Psychopathology of mental and behavioral disorders in people with intellectual disability

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Abstract

Introduction.

Mental and behavioral disorders often coexist in people with intellectual disabilities. The prevalence of mental and behavioral disorders in people with intellectual disability, compared to people with the intellectual norm, differ in the form of manifestation of the symptoms of a given disorder depending on the degree of intellectual disability. Psychopathological and behavioral disorders are often mistakenly captured as a result of intellectual disability itself. Therefore, the correct diagnosis of people with mental retardation is an increasing value.

Aim.

The aim of this article is to present the issues of mental and behavioral disorders in the population of people with intellectual disabilities. Presentation of the symptomatology of these disorders and the subject of therapy in order to improve the functioning of people with intellectual disabilities.

Summary.

People with intellectual disabilities show a greater risk of developing mental and behavioral disorders. To date, no uniform diagnostic criteria have been established that would allow for a more accurate medical diagnosis. Increasing the knowledge of the functioning of people with intellectual disabilities who show mental disorders and the correct diagnosis would allow to increase the effectiveness of undertaken therapeutic tasks and improve the quality of life of people with mental disabilities.

Key words: intellectual disability, mental disability, mental disorders, behavioral disorders, psychopathology
Introduction

Psychopathological disorders of people with intellectual disabilities and coexisting mental health problems require a long and complicated interdisciplinary diagnosis. Despite the fact that knowledge about mental disorders is constantly developed, there is still no clear data on the symptomatology and determinants of their formation (Bobińska, Galecki 2010). Scientists point to the lack of sufficient knowledge about the correctness of psychiatric diagnosis in people with intellectual disabilities (Górna, Jaracz 2012). The diagnostic process and then treatment generate further therapeutic, caring and nursing activities (Bielawska 2010). Understanding disability as a state in which mental disorders occur, changes the perception of people with intellectual disabilities and affects the effectiveness of interventions in caring for a given individual.

Classification of mental retardation

According to the International Statistical Classification of Diseases and Health Problems ICD-10, intellectual disability is a disorder of the development of mental abilities that affects the level of skills in the field of cognitive functions, motor skills and psychosocial functioning (Barnow, Ermer, Dittmann, & Stieglitz 2015).

Taking into account the level of cognitive processes, the ICD-10 classification distinguished the following degrees of mental retardation:

| DEGREE OF MENTAL IMPAIRMENT | CATEGORY | IQ RANGE | MENTAL AGE IN YEARS |
|-----------------------------|----------|----------|---------------------|
| light                       | F70      | 50-69    | 9 to under 12       |
| moderate                    | F71      | 35-49    | 6 to less than 9    |
| considerable                | F72      | 20-34    | 3 to less than 6    |
| deep                        | F73      | <20      | In adults, the mental age is less than 3 years old |

Tab. 1. Mental retardation levels based on ICD-10 classifications
Source: International Statistical Classification of Diseases and Related Health Problems, ICD-10 2009

Scientists more and more often agree with the thesis that people with intellectual disabilities suffer from mental disorders such as those in the intellectual norm (Niemiec-Elanany 2017). Intellectual disability is considered to be one of the risk factors for these disorders. The diagnostic criteria of intellectual disability indicate a clearly lower than average intellectual level, indicating an IQ below 70 IQ. With the IQ mentioned above, the risk of developing mental disorders increases by as much as 3-4 times (Jackowska, Dęga-Rudewicz 2004).

According to the definition of the American Psychiatric Association, DSM - V, mental retardation is based on three diagnostic criteria. On their basis, mental retardation occurs in an individual whose intellectual level is lower than IQ 70 and coexists with at least two difficulties in adaptive behavior, mainly in the psychomotor sphere. The last criterion indicates that these difficulties begin in the early development period (Sturmey 2010). The criteria of intellectual disability disorders in the field of mental disorders refer to changes in thinking, emotions, personal life and social functioning. The period of occurrence of psychopathological disorders is also an essential criterion (Bielawska 2010). Both the ICD and DSM classification refer to changes in health in the premorbid period, symptoms and course of the disease, and the behavior of a given individual (Sturmey 2010).
The definition of mental disorders formulated in the largest classifications - international and American - is similar and has been stable for many years. A mental disorder is diagnosed when a group of four related phenomena occurs: psychopathological symptoms, behavioral disorders, functional disorders and internal distress, called pathological stress. Maintaining conservatism in this case is necessary and extremely important, because even a small change will significantly modify the epidemiological data (Heitzman, Łoza, Kosmowski 2011).

The prevalence of mental disorders
Mental disorders occur in about 50% of people with intellectual disability (Barnow, Ermer, Dittmann, and Stieglitz 2015). The literature on the subject indicates, however, that the percentage of these disorders is variable. J. Bregman states that mental disorders occur in about 27–71% of people with intellectual disability, and according to M. Rutter, in 7.7-9.9% of a given population. (Komender 2002). Mental disorders are found in approximately 33% of people with mild intellectual disability, and among people with moderate and severe disabilities - half (Goodman, Scott 2000).

