Abstract

Introduction: There is a high prevalence of cognitive and socioemotional dysfunction and disorders in very low birth weight (VLBW <1500 g) and extremely low birth weight (ELBW <1000 g) children. These findings raise concerns and questions about the level of mental development of these children, not only in early childhood but also during school age, adolescence and adulthood.

Methods: Socioemotional and cognitive development was assessed in 118 children with VLBW or ELBW and 101 children with normal birth weight (≥ 2 500 g), aged 5 to 9 years. The test battery contained selected subscales from the Intelligence and Development Scales (IDS) and the Developmental Neuropsychological Assessment – second edition (NEPSY-II). Parents were administered Behaviour Rating Inventory of Executive Function (BRIEF), and an anamnestic interview as well as observation was also conducted.

Results: A statistically significant difference in cognitive and socioemotional development between children with VLBW/ELBW and children with normal birth weight. The IQ score of children with normal birth weight was on average 12.98 points higher. These children also perform better results than children with VLBW/ELBW in all subtests of the IDS and NEPSY-II. Parents did not evaluate impaired executive function.

Conclusion: Among children with VLBW/ELBW, aged 5 to 9 years, the results showed impairment in cognitive and socioemotional development. However, it is important to note that the performance of children with VLBW/ELBW was still within the normal range. The results of the study emphasize the need to introduce adequate long-term and systematic care for children with VLBW/ELBW and the importance of further research to better understanding on the specifics of the development of these children, not only during childhood, but also in school age, and adolescence.

Key words: cognitive development, socioemotional development, very low birth weight, extremely low birth weight