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CONTEXTS AND PERSPECTIVES

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## Aspergere's syndrome – picture of a child who looks for a place in society

### Introduction

Asperger's Syndrome (AS) is one of the developmental disorders, that was described more than half a century ago, but the specialists were not interested in it for a long time. In the 1990s knowledge about this disorder became more common. Children with Asperger's Syndrome have great difficulty in direct contact with other people. Disruption in the social sphere makes them difficult to adapt to the existing reality, establish closer relationships with others, both with family members and peers. In this connection they require a specific approach of psychologists, educators and society.

### Asperger's Syndrome as an autonomous nosological entity

For the first time Asperger's Syndrome was described by Dr. Hans Asperger (and therefore the disorder derives its name from him). In 1944 this Austrian physician published a work in which he presented the major symptoms of the disorder, defined by him as an "autistic psychopathy". His findings were based on observations of four boys showing impairment in social interactions and communication, and characterized by uncommon development of specific interests (Stachowicz, 2013). Asperger's work did not achieve any popularity, because it was known only to German-speaking readers. In addition one year earlier Leo Kanner had published an original work about autism, which gained more attention, and as a result it pushed Asperger's publication into the background (Firth, 2011). However, it does not mean that Asperger's observations were not mentioned in English literature, but they appeared very rarely. A great deal of interest of Asperger's work was aroused by a work of Austrian psychiatrist, Lorna Wing, in which the author for the first time used the term Asperger's Syndrome, due to bad associations with the word "psychopathy". In her article, she noticed that some researchers clearly differentiated the disorder described by Asperger from autism, although in fact they had more similarities than differences. She pointed out that children with AS under

three years of age, compared to children with autism, did not have major problems with communication (Wing, 1981). Numerous similarities between autism and Asperger's caused a number of ambiguities in determining the relation between them. Is AS a variant of autism, or a subset of disorders in the autism spectrum and has its own diagnostic criteria? (Attwood, 2006).

It seemed that this problem was solved in 1994, when the Asperger's Syndrome was included on the ICD-10 list, created by the World Health Organisation. It was set in the category "pervasive developmental disorder" among other disorders characterized by deviations from social norms and communication. Asperger syndrome was defined as "A disorder of uncertain nosological validity, characterized by the same type of qualitative abnormalities of reciprocal social interaction that typify autism, together with a restricted, stereotyped, repetitive repertoire of interests and activities. It differs from autism primarily in the fact that there is no general delay or retardation in language or in cognitive development. This disorder is often associated with marked clumsiness. There is a strong tendency for the abnormalities to persist into adolescence and adult life. Psychotic episodes occasionally occur in early adult life" (ICD-10: 249). The above quotation shows that the WHO clearly differentiates autism and Asperger's Syndrome, with the latter treated as a separate nosological entity. In the same way both disorders were distinguished in the Classification of the American Psychiatric Association – DSM-IV, also published in 1994 (Chojnicka, Szkiełkowska, 2013).

This problem was differently treated in the DSM-V, introduced in 2013. The term "pervasive developmental disorder" was replaced by "autism spectrum disorders" (ASD), which included autism, Asperger's Syndrome and PDD-NOS (Gerhart et. al., 2013). The authors of the changes strongly emphasized that according to them these disorders were one continuum that varies depending on the intensity of symptoms, and therefore could not be diagnosed as separate nosological entities. What is more, they underlined that the classification of disorders had been based on their characteristic feature, but not on the depth of symptoms, represented the intellectual ability and language skills. In this connection, they proposed to base the diagnosis of autism spectrum disorders primarily on the depth of the symptoms and individual differences occurring between people with ASD (Chojnicka, Szkiełkowska, 2013).

Some authors do not agree that the differences between the two disorders come down to the depth of the symptoms. In the opinion of Martha Korendo experiences of diagnosticians and therapists allow to establish some clinical symptoms, differentiating these two disorders. She presents four frameworks on which it is possible to differentiate autism from Asperger's syndrome. The criteria for the differential diagnosis of both disorders proposed by M. Korendo are presented in the table below (Korendo, 2012).

