay or the use of pharmacotherapy. There is an urgent need for further development of knowledge in this area, which should be achieved through scientific and practical cooperation between psychiatrists, psychotherapists, psychologists, and speech-language therapists, and dissemination of knowledge about the possibilities of speech-language therapy for children with various types of mental health problems.

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