Dynamic Sitting Exercises and Cognitive Impairment

Dear Editor,

We read the article entitled "An Acute Bout of Dynamic Sitting Exercises Improves Stroop Performance and Quality of Sleep in Older Adults with Cognitive Impairment" on the esteemed "International Archives of Health Sciences" with great interest. Taheri *et al*. studied the effect of the dynamic sitting exercise (DSE) in the sleep quality of patients diagnosed with cognitive impairment. They found that all variables of sleep, which where efficiency, number of wakes, fragmentation, and movements showed better results in individuals undergoing the DSE.[1]

Taheri *et al*. hypothesized that the better outcomes in the psychomotor performance in the DSE could be explained by the increase of oxygen uptake, inhibition of vascular inflammatory processes, and rheological alterations in blood. Furthermore, it is worthy of mentioning that the time of the study was only 2 weeks with a total of eight sessions.[1] However, we believe that the best explanation for the better outcomes in these patients was that after the change of their routine life with the exercise; they felt more tired and could sleep more and have better sleep parameters as is well-known.[2] Furthermore, some studies have already proved that the quality of sleep significantly affects executive functions, the metabolism of the frontal lobe, and Papez circuit.[3-5]

As Taheri *et al*. said that the knowledge in the literature about the DSE is scarce and new studies should be done. Moreover, these new studies need to include at least the basic inflammatory biomarkers, periodical polysomnography, and an evaluation of short- and long-term follow-up like appointments in 1, 3, and 6 months. After this, then we will be able to possibly discuss a hypothesis.[1,6]

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Conflicts of interest

There are no conflicts of interest.

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