

HEADACHE-ATTRIBUTED BURDEN IN ITALIAN CHILDREN AND ADOLESCENTS: FINDINGS FROM THE REPICEF SCHOOL-BASED STUDY

A. Onofri, C. Rosignoli, F. De Santis, R. Ornello, S. Sacco

Dipartimento di Scienze Cliniche Applicate e Biotecnologiche, Università degli Studi dell'Aquila, Italy

Background. Primary headaches are among the most common neurological disorders in children and adolescents, affecting school performance, emotional well-being, and social participation. Despite their high prevalence, population-based data on headache-attributed burden remain limited. The REPICEF (Registro EPIdemiologico delle CEFalee in età evolutiva) project evaluated the educational and psychosocial impact of primary headaches in a large school-based cohort of Italian children and adolescents.

Methods. REPICEF is a cross-sectional, school-based study conducted in L'Aquila, Italy, including students aged 6–17 years. Participants completed the Italian version of the Headache-Attributed Restriction, Disability, Social Handicap and Impaired Participation (HARDSHIP) questionnaire. Headache-attributed burden was assessed using HARDSHIP items evaluating vitality (Q35), emotional well-being (Q39–Q40), social participation (Q43), and school functioning (Q44). Data were analyzed using R (v4.3.0).

Results. Among 963 participants, 855 (89.1%) reported at least one headache episode during the previous year. Headache was associated with impairment across emotional, social, and school-related domains. Younger children (6–11 years) reported lower vitality than adolescents (mean Q35: 1.88 vs. 2.29), whereas adolescents reported higher fear scores (Q39: 1.58 vs. 1.29). Girls showed higher fear scores than boys (Q39: 1.90 vs. 1.54), while boys reported greater perceived social impact (Q43: 3.53 vs. 3.42) and greater difficulty with schoolwork (Q44: 1.60 vs. 1.78). Across headache diagnoses, probable medication-overuse headache showed the poorest quality-of-life profile, with the lowest vitality and emotional well-being scores, whereas undifferentiated headache was associated with reduced vitality and greater impairment in school functioning. Difficulties with homework and daily activities were observed across all headache subtypes.

Conclusions. Primary headaches impose a substantial educational and psychosocial burden in Italian schoolchildren, extending beyond clinically definite migraine and tension-type headache. The marked impact observed in probable headache categories highlights the importance of early identification and timely management, even before a definitive diagnosis is established, to reduce headache-related disability during childhood and adolescence.