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Letter to the editor

Depression, anxiety, and insomnia symptoms among patients with COVID-19: It might be too soon for conclusions

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We read with great interest the recently published paper from Chaomeng et al. [1] on the "Prevalence of depression, anxiety, and insomnia symptoms among patients with COVID-19: A meta-analysis of quality effects model". This study reinforces beliefs from previous studies suggesting that patients with COVID-19 may later develop insomnia [2]. More information about this condition is very important, considering it is the most common sleep disorder in the world [3], being responsible for over 5 million consultations a year in the United States of America (USA) alone [4]. Insomnia is a pathology that is related to many other medical conditions such as hypertension [5], diabetes [5], and neurological [6], and sleep disorders [6] [7]. However, as insomnia often occur in comorbidity, we should be aware of confounders which may hamper correct interpretations of different scenarios. For instance, in Lichstein's [8] study the sample had insomnia, but there was no clear clinical indicator of obstructive sleep apnea (OSA). After objectively studied regarding sleep related respiratory function, 43% had an apnea-hypopnea index (AHI) indicative of mild OSA, and 29% had an AHI indicative of moderate OSA [8]. Because insomnia and OSA frequently co-occur[13], it would have been interesting to explore the presence of sleep-disordered breathing in the Chaomeng et al. [1] review. On the other hand, the studies included in the above-mentioned meta-analysis relied in insomnia diagnosis by Insomnia Severity Index (ISI). Wallace & Wohlgemuth [9] did a study in which the population with obstructive sleep apnea filled the ISI questionary being observed that 74% of them presented with profiles compatible with clinically significant insomnia. Therefore, it is plausible that, at least some part of the individuals who were diagnosed with insomnia had also sleep apnea (Comorbid Insomnia and Sleep Apnea - COMISA). Further, if SARS-Cov-2 infection could be confirmed, additional respiratory stress could play a role in this relevant comorbidity increasing its severity. However, the symptoms that Chaomeng et al. [1] studied may not have been caused by COVID-19. Brito et al. [10] concluded for an association between psychiatric disorders and social isolation [10]; likewise with the fact that a large portion of the general population had insomnia even before the SARS-CoV2 pandemic, the symptoms identified would not necessarily be a consequence of COVID-19 infection. Moreover, unemployment has already been shown to be an external source of insomnia [11], a scenario that got worse in 2020.For example, in Brazil between December 2020–February 2021,14.4 million people was unemployed, setting a historical record [12]. In this context, we believe that a direct relationship between COVID-19 and primary insomnia should not be inferred at this point, even if data from Chaomeng et al. [1] is inspiring and very welcome.

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