Symptomatology of mental and behavioral disorders
Mental retardation, regardless of the degree of deviation from the norm, may occur alone or constitute one of many coexisting disorders (Orzel 2013, Pużyński, Wciórka 2000; Kirshore 2005). People with intellectual disability may manifest symptoms of many disorders simultaneously (Bobińska, Galecki 2010). Particular attention should be paid to mental disorders and behavioral disorders, the clinical picture of which may reveal slight differences in the course of the course among people with intellectual disability compared to people with the intellectual norm (Cooper, Holland 2010). These disorders lead to a number of consequences affecting the psychophysical and social functioning of the individual suffering from disorders, as well as people from the patient's immediate environment (King 2010).

There are four possible combinations of causes that are responsible for the coexistence of intellectual disability and mental disorders (Table 2).

According to the research, the first two variants are the most likely. Option A is based on the assumption that, regardless of the determinants, a low level of intelligence predisposes people to mental disorders. A lower level of intellectual functioning is associated with encountering greater difficulties by a given individual, for example in learning. They may be less able to cope with stress and respond more to it. Thus, a lower IQ is associated with higher levels of frustration, stress, sadness, anger and anxiety (Goodman, Scott 2000). Variant B assumes the existence of similar biological factors which independently cause intellectual disability and mental disorders. A greater probability of revealing mental disorders in people with intellectual disability results from the specificity of social and psychological existence (Bobińska, Galecki 2010). At the same time, the occurrence of mental health disorders in people with a reduced level of intelligence is associated with having a weaker system of defense mechanisms, often limits their functioning to a large extent and indirectly affects their quality of life, as well as adaptation in society (Bobińska, Galecki 2010).

| VARIANT | CAUSES | IQ LEVEL | DISTURBANCES PSYCHICAL |
|---------|--------|----------|------------------------|
| A       | - organic substrate  
|         | - multi-gene inheritance  
|         | - social factors        | short | Yes          |
| B       | - biological agents    | short | Yes          |
| C       | - social factors       | short | Yes          |
| D       | - social factors       | short | No           |

Tab. 2. The causes of the coexistence of intellectual disability and mental disorders
Source: (Goodmann, Scott 2000 p. 204).
A separate but also important issue may be disorders resulting from diagnostics, treatment, care and daily satisfaction of basic life needs. Proper diagnosis plays a key role in helping people with intellectual disabilities. Due to the complexity of the phenomenon of intellectual retardation, the diagnostic process is highly complicated. The main problem is the lack of diagnostic tools for people with intellectual disabilities. The diagnosis is made with the use of tests for people with the intellectual norm, which, taking into account the significant deficits in the mental functioning of people with intellectual disabilities, is often unreliable (Sturmey 2010).

**Co-occurrence of intellectual disability and mental disorders**

Mental and behavioral disorders in the population with intellectual disability are the result of damage to the central nervous system, i.e. the biological basis as well as the psychosocial basis, through the influence of social and environmental factors on the individual. The occurrence of the same mental disorders in people with intellectual disabilities and people with an intellectual norm differs in the form of manifestation of the symptoms of a given disorder depending on the degree of intellectual disability. The deeper the level of disability, the differently the disorders are, mainly due to the large limitations of cognitive and linguistic functions (Bobińska, Galecki 2010). As a result of these dysfunctions, mental and behavioral disorders are often mistakenly interpreted as a result of intellectual disability itself.

**Depressive disorders**

The most common mental disorders in the group of people with mental retardation include depressive disorders and anxiety disorders. Depressive disorders occur significantly not more often in people with reduced intellectual performance compared to people with the intellectual norm. Unfortunately, the diagnosis of depressive disorders is highly complicated. The basic diagnostic problems include differences in the degree of cognitive and social skills (Stavrakaki, Lunsky 2010). Among people with mild mental disability, symptoms of depression, both in the history and observation, generally do not differ from the symptoms in the general population. Depressive disorders among people with deeper disabilities manifest themselves in the form of non-specific symptoms. Therefore, depressive disorders may include symptoms that are not attributed to these disorders in the group of people within the intellectual norm (Bobińska, Galecki 2010, Orzel 2013). Common depressive symptoms in people with intellectual disability, regardless of its degree, include significantly depressed mood, depressive affect and sleep disorders. Taking into account the symptomatic specificity of depression in people with significant and profound mental retardation, the following depressive symptoms can be distinguished: excessive irritability, psychomotor agitation, severe behavioral disorders, loss of adaptation abilities (Stavrakaki, Lunsky 2010). We also quite often observe aggressive, self-destructive behavior and shouting. People with moderate mental retardation are characterized by auto-aggressive actions and avoiding contact with others (Bobińska, Galecki 2010, Orzel 2013). People with mild mental retardation are characterized by tearfulness, low self-esteem, mood changes, lack of interest and loss of energy (Stavrakaki, Lunsky 2010). Therefore, the greater the degree of intellectual disability, the greater the atypical symptoms in depressive disorders, i.e. the increase in autoaggression and hyperactivity. This dependence leads to an increase in the tendency to manifest emotional states and increased tension in people with intellectual disabilities and directing negative emotions to the immediate environment (Bobińska, Galecki 2010, Orzel 2013).

