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Scientific letter

Covid-19. How does it affect to the physical exercise in physicians?***Covid-19. ¿Cómo afecta a la realización de ejercicio físico en médicos?**

Dear Editor,

Currently 2 pandemics coexist, the old and silent physical inactivity, and the recently known Covid-19.¹ Inactivity is a major global health problem in continuous growth in developed countries and is considered a predictor of morbidity and mortality. The doctor is one of the main prescribers of an active life and physical exercise as a health tool aimed at the general population. Experiencing the benefits of these healthy habits has a positive impact on their increased recommendation to patients.²

Presumably, inactivity has increased in the medical community, due to the lockdown coupled with occupational stressors. With the aim of knowing the impact of the pandemic on the performance of physical exercise and the factors that have influenced it, the Rehabilitation Service of the Hospital Complex of Toledo distributed a survey among the registered doctors in the province of Toledo from 9th to 19th April 2020.

Of 2645 members, 532 questionnaires were completed. 40.8% were under the age of 35 and the majority were women (64.7%). 48.9% had children and 29.3% were residents. 84% performed one/several types of physical exercise before lockdown, mainly aerobic (86.8%), followed by strength and flexibility-balance (34.2 and 29.8%, respectively). The first reason for not exercising was lack of time. 40.9% exercised 2–3 days/week and the rest in similar percentages one or more than 3 days. 56.6% exercised for 30–60 min/day, followed by more than 1 h (31.19%). The method(s) for conducting the exercise was *on-line* (2.8%), face-to-face (45.9%) and freelance (61.1%).

During lockdown, 55.8% exercised less, mainly due to lack of material. The changes that occurred in each modality were statistically significant ($p < 0.01$), with the percentages being pretty close (65.7% aerobic, 41.1% strength and 44.6% stretching-balance). 44.1% exercised more than 3 days/week. 51.1% exercised for 30–60 min/day and 38.5% for <30 min. The training(s) was *on-line* (52.1%) and freelance (61%). Doing less exercise during this period than before (bivariate analysis) was related to age ($p < 0.01$), sex ($p < 0.037$) and having children ($p < 0.02$), while more exercise was related to more hours of sleep ($p < 0.01$).

It is still early to know the short- and medium-term consequences of the measures taken to prevent the spread of the Covid-19 infection. In this context of health uncertainty, and pending a vaccine, we agree with Chen et al. that maintaining routines

of physical activity and exercise should be a main strategy during periods of lockdown, due to its benefits in the immune system, cardiovascular disease and all-cause mortality, as well as in the psychosocial realm.^{1,3} The general recommendations are to combine modalities and intensities. It is evident that the greatest exercise offer is outside the home and its adaptation at home has occurred at the expense of modality changes and online training, with increased frequency (days/week) and reduced volume (minutes/day), and in which personal factors have intervened. Without delving into the negative effects of technology, its use promotes exercise adherence during lockdown.

Our study is one of the few that evaluates physical exercise in resident and specialist doctors, and possibly the first during lockdown. The scarce scientific literature on physical exercising in doctors is mainly focused on medical students. Medical students were found to be less active than sports science and education students. In turn, medical students did more exercise compared to doctors, and all of them more compared to the general population, according to different authors.^{4,5} The lack of time has already been pointed out as the main reason for not exercising in this group.² And this same reason together with the lack of knowledge affects their weaker recommendation to the general population. This study, together with the published scientific evidence, leads us to consider a new healthcare era, where the theoretical and practical training of physical exercise is promoted at medical universities and later throughout the working life, since this can have an impact on the prevention of inactivity and associated morbidity of both health professionals themselves and the general population.

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María Hernández López, Ana B. Puentes Gutiérrez*,
María García Bascones

Servicio de Rehabilitación, Complejo Hospitalario de Toledo, Toledo, Spain

* Corresponding author.

E-mail address: anapuentes@gmail.com (A.B. Puentes Gutiérrez).

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