**Tab. 1.** The criteria for differential diagnosis of Asperger's Syndrome and autism by M. Korendo

| Framework of diagnoses     | Asperger's Syndrome                                                                                                  | Autism                                                                                                                      |
|----------------------------|----------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| Language and communication | Selective communication intention                                                                                    | No intention of communication                                                                                               |
|                            | Pointing finger gesture                                                                                              | Lack of pointing finer gesture                                                                                              |
|                            | Official speech or impaired development of speech                                                                    | Lack of development of speech or nominal speech                                                                             |
|                            | Selective listening                                                                                                  | No listening                                                                                                                |
| Manipulative behaviour     | Manipulation of language in the form of threats, confabulation, complaints, often linked with looking into the eyes. | Primary manipulation (experiential, subconscious), manifesting aggression, crying, screaming due to limited language skills |
| Social relationship        | The presence of need of social relationship, to live with others, but according to own rules.                        | No needs                                                                                                                    |
|                            | Better relationships with adults than with peers                                                                     | No relationships with adults and peers.                                                                                     |
| Manual disorders           | The plan of moving – slight damage                                                                                   | The plan of moving – heavy damage                                                                                           |
|                            | No writing and drawing due to manual problems.                                                                       | No writing and drawing due to not understanding the world.                                                                  |

Source: M. Korendo, 2012, p. 251–255

The list shows that there are some differences in the criteria for the diagnosis of Asperger's Syndrome and autism. They indicate however, that both types of disorders should be treated as separate entities.

### Asperger's Syndrome – its causes and epidemiology

The pathogenesis of Asperger's Syndrome is still unknown. Most often, the researches point to genetic and psychosocial factors as the main reason for the appearance of this disorder. Asperger suggested that disorders described by him were caused by genetic factors (Jakuszkowiak-Wojten et. al., 2007). If we take into account the link between Asperger's Syndrome and autism we can say that the biological framework significantly influences the formation of this disorder, as it was confirmed by empirical research. In the family with an autistic child there also appears Asperger's Syndrome, and that situation suggests that both entities may be a part of the same genetic defect (Firth, 2011).

The twin studies are also very interesting, if take into consideration an appearing of autism. They have shown that that the risk of autism in identical twins is considerably higher than in fraternal twins. This may prove that autism is caused by genetic factors. Brothers and sisters of the children with autism also have some difficulties, such as: problems with speech and with reading (Baron-Cohen, Bolton, 1999).

Some researchers suggest that the age of parents also plays a crucial role. When a child's father, in the moment of conception, is over 40, the risk of Asperger's Syndrome increases significantly. It is also suggested that prenatal injuries, toxoplasmosis, cerebral palsy, damage to the central nervous system and infections all may contribute to the appearance of AS (Stachowicz, 2013). We do not know all the factors causing Asperger's Syndrome, so there is a strong need to conduct more detailed research in this area.

It is also difficult to indicate the prevalence of Asperger's Syndrome. Research has not given conclusive results. In addition, it should be noted that researchers tend to focus on the epidemiology of autism rather than Asperger's Syndrome. According to research, which was conducted in 1993 in Sweden, 3,6% per 1000 children and adolescents aged 7–16 was affected by Asperger's Syndrome. What is more this disorder more often affected boys than girls (ratio 4:1) (Ehlers, Gillberg, 1993). On the other hand, Eric Fombonne and Lee Tidmarsh analysed the results of six studies of various authors from the years 1998–2001, four of which were carried out in the UK and one in Norway and Sweden. This study showed significant differences in the extent of the incidence of the disorder in the studied populations. They showed that Asperger's Syndrome occurs in 0.3 to 48.4 per 10 000 people. These authors found that such a significant difference in the results was caused by the sample size (Fombonne, Tidmarsh, 2013).

Referring to research conducted by M. Korendo on the group of 65 children with Asperger's Syndrome, it should be noted that the ratio of boys and girls amounted to 85.72% and 14.50% (Korendo, 2013). It confirmed that this problem more often related to boys than girls.

