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AN APPROACH TO INTELLECTUAL DISABILITY

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Abstract. *Intellectual disability is a multidimensional phenomenon that is influenced by different factors and determines its characteristics and severity. A number of factors and causes can lead to this neurodevelopmental disorder. As a result, the characteristics, the symptoms and the degree of severity of the symptoms that vary between individuals vary. However, some common features have been identified for all people with intellectual disabilities. It is obvious that the heterogeneity that occurs between people with Intellectual retardation creates problems in the exact definition of this disorder.*

Keywords: *neurodevelopmental disorder, characteristics, symptoms*

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Introduction

Intellectual disability is a multidimensional phenomenon, and it varies widely. Its causes, form and consequences of mental disability are due to multiple factors, which shape its characteristics and severity. of mental disability. Today, the term Intellectual retardation (ID), or general learning disability, has replaced the earlier definition of mental retardation (MR), and encompasses the whole range of generalized neurodevelopmental disorders, including reduced mental and adaptive function in the wider environment. (Johnson, Walker, Palomo-González & Curry, 2006). To qualify as a person with a mental disability you must:

- The results he scores on the IQ tests should be below 70 or its equivalent in each test that measures his mental level.
- To present or face difficulties in at least 2 of the 10 basic areas of a person's daily life, i.e., autonomy and self-care, health, personal hygiene, safety, social skills and social adjustment, communication, the utilization of community services and facilities, the capacity for learning, the functional and academic utilization of leisure and work. (Luckasson et al., 2002).

For a reliable assessment of the characteristic symptoms related to the abilities of each individual, his / her strengths and weaknesses in the whole range of his / her daily life should be carefully considered (American Mental Association, 2013).

Improving the abilities of people with intellectual disabilities is presumed through comparison with other people of the same age and the same social environment. (APA, 2010).

Special mention should be made of non-subsurface intellectual disability, in which mental deficits occur without any other physical or biological abnormalities or dysfunctions in individuals (Schalock & Luckasson, 2014). Typical examples of these cases are Down Syndrome and Fragile X Syndrome, which are responsible for the development and development of intellectual disabilities.

Down Syndrome

Down Syndrome has been reported to be a common genetic cause of mental disability. Cases of Down syndrome are mainly due to partial or complete replication of chromosome 21 in the genome. The most common form (95% of cases at birth) is standard trisomy, involving recurrence of chromosome 21. In over 90% of these cases, the extra chromosome is of maternal origin, due to non-reconnection during reduction. Transfer of chromosome 21 material to another chromosome (usually 13 or 18) and mosaicism (transmission of a cryptic 21 cell line trisomy from an uninfected parent) are rare causes of Down Syndrome. (Arya et al., 2011).

Fragile X Syndrome

Fragile X syndrome (FXS) is a genetic disorder, and it is estimated that it occurs more often in men than women. People have mild to moderate intellectual disability, while about 1/3 of these cases have symptoms that belong to in the range of the autistic spectrum, and show hyperactivity which is also associated with seizures, in approximately 10% of cases. Disruption of the fragile syndrome is caused by the dilation of the CGG (trinucleotide repeat) gene on the X chromosome, leading to a deficiency of the resulting protein, which is necessary for the normal development of connections between neurons and the nervous system. The diagnosis of the syndrome is made through genetic testing with an appropriate test, not while no specific drug product is provided for early prevention or complete treatment.

However, through special education, speech therapy, behavioral therapy and physiotherapy, it is possible to develop a wide range of skills, while the use of drugs achieves the prevention and treatment of seizures as well as the problems of aggressive mood and behavior.