**Anxiety disorders**

Anxiety disorders are very common among people with intellectual disabilities. As in the case of depressive disorders, the diagnostic process is complicated. The most
characteristic symptoms of anxiety disorders in this group of people are aggressive, auto-aggressive, agitating and compulsive behaviors, manifested by repeated crying, screaming, insomnia (King 2010), increased activity or emotional lability. People with intellectual disabilities very often also experience panic attacks, obsessive disorders, compulsive disorders, post-traumatic stress disorder and simple phobias, e.g. fear of the dark, tight spaces (Stavrakaki, Lunsy 2010, Orzel 2013). A particularly difficult diagnosis is obsessive-compulsive disorder, manifested by intrusive thoughts and actions. As with depressive disorders, the source and course of anxiety disorders depend on the severity of the impairment. Among people with deep mental retardation, one of the most difficult ones is to determine whether the symptoms are compulsions or stereotypical activities. Correct diagnosis is much easier for people with a milder degree of disability. A characteristic symptom of compulsions are negative emotions such as anger or aggression (Bobińska, Galecki 2010, Orzel 2013). It needs to be highlighted that, that in people with intellectual disability, the severity of anxiety disorders is often determined by environmental determinants. Mentally handicapped people struggle with expectations that exceed them and with negative social evaluation. These aspects, combined with significant cognitive disturbances, lead to inadequate reactions (Cierpiałkowska 2011).

Behavior disorders

There is no doubt that intellectual disability, in addition to many broadly understood consequences, also entails greater susceptibility to behavioral disorders (eagle). They are one of the disorders that occur more frequently in people with mental retardation than in the general population (Komender 2002). They occur in one third of people with intellectual disabilities, and their extent often increases in adolescence. J. Corbett, on the basis of his own research, found behavior disorders in 9% of children with profound mental retardation and in 5% - increased stereotypical behavior (Zaremba, Wald, Stomma 2000). The occurrence of this type of disorders is conducive to, among other things, setting the child too high requirements that go beyond his abilities and skills.

In people with mild mental retardation, behaviors ranging from aggressive and impulsive to stereotypical, self-aggressive and pointless (Niemiec- Elanany 2017) are observed. The movement stereotype observed in this group of people is most often expressed by swaying, rocking, waving hands. They may result from the unmet needs and may also be self-stimulating (Komender 2002). Self-damage most often manifests itself in blows of the head and hands, scratching, pinching, self-biting or hair pulling. This type of disorder occurs in about 10–15% of people with intellectual disability, and more often in people with severe mental retardation. Self-harming behaviors may be correlated with environmental factors as a response to stress caused, for example, by noise, a large number of people suffering from chronic pain or drug side effects. Self-mutilation is especially common in people with significant mental retardation, in whom it can be a means of attracting attention (Goodman, Scott 2000). The profound type of disability is accompanied by somatic disorders, developmental defects, damage to the sensory organs, impulse control disorders, including self-harm, and aggression.

In order to systematize the described behavioral disorders, attention should be paid to the fact that there are two main groups among people with intellectual disability. The first of them are individuals showing too much arousal, the so-called eretic, while the second are people who are too inhibited - apathetic. In addition, the basic features that can be characterized by disabled people, especially to a slight degree, affecting the affective range they manifest include, among others: limitations of higher emotionality, egocentric and selfish
Attitude, lower criticism, susceptibility to manipulation and tendency to observe imitating other people. It is these types of features that underlie all actions and behaviors.

