



## UNIT 1 – WHAT IS AUTISM?

### A BRIEF HISTORY OF AUTISM

The term autism originates from Eugen Bleuler in 1911, several decades before autism was described as a disorder. Namely, Bleuler derived the term autism from the Greek word “autos” meaning “self”. So, autism would literally mean selfism, ie. complete self-centeredness. In Bloiler's interpretation, autism is a form of thinking of people with schizophrenia who replace the real world with fantasies and hallucinations (Evans, 2013). The official history of autism attributes the first descriptions of this disorder to Leo Kanner and Hans Asperger, who independently, in the 1940s, used Bloiler's term autism to describe a so far unknown clinical condition. In doing so, the significant contribution made by Grunya Efimovna Sukhareva is often neglected, describing the clinical picture of highly functional autism as early as 1926. Unlike Kaner and Asperger, Sukhareva did not use the term autism in her first works.

Initially, there were no single diagnostic criteria for autism, so it happened that different authors created their own lists of diagnostic criteria, giving more or less importance to a specific symptom. The very concept of autism has changed over time, not only under the influence of research and clinical practice, but also thanks to huge changes in socio-political relations. Two leading classification systems - Diagnostic and Statistical Manual of Mental Disorders of the American Psychiatric Association and the International and Statistical Classification of Diseases and Related Health Problems of the World Health Organization, in the last decades of the XX century classified typical autism, Kaner type, in the wider category of pervasive developmental disorders. This category also includes Asperger's syndrome, which was commonly used to denote highly functional individuals with autism, Rett's syndrome, childhood disintegrative disorder, and pervasive developmental disorder not otherwise specified.

A special category of autism spectrum disorder (ASD) has been recognized in the current diagnostic systems DSM-5 (APA, 2013) and ICD-11 (WHO, 2018), which will start to be applied from 2022. In both classification systems, ASD belongs to a broader group of neurodevelopmental disorders. The term "pervasive developmental disorders" is no longer used. Former subcategories of pervasive developmental disorders (e.g., typical and atypical autism, Asperger syndrome, and PDD-NOS) are included in a single category of ASD and can no longer be diagnosed as separate clinical entities. Despite the huge variations in the degree of need for support, level of intellectual, adaptive and speech-language functioning, co-occurring conditions, and other characteristics, all people with autism have difficulties in achieving social communication, as well as, to a greater extent, stereotypical and repetitive behaviors.



## BASIC CHARACTERISTICS OF AUTISM

### Social communication disorder

Disorders of social communication are manifested through difficulties in achieving socio-emotional reciprocity, deficits in achieving nonverbal communication, as well as problems in developing, maintaining and understanding relationships with other people.

Socio-emotional reciprocity is the complex ability of an individual to engage in social interactions between two or more people. Leach and LaRocque (2011) proposed that “individuals who display social reciprocity are aware of the emotional and interpersonal cues of others” (p. 151). People with ASD have difficulties in understanding and monitoring socio-emotional signals from the earliest childhood, which is why they often react inadequately to other people's attempts to establish communication with them. In addition, it should be borne in mind that many people with autism are nonverbal or minimally verbal, which further complicates the realization of fruitful communication. Deficits in socio-emotional reciprocity can manifest in very different ways: a person with ASD does not initiate communication with others, does not react or inadequately reacts to attempts by others to establish communication with her; she endlessly elaborates on one topic, not realizing that her interlocutors may not be interested in that topic; they do not sufficiently understand the emotional state of the interlocutor and his communication intentions (ie why he said something).

People with autism often do not look into the eyes of the interlocutor or make only superficial eye contact. They do not use gestures in an appropriate way to compensate for shortcomings in verbal communication or to enrich or especially emphasize the spoken content. In addition, they often have a flattened facial expression. Body language, gestures used and facial expressions are often not sufficiently integrated with the verbal aspects of communication. Some people with autism completely lack facial expression and nonverbal communication.

Difficulties in creating and maintaining relationships with other people are manifested in a wide range of problems in realizing imaginative play with peers, adapting one's own behavior to different social contexts, difficulties in achieving cooperation at work or friendly relations with colleagues, to complete lack of interest in others.

### Restricted and repetitive patterns of behavior

People with autism exhibit various stereotypical and repetitive activities in movements, speech, and overall behavior. Rocking, fluttering, flicking, touching and tapping one's own body or the body of others are just some of the many forms of stereotypical motor activity. Stereotypes can also be manifested in speech - echolalia (repetition of other people's words), asking the same questions, endless elaboration of the same topic, idiosyncratic speech (ie speech specific to an individual with autism that the wider environment does not understand), etc.



Stereotypical movements and speech are often accompanied by ritual forms of behavior. People with autism sometimes insist on always following the same path, eating the same food, always dressing the same way. Sometimes it happens that very small changes in the environment and the impossibility of performing ritual activity lead to extreme distress. High insistence on sameness in preschool children with ASD may be associated with elevated anxiety in the future (Baribeau et al., 2021).

One of the possible symptoms of autism is the appearance of narrow, limited interests. Such interests can be atypical in focus (eg interest in unusual objects) and / or in intensity, when an individual with autism spends a huge amount of time always engaging in the same activity. In certain circumstances, it is possible to use the limited and perseverative interests of a person with autism to perform a certain work activity.

