

PRIMARY HEADACHES IN ITALIAN CHILDREN AND ADOLESCENTS: EPIDEMIOLOGY AND CLINICAL PROFILE FROM THE REPICEF STUDY

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Background. Primary headaches are among the most common neurological disorders in children and adolescents, yet contemporary population-based epidemiological data from Italy remain limited. The REPICEF (Registro EPIdemiologico delle CEFalee in età evolutiva) study aimed to estimate the prevalence and clinical profile of primary headaches in a large school-based population using a standardized diagnostic instrument.

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, recently validated for the Italian pediatric population. Headache diagnoses were assigned according to the questionnaire algorithm based on ICHD-3 criteria. Demographic characteristics, headache phenotypes, and diagnostic distribution were analyzed using R (v4.3.0).

Results. A total of 963 students (mean age 13.7 ± 2.9 years; 50.3% female) were included. Overall, 855 participants (89.1%) reported at least one headache episode during the previous year. The most frequent diagnoses were probable migraine (28.4%), probable TTH (22.8%), undifferentiated headache (16.7%), TTH (13.7%), and migraine (11.4%). Moderate headache intensity was reported by 63.7% of participants, while photophobia and phonophobia were present in 66.5% and 83.9%, respectively. Adolescents showed a significantly higher prevalence of probable TTH than younger children (19.3% vs. 11.3%; $p < 0.001$), whereas definite TTH was more frequent in children (14.4% vs. 9.6%; $p = 0.008$). Females had a significantly higher prevalence of probable MOH than males (6.8% vs. 1.7%; $p < 0.001$), while probable TTH ($p = 0.014$) and undifferentiated headache ($p = 0.025$) also differed significantly by sex.

Conclusions. Primary headaches are highly prevalent among Italian children and adolescents, with probable migraine representing the most frequent diagnostic category. These findings support standardized school-based screening to improve the early identification of pediatric headache disorders.