Modern Approaches of the Intellectual Disability

Intellectual disability affects about 2% of the general population, while 75% to 95% of people with mental disabilities have a mental disability. Cases of syndromic or idiopathic cases represent 50%, while at the same time a quarter of cases are caused by a genetic disorder and 5% are inherited from the individual's parents (Harris, 2006). According to the American Association for intellectual and Developmental Disabilities, the definition of mental disability should be based on the adaptive behavior or adaptive function of an individual, which examines in detail the skills required to held by individuals, to live independently. In order to adequately assess adaptive behavior, according to the Diagnostic and Statistical Manual of intellectual Disorders (DSM-IV) (APA, 2013), three criteria must be met to diagnose mental retardation:

- The significant limitation presented to a person's general intellectual abilities and mental function (compared to the typical average of his peers).
- The significant limitations presented in one or more areas of his adaptive behavior.
- The multiple socialization environments, as well as the corresponding level of response and adaptation of the individual to them.

This specific recording and evaluation is achieved by appropriate professionals (educators, treating physicians, and counselors) through adaptive behavior scoring scales, and functional limitations may become apparent, either in childhood or adolescence (Andrews & Harlen, 2006).

The key and characteristic features of skills that are very important for the development of adaptive behavior and independent living of individuals, focus on:

- Daily living skills such as dressing, bathing and feeding.
- Communication skills, such as understanding what is being said and being able to respond with arguments in any situation.

- Social skills with peers, family members and other adults.
- Other special skills that can be crucial to an individual's integration into the community and to the development of appropriate social behaviors, which correspond to the social expectations associated with the main stages of life (i.e., childhood, adulthood and old age) (APA, 2010).

Appropriate support and individual services can make a significant contribution to enhancing their functionality and achieving a satisfactory standard of living for these individuals.

Diagnosis and classification of intellectual disability

In order to have a remarkable and reliable result, the A person mental state uses single-phase tests and individual multi-factor criteria for measuring his intelligence (Raven-Raven's Progressive Matrices). The results of the IQ tests also indicate the different levels to which the person being examined may belong.

Mild intellectual retardation (IQ level ranges from 50 to 70), moderate intellectual retardation (IQ level ranges from 30 to 55), severe intellectual retardation (IQ level, 20 to 40) and finally, profound intellectual retardation (with IQ levels, 20 or 25). Alfred Binet in France created the Stanford-Binet Intelligence Scales, as a test of "general intelligence". Based on Binet's example, Lewis Madison Terman (Stanford Graduate School of Education) extended this discovery by creating a mental test that included scores in the form of an "intelligence quotient." (Salvador-Carulla et al., 2011). Until the most recent revision of diagnostic criteria, an IQ score of 70 or below 70 was a primary and primary diagnostic factor for intellectual disability (Roeleveld et al., 1997). Today, the diagnosis of intellectual disability is not based solely on IQ test scores, but also on all the social and psychological factors that determine an individual's adaptive behavior and functioning.

Symptoms and Features

The characteristics and symptoms of people with intellectual disabilities vary from person to person. However, the common symptoms of people with intellectual disabilities include the following characteristics: (APA, 2013):

- Significant delays in the development of motor skills, such as walking.
- Speech delays and difficulties in developing speech skills.

- Significant difficulties in skills related to all daily activities that include, clothing, personal hygiene and nutrition.
- Incomplete skills in designing and organizing a program.
- Behavioral and socialization problems.
- Lack of development of mental capacity, obsession with child behavior.
- Low school learning performance and socialization problems in the school unit.
- Not accepting possible changes in their lives.
- Social norms and their observance are difficult for people with intellectual disabilities to understand.

When the first problems in children's learning performance occur, it is necessary to be evaluated by specialist therapists, in order to distinguish and identify the features of intellectual disability from possible other, learning or emotional disorders (Brown & Hatton & Emerson, 2015). People with mild intellectual retardation are able to learn and learn basic self-care skills and other practical activities. and at the level of adulthood, they can live completely independently by actively participating in the labor market and in claiming their labor rights. People with moderate intellectual retardation show a limited educational background, learning basic and simple health and personal safety skills, as well as participating in simple activities of daily living. In their adult lives it is very likely that they will continue to live with their family or join organized support groups, which will therefore help them to adapt to the wider adult social reality.