### **The clinical picture of a child with Asperger's Syndrome**

There are three main areas in which symptoms of Asperger's Syndrome appear: verbal communication, social functioning and specific interests and routines. The development of speech of children with Asperger's Syndrome is usually normal, although some studies show that there could be some acceleration or delays in this area. And over time it changes. Children have more and more problems with communication. It refers to (Komender et. al., 2009):

- pragmatics (the use the language in social situations),
- semantics (the recognition of the meaning of the same words),
- prosody (problems with modulation of speech, intonation, etc.).

In the pragmatics area deficits are manifested by the fact that a child can not fit into the context of social forms of expression. They address to the adults as to their peers, cannot listen to the words of others, but only lead monologue. What is more they cannot cope with the uncertainties and mistakes, and do not understand that they should not interrupt when someone is speaking. When they feel embarrassed and do not know how to respond to a question they simply change the subject of conversation (more comfortable for them), regardless of the reaction of the others.

Children with Asperger's Syndrome also have a tendency to add comments, which are not related to the subject of conversation. This happens appears usually when during the conversation there appear the words related to earlier conversations (Attwood, 2006).

M. Korendo indicates that problems of children with AS are not limited to delays in speech development. The author points out that important is not only important quantitative assessment of spoken words, but also the qualitative characteristics of semantic fields. If a child begins to speak in words that should appear much later in the proper development of speech (atmosphere, jet, cell, Pitot tube, etc. ), it is certainly an alarm for parents. These children also have difficulties with inflection and syntax. M. Korendo indicates that "disorders and irregularities in the development of the language system is one of the fundamental characteristics typical of Asperger's Syndrome" (Korendo, 2013).

Semantic disorders are manifested in the fact that a child cannot understand the meaning of the words used in the figurative sense. They not able to understand idioms, proverbs, metaphors or jokes. They have also problems with understanding slang and even colloquial speech.

Children with Asperger's Syndrome have a tendency to linguistic pedantry and great precision, some of their statements are artificial. Their language is very formal, they speak as if they read a dictionary. Echolalia (repeating of the last sentence or word) often appears in their statements. They repeat them quietly, as if to themselves. The voice of children with Asperger's Syndrome is very characteristic, sometimes monotonous or severe, with an improper accent. Sometimes, facial grimacing appears, but it is mostly indifference. Children look at the members of conversation but do not maintain contact with them. The gesture during the conversation may be very overactive. They react with anger, when they are not being listened to. They want to be listened to, so they ask questions of control or command, eg., "Listen carefully" (Maciarz, Drała, 2010).

Another characteristic feature of children with Asperger's Syndrome is a subject of fascination and the need to perform routine activities. A child collects different items, sometimes very strange, such as brush toilet. After some time they stop collecting them and start collecting new things. After a fascination with collecting things appears a subject of fascination, especially from the field of science or natural science. Fascination with statistics, symmetry and order can also appear (Attwood, 2006). The interests of children with AS are very special, precise, and may be limited, eg. to a particular film or composition of meteorites. They can talk endlessly about their interests (Woods et. al., 2013).

Children with Asperger's syndrome can be divided into two groups: those whose speech develops early and those who start speaking late. J. Cieszyńska-Rózek (2013) presents these two profiles of development (table 2).

Children with Asperger's Syndrome have problems with adapting to the social environment. They have difficulty in making friends because they do not realize

that friendship is based on the subtle behaviour towards other people. Moreover, it is extremely difficult for them to establish a friendly relationship, because peers are afraid of their impulsiveness and weirdness. The aversion to changes and the tendency to stereotypical behaviour mean that these children avoid playing with their peers and isolate themselves from the others, remaining in the own world. In addition, children with Asperger's syndrome are not able to read the signals given to them by others and therefore cannot respond in the correct manner. They cannot engage in the social relations and they do not understand social norms. In this situation they have a great difficulty in the orientation in the rules of the games and activities, they disrupt and do not react to commands. On the other hand, these children are very sensitive to the emotional moods of others, in particular members of family, but their emotions are not quite accurate because they are not able to understand the degree of emotion (grief, anger, contentment). They think that everyone should know their thoughts, and when find out otherwise, they react angrily. The negative response to changes in the environment causes that they cannot be involved in the social situations.

