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LETTERS TO THE EDITOR

Pay attention to the health problems of health care professionals: the key to fighting COVID-19

Chaoyu Wang, MS[1,*]; Jiahui Chen, MS[2,*]; Junzhong Deng, MS[3,*]; Riken Chen, MD[4,*]; Yanhong Liu, MS[1,*]; Jiangpeng Lin, MS[4]; Yu Zhang, MD[4]; Yuanming Zhou, MS[5]; Junyan Lin, MS[4]; Linna Hu, MD[6]; Xinxian Zhen, MS[1]; Zhenzhen Zheng, MD[3]

*[1]Taishan Hospital of Traditional Chinese Medicine, Jiangmen, China; [2]Emergency Department, Central Hospital of Guangdong Nongken, Zhanjiang, China; [3]The Second Affiliated Hospital of Guangdong Medical University, Zhanjiang, China; [4]State Key Laboratory of Respiratory Disease, The First Affiliated Hospital of Guangzhou Medical University, Guangzhou Institute of Respiratory Disease, National Clinical Research Center for Respiratory Disease, Guangzhou, China; [5]Guangzhou Eighth People's Hospital, Guangzhou Medical University, Guangzhou, China; [6]Guangzhou University of Chinese Medicine, Guangzhou, China; *Contributed equally*

With great interest we read the recent article by Drager et al,[1] published in the *Journal of Clinical Sleep Medicine,* and we congratulate the authors on their effort to further shed light into the relationship between COVID-19 and health care professionals in a sample of a nationwide cross-sectional study in Brazil. This is an important field, and the connection of both has been incompletely investigated so far. The health status of health care professionals is critical to the control of COVID-19.

Sleep quality worsened for 61.4%, while 43.5% and 22.8% reported a 1-hour or more sleep duration reduction and worsening or new-onset nightmares, respectively. Multivariate analyses showed that age, female sex, weight change, prevalent anxiety, new-onset burnout, family income reduction > 30%, and assisting patients with COVID-19 were independently associated with new-onset or worsening of previous insomnia episodes.[1] These results show that during the COVID-19 pandemic, the sleep and psychological problems of health care professionals are serious influencing factors which is consistent with the results of many previous studies.[2–4] We think that in addition to these problems, there is another factor that causes health problems that is also very important. A recent study by Mapelli et al[5] found that at spirometry, from no mask to surgical mask to FFP2 mask (KN95 particulate respirator; BYD Care, Shenzhen, China), a progressive reduction in forced expiratory volume in 1 s (FEV1) and forced vital capacity (FVC) was observed. Rest ventilation, oxygen uptake (VO_2), and carbon dioxide production (VCO_2) were progressively lower with a reduction in respiratory rate. At peak exercise, participants revealed a progressively higher Borg scale when wearing surgical and FFP2 masks. Accordingly, at peak exercise, VO_2, ventilation, respiratory rate, and tidal volume were gradually lower. During the COVID-19 pandemic, health care professionals have to wear masks for a long time and are always on standby, which will cause their oxygenation to deteriorate. Under the cofunction of hypoxia, sleep disturbance, and long-term psychological problems, health care professionals may have more serious health problems, such as cardiovascular and cerebrovascular diseases, cognitive dysfunction, respiratory dysfunction, and so on.[6–9] No one can predict when the current COVID-19 pandemic will end; therefore, we must do a good job of health protection for health care professionals, which should include but is not limited to the following measures: (1) provide necessary psychological counseling to health care professionals to relieve their depression, (2) implement a shift system to reduce the working hours of each shift and increase the number of health care professionals, (3) provide certain economic subsidies, and (4) increase the research and development of better protective masks and protective equipment, which will prevent virus infection while not damaging lung function.

The results of the Drager et al[1] research are of great significance and have aroused people's concerns for health of health care professionals. In order to control the COVID-19 pandemic, we must pay attention to the health problems of health care professionals. This is key to the success in the fight against the COVID-19 pandemic.

CITATION

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Address correspondence to: Zhenzhen Zheng, MD, Department of Respiratory and Critical Care Medicine, The Second Affiliated Hospital of Guangdong Medical University, 12 Minyou Road, Zhanjiang, Guangdong, 524000, China; Email: 3342227603@qq.com; and Xinxian Zhen, MS, Department of Respiratory and Critical Care Medicine, Taishan Hospital of Traditional Chinese Medicine, Jiangmen, Guangdong, 529200, China; Email: zhenxinxian672@163.com

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