Finally, in the latter category of people with severe mental retardation, or profound mental retardation, people need supervision and more intensive support throughout their lives, as they are not able to take care of themselves and provide the skills necessary for an independent living. They may learn some basic living skills and engage in certain activities of daily living, but always to a limited extent by providing support or supervisory assistance.

References

1. Buntinx, W.H.E. Schalock, R.L. (2010). Models of Disability, Quality of Life, and Individualized Supports: Implications for Professional Practice in Intellectual Disability.

Journal of Policy and Practice in Intellectual Disabilities – Overview 7(4), 283-294, doi:10.1111/j.1741-1130.2010.00278.x
2. American Psychiatric Association. (2013). Diagnostic and statistical manual of mental disorders (5th ed.). Washington, DC: Author.
3. American Psychological Association. (2010). Publication Manual of the American Psychological Association. Washington, DC: American Psychological Association.
4. Andrews, R. & Harlen, W. (2006). Issues in synthesizing research in education. Educational Research, 48(3), 287-299, doi: 10.1080/00131880600992330.
5. Arya, R. &Kabra, M. & Gulati, S. (2011). Epilepsy in children with Down syndrome. Epileptic Disorders, 13(1), 1-7.
6. Brown, I.&Hatton, C. & Emerson, E. (2015). Quality of life indicators for individuals with intellectual disabilities: Extending current practice. Intellectual and Developmental Disabilities, 51(5), 316–332, doi: 10.1352/1934-9556-51.5.316.
7. Hagerman, R.J. & Berry-Kravis, E. & Hazlett, H.C. & Bailey, D.B. & Moine, H. & Kooy, R.F. & Tassone, F. & Gantois I. & Sonenberg, N. & Mandel, JL. & Hagerman, PJ. (2017). Fragile X syndrome. Nature Reviews Disease Primers, 3, 17065 , doi: 10.1038/nrdp.2017.65.
8. Harris, J.C. (2006). Intellectual Disability: Understanding its Development, Causes, Classification, Evaluation, and Treatment. New York, NY: Oxford University Press.
9. Johnson, C.P., Walker, W.O. Jr, Palomo-González S.A. & Curry, C.J. (2006). Mental retardation: diagnosis, management, and family support. Curr Probl Pediatr Adolesc Health Care. 36(4), 126-65. doi: 10.1016/j.cppeds.2005.11.005.
10. Luckasson, R., Borthwick-Duffy, S., Buntinx, W. H.E., Coulter, D.L., Craig, E.M. (P.), Reeve, A., Schalock, R.L., Snell, M. E., Spitalnik, D.M., Spreat, S., Tassé, M.J., & The AAMR AD HOC Committee on Terminology and Classification. (2002). Mental retardation: Definition, classification, and systems of supports (10th ed.). American Association on Mental Retardation.
11. Roeleveld N, Zielhuis GA, Gabreëls F. (1997). The prevalence of mental retardation: a critical review of recent literature. Dev Med Child Neurol., 39(2), 125-132. doi: 10.1111/j.1469-8749.1997.tb07395.x.
12. Salvador-Carulla L, Rodríguez-Blázquez C, Martorell A. Intellectual disability: an approach from the health sciences perspective. Salud Publica Mex. (2008). 50 (2), 142-150, doi: 10.1590/s0036-36342008000800006.
13. Schalock, R. L. & Luckasson, R. (2014). Clinical judgment (2nd ed.).Washington, DC: American Association on Intellectual and Developmental Disabilities.
14. Sherman, S., Pletcher, B. A., & Driscoll, D. A. (2005). Fragile X syndrome: diagnostic and carrier testing. Genetics in medicine: official journal of the American College of Medical Genetics, 7(8), 584–587, doi:10.1097/01.