Although difficulties in sensory processing of information in people with autism have been described for decades, only since 2013 (APA, 2013) have they been recognized as one of the key diagnostic criteria for ASD. Sensory processing disorder covers the entire autism spectrum and is present in all age groups. Some people with autism are hypersensitive, so they perceive certain sound and light stimuli, smells and tastes as extremely unpleasant sensations. Noise produced by some machines, flashing lights, buzzing devices, intense odors and stuffy spaces, can completely prevent even well-trained people with ASD from performing work activities efficiently. On the other hand, there are those people with ASD who are hyposensitive, which means that they react less to sensory stimuli, and are sometimes insensitive to unpleasant stimuli, such as coldness and pain. Difficulties in sensory processing can also take the form of fascination with lights, rotating objects, the vibrations they produce, and the like. so that an individual with ASD devotes more time to non-functional parts of objects or their sensory characteristics than to the object itself.

Autism develops in early childhood, although some symptoms may not be immediately apparent. As the social demands of the environment increase, so does the behavior of a child with autism become more prominent. On the other hand, it happens that people with highly functional autism mask their difficulties, using different strategies: they force themselves to look the interlocutor in the eye, use learned phrases, imitate the facial expression of people from the environment, take care of interpersonal space etc. The tendency to conceal symptoms is usually more common in women with ASD.

All of the above symptoms of autism cause significant impairment in social, occupational, and other important activities of current functioning (APA, 2013).

## CO-OCCURRING CONDITIONS

A co-occurring diagnosis of neurodevelopmental disorders, such as ADHD or intellectual disabilities, psychiatric and neurological conditions, is common among people on the autism spectrum, and co-occurring conditions can have a significant impact on the



behavior, daily functioning, and outcome of autistic disorder. Nevertheless, these conditions often remain unrecognized, so that changes in behavior, regression, and lack of expected response to support and treatment provided are more often associated with autism itself rather than with possible co-occurring conditions (Casanova et al., 2020). Co-occurring conditions increase the cost of treatment and pose a great challenge for the families of people with autism.

Recent research shows that certain psychiatric conditions, such as depression and conduct disorders in young people with ASD may overwhelm their caregivers' coping resources (Menezes et al., 2021). The most common co-occurring psychiatric conditions in people in the spectrum are mood disorders (depression and bipolar disorder) and anxiety disorders whose prevalence is about 18%, and modern research shows that schizophrenic spectrum disorders are more common than previously thought (Lugo-Marín et al., 2019). Psychiatric comorbidity requires close cooperation between the psychiatric service, parents, vocational rehabilitation services, employers and teachers, because the intervention is not limited to taking medication, but also to monitoring the condition, providing individualized support and removing social barriers and stigma that is often associated with psychiatric illness.

Some neurodevelopmental disorders such as ADHD and intellectual disability are often associated with autism. It was once thought that the diagnosis of autism precluded the diagnosis of ADHD, but a large number of research studies have unequivocally indicated the possibility of comorbidity of these two developmental disorders. Lugo-Marín et al. (2019), a detailed analysis of 18 research studies, conclude that a quarter of adults with autism also have ADHD. People with comorbid autism and ADHD typically have more severe symptoms, especially in the social domain, as well as a greater tendency for repetitive activities (Rosen et al., 2021). Intellectual disability is also one of the most common co-occurring autism disorders. Unfortunately, in research that deals with effective models of providing support to young people with autism during the transition from school to the world of employees, this fact is often ignored, so that the research samples are mostly respondents with highly functional autism.

Naturally, people with the comorbidity of autism and intellectual disabilities will have a much greater need for support both in the workplace and outside of it than highly functional individuals. Among other things, epilepsy is much more common in these people, which, along with migraines and headaches, is considered to be the most common associated neurological disorder in autism. The associated neurological disorder can have a significant impact on the further developmental course, both directly and through the adverse effects of the drugs used. Therefore, "neurological check-ups are indicated in autism to ensure adequate physical health care and support" (Pan et al., 2020). In addition to convulsions, people with autism are more frequent users of health care services due to other health problems such as constipation and other diseases of the gastrointestinal system, dental issues, and hearing loss (Failla et al., 2021). Sleep disorders are a particular burden for people with autism and their parents, which can lead to a worsening of the clinical picture of autism and negatively affect daily functioning. At



least in some children with autism, sleep disorders may be associated with their excessive reactivity to sensory stimuli (Mazurek et al., 2019). Autism is often linked to eating disorders. In the population of patients with eating disorders, slightly less than 5% have a diagnosis of autism (Nickel et al., 2019). However, in practice, much greater problems can be created by specific eating habits, such as selectivity in food choices and feeding rituals.

## ETIOLOGY AND RISK FACTORS

The exact cause of autism is not known, and various risk factors are mentioned in the literature that increase the likelihood of developing autism. These risk factors can be genetic and environmental, and a large role in the development of autism can be played by the multiple influence of different risk factors on a genetically predisposed individual.

Despite the fact that hundreds of genes that can be linked to autism have been identified so far, it is possible to prove a link between autism and mutations in individual genes in a very small number of subjects. The genetic architecture (the relative contributions of different forms of genetic variation) of autism is very complex, and previous research indicates extraordinary causal diversity (de la Torre-Ubieta et al., 2016).

Environmental factors as possible risk factors for autism are: exposure to air pollutants, pesticides and other chemicals in the prenatal period, including consumption of alcohol and other psychoactive substances and taking certain medications (eg valproic acid) by the pregnant woman; infections in the prenatal (especially rubella) and early postpartum period; gestational diabetes; hypoxia; prematurity; lack of folic acid, iron, fatty acids and vitamins in the diet of pregnant women; perinatal and postnatal complications, etc. Many studies cite advanced paternal and maternal age as significant risk factors for autism (Styles et al., 2020).