**Tab. 2.** Two profiles of early behaviour of children with spectrum of Asperger's Syndrome (children aged 2–4 years, selected cognitive functions)

| <b>Cognitive function</b>             | <b>Profile 1<br/>Asperger syndrome with early<br/>speech development</b>                                                                                                                                                                      | <b>Profile 2<br/>Asperger syndrome with late<br/>speech development</b>                                                                                                                                                                                                      |
|---------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| The development of gross motor skills | Aversion to riding a bike, early walking and running.                                                                                                                                                                                         | Aversion to riding a bike, walking and running appear at the proper age.                                                                                                                                                                                                     |
| The development of fine motor skills  | Aversion to drawing, long-lasting ambidexterity                                                                                                                                                                                               | Aversion to drawing, long-lasting ambidexterity                                                                                                                                                                                                                              |
| The development of play               | Laying in a row, thematic fun occurs when the roles of people are not played, fixations on maps, timetables, etc.                                                                                                                             | Laying in a row, no thematic fun                                                                                                                                                                                                                                             |
| Eating                                | Food selectivity, aversion to new meals.                                                                                                                                                                                                      | Food selectivity, aversion to new meals, eating with fingers, aversion to cutlery.                                                                                                                                                                                           |
| The development of speech             | Rapid development of specific vocabulary, repeating all phrases said by adults, fixations on numbers, alphabet.                                                                                                                               | There was no regression in language development, a lack of connecting words at 3 years of age, echolalia, not calling members of a family.                                                                                                                                   |
| The development of social skills      | Aversion to eye contact, lack of fear of strangers, lack of respect for social rules, inability to start a conversation, manipulation in contacts with adults, aversion to dressing, frequent aggression against siblings, serious, sad face. | Aversion to eye contact, lack of fear of strangers, lack of respect for social rules, inability to start a conversation, manipulation in contacts with adults, aversion to dressing, aversion to listening stories, frequent aggression against siblings, serious, sad face. |

Asperger's Syndrome causes that children cannot establish social relationships because its symptoms are a psychological barrier, preventing them from connecting with others. If a child is not diagnosed with AD, she or he might be considered eccentric in a primary school, sometimes can be isolated and escape into solitude. In adolescence a child becomes aware of their isolation and feels the need of acceptance, and tries to contact with peers. Unfortunately, due to their clumsiness and difficulties in conversations, they are exposed to ridicule and a lack of acceptance. At that time there appear violent emotional reactions or a need to do strange tasks, for example frequent hand washing appear. Often in adolescence children with Asperger's Syndrome retreat into their own world, they begin to talk to themselves, they stop contacting with others. Suffered frustrations make young people perceive the surrounding reality as unfriendly and isolate more and more. Their sensitivity, which appears in adolescence can lead to depression, suspicion towards the environment, paranoid imaginations and even suicide attempts (Maciarz, Drała, 2013).

Children with Asperger's syndrome are also characterized by impaired motor coordination and sensory hypersensitivity. Coordination disorders shows their clumsiness and awkwardness, therefore they are characterised weaker level of fitness relative to peers and a lower level drawing and writing. Sensory hypersensitivity causes anxiety, fear, and in extreme cases even pain (Komender et. al., 2009).

## Conclusion

A child with Asperger's syndrome requires early diagnosis, treatment, care and support. In addition, it must be remembered that this help should be addressed not only to a child, but also to their family. Early diagnosis of Asperger's Syndrome can greatly facilitate their life. Properly conducted therapy gives a chance for overcoming many difficulties.

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## Asperger's syndrome – the problem is still unknown

### Abstract

The article presents a brief history of research, its development, the causes of Asperger's Syndrome and today's method of diagnose. It also indicates the importance of language development of a child, as a basic diagnostic criterion. The author tries to show how important the role of early diagnosis and appropriate therapeutic interaction is, in this case it is mainly connected with language. Asperger's syndrome is a complex developmental disorder, and in this way it was presented in this article.

**Key words:** Asperger's Syndrome, developmental disorder, language development, early diagnosis and treatment

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