



Risk Factors for Learning Disability

Dzhos Yu.S., Nekhoroshkova A.N., Griбанov A.V., Deputat I.S.

Northern (Arctic) Federal University, Russia

The genesis of learning disability depends on the interaction of many factors. Perinatal pathology central nervous system occurs among 80% of children. Also hereditary predisposition plays an important role. Family deprivation, peculiarity upbringing, stress affect on psycho-emotional state of children and 42% of children have high level of anxiety. Personal characteristics, such as irritability, stereotype, alexithymia and other also lead to additional difficulties, especially in communication with teachers and peers. The impact of these factors leads to the development dysadaptation and changes in the functional maturation of the brain that determines cognitive development. Qualitative age adjustment in the functioning of the brain of the child in the early school years are characterized by significant individual differences in the rate of maturation of the cortex and regulatory systems that determine the specificity and efficiency of different activities. Neuropsychological diagnosis, electroencephalography (EEG) and analysis of the DC-potential allow estimating peculiarities of the formation of regulatory systems in the brain. The appearance of low-frequency EEG rhythms and reduction of energy consumption, especially in the frontal cortex on the background of higher cerebral energy metabolism of the brain as a whole indicates the relative immaturity of the brain structures. For the correction of learning disabilities among children of primary school age we have used a comprehensive approach that includes medical therapy (courses of nootropics several times a year), combined with neuropsychological correction (method replaces ontogenesis) and family therapy. This work was supported by grants from the President of the Russian Federation № 14.Y30.14.2785-MC.

Biography

YuliyaDzhos has completed her PhD at the age of 28 years from Northern State Medical University (Russia). She is deputy director for scientific work and associate professor in the Institute of Medical and Biological Research Northern (Arctic) Federal University. She has published more than 80 papers in journals.