

## Headaches in the context of the COVID-19 pandemic: preliminary results of a national survey

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### Abstract

**Background:** Headache in the context of the COVID-19 pandemic is a largely discussed topic being divided into a pre-infection headache, headache attributed to COVID-19 infection, and post-COVID headache. The aim of the research was to analyze the evolution of headache syndrome in patients who have experienced COVID-19 infection.

**Material and methods:** An online survey was conducted in people with COVID-19 and headache using a validated and ethically approved questionnaire and data were collected for 3 months (February - May 2021) on demographics, comorbidities, clinical signs of COVID-19 infection, headache before, during, and after COVID-19 infection, signs of anxiety, depression and sleep disorders.

**Results:** The study showed that half of the respondents had different forms of headache before the COVID-19 infection. During the period of infection with Sars-Cov-2 – 91% of respondents experienced headaches attributed to COVID-19, which were intense, generalized, associated with vertigo, nausea, autonomic signs, pronounced asthenia (80%), and pain with another localization (85.5%). Persistent headaches after COVID-19 were reported by 62.7% of respondents and 16.7% of them – severe forms.

**Conclusions:** The headache attributed to COVID-19 infection was prevalent in the presented group being intense and associated with pronounced asthenia. The percentage of patients with persistent headaches in the post-COVID period is worryingly high which increases the degree of functional disability of patients, individual and social burden.

**Key words:** headache, COVID-19, survey, post-COVID.

## Clinical characteristics of primary headaches in Moldovan adolescents

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### Abstract

**Background:** Accurate diagnosis of primary headache types is very important for correct prophylaxis and treatment, but this is sometimes complicated in the adolescence due to similar clinical features of migraine (MG) and tension-type headache (TTH). The aim of this study was to evaluate the specific clinical characteristics of MG and TTH in adolescents in the Republic of Moldova.

**Material and methods:** We studied 1486 adolescents (10 – 19 y.o.) diagnosed with primary headache.

**Results:** Regardless of the type, the frequency of headaches was higher in girls ( $p < 0.001$ ) without difference according to age ( $p = 0.395$ ) and residence ( $p = 0.003$ ) criteria. The duration of headache was higher among girls, in late adolescence and from urban area ( $p < 0.001$ ). The pain intensity was significantly higher in MG ( $p < 0.001$ ), in late adolescence and in urban area ( $p < 0.001$ ). The pain pressure feature was characteristic for over 60% of adolescents with both types of primary headache (MG – 60.5%, TTH – 68.5%). Bilateral pain was a specific characteristic for both types of headaches, but its prevalence was significantly higher in TTH (30.3% vs 55.9%,  $p < 0.001$ ). Among the symptoms that may be associated with headache, a common feature for both types of primary headache was phonophobia (MG – 85.4%, TTH – 72.8%,  $p < 0.001$ ).

**Conclusions:** During adolescence, especially in 10–14 y.o. adolescents, MG and TTH have similar characteristics, causing difficulties in differentiating these two types of primary headaches.

**Key words:** migraine, tension-type headache, adolescents, clinical features.

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