

EARLY CHILDHOOD HEADACHE: MAPPING PSYCHOLOGICAL, COGNITIVE, AND FUNCTIONAL IMPACT

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Background. Although the literature on pediatric headache is extensive, evidence in young children remains limited, particularly regarding psychological, behavioral, attentional, and executive functioning, partly due to methodological challenges. This study examined these domains in children up to 8 years of age with headache.

Methods. Thirty children with headaches (mean age=5.8 years, SD=1.1; range=3.6-7.11 years; 15 F, 15 M) were included. Clinical variables included headache frequency, intensity, age at onset, medication use, migraine equivalents, and comorbidities. Behavioral functioning and quality of life were assessed through parent-report measures, including the CBCL 1.5-5 and 6-18, the BRIEF and BRIEF-P, and the PedsQL. Attention, executive functioning, and nonverbal reasoning were directly assessed using selected NEPSY-II subtests and Raven's CPM.

Results. Mean headache frequency was 5 attacks/month, with 83.3% in the low-frequency group (≤9/month). Symptom onset ranged from 1 month to 4 years pre-assessment. Migraine equivalents were present in 76.7% of children, while comorbidities were present in 57.7%, mainly language disorders. Borderline/clinical BRIEF scores were observed in 37.9% of children for Inhibition and in 41.4% for Emotional Regulation. Clinically significant internalizing problems were identified in 42.9% of patients. Quality of life was impaired in 50% of patients (cutoff <77), with the lowest mean score observed in emotional functioning (64.3%, <75). A total of 73.1% of patients scored ≥75th percentile on CPM. On NEPSY subtests, performance was heterogeneous: 23.8% and 25.0% showed above-average scores on Denomination and Inhibition tasks, respectively, while 33.3% and 25.0% demonstrated borderline or below-average performance.

Conclusions. Findings indicate a heterogeneous cognitive-behavioral profile in young children with headache, suggestive of emotional, attentional-executive vulnerabilities alongside preserved cognitive abilities.