



## The examination of the correlation between physical activity reduction and sleep quality of athletes during the covid-19 pandemic

Oral Presentation

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### Abstract

**Introduction:** The COVID-19 pandemic has negatively influenced people's general health.[1] Mobility restriction was the government's step to suppress the quick transmission of COVID-19. This measure caused a decrease in physical activity and an increase in inactive lifestyles.[2] Compared to sedentary people, active individuals should have better control on high-risk comorbidities that increase susceptibility to severe COVID-19.[3] This study aims to investigate whether there is a relationship between the level of physical activity and sleep quality among athletes.

**Methods:** This analytical descriptive study was conducted among 69 athletes (31 men and 38 women) who are members of clubs in the city of Tehran. They were asked to complete the questionnaire of the Pittsburgh Sleep Quality Index (PSQI) and specify the change in their level of physical activity. The Spearman correlation method with a significance level of 0.05 and SPSS software version 24 were used for data analysis.

**Results:** The results of the Spearman correlation coefficient study showed a significant positive relationship between physical activity reduction and sleep duration ( $r=0.252$ ,  $P=0.037$ ). However, there is no relationship between physical activity reduction and sleep quality ( $r=0.159$ ,  $P=0.1917$ )

**Conclusion:** According to the results of this study, it can be concluded that sleep may be affected by reduced physical activity during the COVID-19 pandemic. Thus, measures should promote indoor physical activities during the pandemic. In addition, it is necessary to take other measures such as vaccination to decrease the need to quarantine.

### Keywords

COVID-19; Sleep; Physical activity

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