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Journal of Clinical Neuroscience

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Correspondence

Contributing factors towards progression of migraines during the Covid-19 pandemic

To the Editor,

The research paper by Yuksel et al. [1] delved into the much important aspect of discussing topics related to the worsening of migraines due to Personal Protective Equipment (PPE), and the study findings give a brief but in-depth review of their effect on patients. The findings indicate that scalp contact masks, double masks and daily mask duration were higher in the worsening group. Adding to this, the frequency of personal disinfectant use was also higher in this group. The authors further demonstrated a relationship between migraine worsening and mask type, number of masks, and intensive disinfectant use. Though the study and its methodology have a novel approach, there are other reasons for worsening migraines that the authors could've considered while doing this study.

During the pandemic, more than one third of the people had increased work-related stress, including stress due to unemployment, workplace stress, and other factors [2]. Furthermore, since the study had 184 (59.3%) unemployed participants, the stress due to the Covid-19 pandemic could have greatly affected the participants and may not have been purely out of PPE usage. Considering this, the study investigators could have taken this into account during the result discussion as a drawback.

Another factor that should've been considered was the number of research participants that were diagnosed with a co-morbid condition. 78 (44%) of the total 177 candidates with worsening migraines were diagnosed with co-morbidities and 45 (25.4%) of them had a Covid-19 diagnosis. Several studies show that the progression of chronic migraines may be worsened due to co-morbidities [3]. To get a fair analysis, the investigators could've checked whether patients with co-morbidities more frequently used PPEs due to fear of severe Covid-19 complications.

A supplementing argument to previous suggestions is that the authors indicate that the worsening group were more commonly diagnosed with allodynia. It is entirely possible that frequent use of masks caused pain in these subjects and hence was a contributing factor. It cannot be purely indicated that PPEs were the only contributing factor for worsening migraines in these candidates and that there are several underlying factors.

It is my hope that the authors in future studies do a more in-depth analysis of the said study so that an appropriate and verifiable analysis can be obtained. The authors could've analysed other factors that contributed to the worsening of migraines including age, employment, and others.

Moreover, an equitable population distribution among the three categories of migraine participants could have been more eye-opening. Since only 37 (11.9%) of the candidates were in the improving group compared to 177 (57%) of participants in the worsening group, this study surely has several limitations.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Acknowledgement/Funding

None.

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<https://doi.org/10.1016/j.jocn.2022.04.010>

Received 31 March 2022; Accepted 10 April 2022

Available online 13 April 2022

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