**Aggression and self-aggression**

People with mental retardation display destructive behavior through aggression and self-aggression. The problem of aggressive behavior concerns 30-60% of people with intellectual disabilities (Tsiouris 2011). It is a significant problem due to its universality and therapeutic difficulty. Benson and Havercamp (2010) argue that in mentally retarded individuals, all aggressive activities, excluding direct physical harm, affect the individual's cognitive and social functions through concentration and the process of learning to function in society. Aggression among people with intellectual disabilities is not always biological, because aggressive behavior can be learned (Benson, Havercamp 2010). Holyst (2009) emphasizes the significant role of the closest environment of a person with intellectual disability and the social interactions taking place there. Believes that specific attitudes towards people with disabilities, such as excessive protection, compassion or pity trigger negative emotions in an individual, leading to aggression. The basis of aggressive behavior depends on the degree of impairment and the scope of limitations and needs associated with it. In milder degrees of intellectual disability, the cause of aggressive behavior is usually reduced self-esteem or lack of a sense of independence. In people with deeper intellectual disability, frustration may result from unmet basic needs. It should also be noted that aggressive behavior may result from the experienced physical pain, inappropriate temperature, noise, crowding, as well as inappropriate treatment by people in the immediate vicinity. When describing aggressive behavior in people with intellectual disability, self-aggression plays a special role. According to Benson and Havercamp (2010), any aggressive behavior directed at oneself, manifested in the discussed group usually through self-mutilation, constitutes a learned instrumental reaction. This reaction is perpetuated with positive social reinforcements or the termination of negative stimuli. Self-aggressive behaviors in people with intellectual disabilities may be a specific way of providing sensory, tactile, auditory or visual stimulation. Therefore, aggressive and auto-aggressive behaviors may be not only organic, but may also be social and environmental (Babiker, Arnold 2003). This reaction is perpetuated with positive social reinforcements or the termination of negative stimuli. Self-aggressive behaviors in people with intellectual disabilities may be a specific way of providing sensory, tactile, auditory or visual stimulation. Therefore, aggressive and auto-aggressive behavior may not only have an organic basis, but may also be social and environmental (Babiker, Arnold 2003). This reaction is perpetuated with positive social reinforcements or the termination of negative stimuli. Self-aggressive behaviors in people with intellectual disabilities may be a specific way of providing sensory, tactile, auditory or visual stimulation. Therefore, aggressive and auto-aggressive behavior may not only have an organic basis, but may also be social and environmental (Babiker, Arnold 2003).

**Therapy of people with intellectual disabilities**

Intellectual disability is an irreversible disorder, which means that it will accompany an individual throughout his life, with no possibility of curing him. On the other hand, quick initiation of an intensive multifaceted therapy adapted to the degree of disability enables the development of some intellectual functions to lead to greater independence of the individual. The therapy of people with intellectual disabilities should be individualized in relation to the needs and possibilities of a given individual. It includes: rehabilitation to improve motor functions, pharmacotherapy to treat coexisting somatic diseases and mental disorders, speech therapy to support the development of speech and communication skills, cognitive training...
stimulating the development of the perceptual functions of the brain, training psychosocial skills, and psychoeducation and social support for the family of a handicapped person.

Summary

Intellectual disability is congenital or very early acquired irreversible developmental disorders manifested by a significant reduction in mental performance and intellectual functions. Intellectual disability is characterized by heterogeneity of symptoms of varying severity and dynamics that are difficult to predict. This disability covers the cognitive sphere of human functioning, influencing his personality and determining the way of functioning. People with intellectual disabilities are usually unable or unable to communicate about their problems. Therefore, it is necessary to conduct a comprehensive diagnostic process taking into account biological, psychological, social and family factors. Carrying out a medical diagnosis of a person with intellectual disability is complicated and is still an open question. The reliability of diagnosis and taking correct medical interventions decrease simultaneously with the severity of the degree of intellectual disability along with which the cognitive, linguistic and functional deficits deepen. In people with intellectual disabilities, mental and behavioral disorders are often comorbid, which due to non-specific symptoms are a great difficulty in diagnosis. The introduction of intensive, multifaceted interdisciplinary individual therapy is able to improve the functioning of a given individual on the motor, psychological and social level. The reliability of diagnosis and taking correct medical interventions decrease simultaneously with the severity of the degree of intellectual disability, along with which the cognitive, linguistic and functional deficits deepen. In people with intellectual disabilities, mental and behavioral disorders are often comorbid, which due to non-specific symptoms are a great difficulty in diagnosis. The introduction of intensive, multifaceted interdisciplinary individual therapy is able to improve the functioning of a given individual at the motor, psychological and social level. The reliability of diagnosis and taking correct medical interventions decrease simultaneously with the severity of the degree of intellectual disability, along with which the cognitive, linguistic and functional deficits deepen. In people with intellectual disabilities, mental and behavioral disorders are often comorbid, which due to non-specific symptoms are a great difficulty in diagnosis. The introduction of intensive, multifaceted interdisciplinary individual therapy is able to improve the functioning of a given individual at the motor, psychological and social level. The reliability of diagnosis and taking correct medical interventions decrease simultaneously with the severity of the degree of intellectual disability, along with which the cognitive, linguistic and functional deficits deepen. In people with intellectual disabilities, mental and behavioral disorders are often comorbid, which due to non-specific symptoms are a great difficulty in diagnosis. The introduction of intensive, multifaceted interdisciplinary individual therapy is able to improve the functioning of a given individual at the motor, psychological and social level.

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