

# Neuropsychological and emotional-behavioral changes in children's development after COVID-19

Monday, September 23, 2024 1:10 PM (20 minutes)

**Objectives:** Sars-Cov-2 infection had a significant impact on the psychological well-being of children and led to negative effects on their mental health. Although children affected by COVID-19 had milder symptoms compared to adults, impairments in neuropsychological and emotional development were noted.

The main aim of this study was to detect possible changes in the neuropsychological and emotional-behavioral development of children after Sars-Cov-2 infection.

**Methods:** 40 patients aged 8 to 9 years were divided into two groups: children who had contracted SARS-Cov-2 infection (CG) and children who had not contracted infection (NCG). The BVN 5-11 instrument was used to assess cognitive domains. Data on changes in emotional-behavioral development were collected through a parent questionnaire.

**Results:** The Wilcoxon signed-rank test revealed a significant change in mood only in the CG participants ( $p=0.019$ ). The neuropsychological performance of the two groups on BVN 5-11 sub-items was below the cutoff of clinical significance.

Significant positive correlations were observed between Naming on visual presentation and Reading time ( $p=.006$ ), and Phonemic fluency and device use time ( $p=.030$ ). Positive statistically significant correlations were also found between Mood and Free behavior ( $p=.000$ ) and between Mood and peer Interaction ( $p=.013$ ).

**Conclusions:** Sars-Cov-2 infection had a negative impact on the emotional development of children who were infected with the virus. The neuropsychological functioning of the pediatric population was influenced by psychosocial variables that played a protective role in children's cognitive development.

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No

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