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Letter to the Editor

COVID-19 does not change the Phenomenology of Migraine in Infected or Non-Infected Students

¹ Sounira Mehri, ² Josef Finsterer

¹ Biochemistry Laboratory, LR12ES05, Nutrition-Functional Foods and Vascular Health, Faculty of Medicine, Monastir, Tunisia

² Department of Neurology, Neurology & Neurophysiology Center, Vienna, Austria

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Corresponding Author: **Josef Finsterer**

We were interested to read the article by Kiruthika *et al.* on a cross-sectional study of clinical characteristics (symptoms, duration of attacks, frequency, triggers) in 485 Malaysian full-time university students, infected or uninfected, conducted during the pandemic using an online questionnaire between December 2021 and April 2022 ^[1]. The prevalence of migraine was 36%, but none of the investigated clinical features of migraine correlated with COVID-19 ^[1]. The most common triggers of migraine were stress and lack of sleep ^[1]. The most common coping strategy was a change in lifestyle ^[1]. SARS-CoV-2 positive students with migraine had maladaptive coping strategies ^[1]. The study is convincing, but some points should be discussed. The first point relates to the use of an electronic questionnaire ^[1]. Electronic questionnaires have several disadvantages. It is not easy to check whether the addressee is really the one filling in the electronic form and whether the answers given are true, the addressee cannot ask for help or explanation if he or she does not fully understand a question, it is uncertain whether the addressee is mentally and physically able to fill in the form at the time it is distributed, and the addressees are not neurologically examined.

The second point is the discrepancy between the results stating that “none of the triggers, coping strategies and clinical features of migraine were associated with COVID-19” and the statement that “the most common triggers of migraine were stress and lack of sleep” ^[1]. Since COVID-19 and the circumstances of the pandemic can greatly increase stress in most people, it is very likely that this type of stress also influences the characteristics of migraine.

Third, we disagree with the notion that students are particularly affected by the pandemic. All people were affected, and for most patients well-being, performance and socialization were impaired, but the coping strategies to deal with the new circumstances may have been different for each person. Furthermore, each of us is a student, as learning and experience never stops throughout life. This discrepancy should be resolved.

The fourth point is that the differences between the sexes have not been calculated or discussed. Since migraines are generally more common in women than in men, it is also conceivable that the pandemic or a SARS-CoV-2 infection has affected men and women differently.

The fifth point is that it is not mentioned whether all subtypes of migraine were really considered in the included or excluded patients. These include migraine with aura, migraine without migraine, migraine ophthalmique, hemiplegic migraine, abdominal migraine (children), menstrual migraine, retinal migraine, chronic migraine and status migrainosus.

The sixth point is that vaccination status was not included in the analysis. Since the data were collected at a time when vaccination was already available, it is conceivable that at least some of the patients included were already vaccinated. Was there a difference between vaccinated and unvaccinated migraine patients in terms of the parameters studied?

Overall, this interesting study has significant limitations that put the results and their interpretation into perspective. Addressing these limitations could strengthen the conclusions and support the message of the study. COVID-19 obviously does not change the phenomenology of migraine in students infected or not infected with SARS-CoV-2.

Declarations

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