

## Stress, Depression, and Insomnia in Medical Staff during COVID-19 Pandemic :A Letter to Editor

Reza Jafari Nodoushan<sup>a</sup> , Hadi Alimoradi<sup>b</sup> , Mahsa Nazari<sup>b\*</sup> 

<sup>a</sup> Department of Health, Safety and Environment Management (HSE), School of Public Health, Shahid Sadoughi University of Medical Sciences, Yazd, Iran

<sup>b</sup> Department of Health, Safety and Environment Management, School of Public Health, Shahid Sadoughi University of Medical Sciences, Yazd, Iran.

### ARTICLE INFO

### ABSTRACT

#### Letter to the Editor

#### Article History:

Received: 2 Apr 2021

Revised: 3 Oct 2021

Accepted: 13 Nov 2021

#### \*Corresponding Author:

MahsaNazari

#### Email:

nazarimahsa95@yahoo.com

Tel: +98 9300549382

**Citation:** Jafari Nodoushana R, Alimoradi H, Nazaria M. Stress, Depression, and Insomnia in Medical Staff during COVID-19 Pandemic: A Letter to Editor. Journal of Social Behavior and Community Health (JSBCH). 2021; 5(2): 669-671.

One of the emerging global challenges in infectious disease management is addressing COVID-19 (Chen et al., 2020). With the creation of the coronavirus (COVID-19) pandemic, human society and the physical complications of this disease have also faced widespread psychological complications of this disease (Brooks et al., 2020; Malik et al., 2020). Due to the rapidly increasing number of people infected with this coronavirus, public anxiety has increased in many areas in the world. Fear and worry (which are prominent features of infectious diseases) are understandable because people are concerned about their health. Unfortunately, such concerns impair understanding of illness-related issues, leading to other psychosocial challenges such as Depression, Insomnia, and other psychosocial aspects that have not yet been addressed (Gong et al., 2020; Pfefferbaum & North, 2020). The

outbreak of COVID 19's infection occurred in China last December 2020 and attracted worldwide attention. The prevalence of severe epidemics, such as Acute Respiratory Syndrome (SARS), Ebola, and Middle East Respiratory Syndrome (MERS), has always been associated with a high prevalence of mental health problems (Huang et al., 2020; Ranard et al., 2020). Compared to other epidemics in the 21st century, COVID-19 is the most serious pandemic characterized by human-to-human transmission, asymptomatic carrier transmission, and high transmission efficiencies (Li et al., 2015). Today, despite technological advances, disorders such as depression, anxiety, and stress are the most common diseases of the present century. The present study investigates the symptoms of insomnia, depression, and anxiety in medical staff (nurses, doctors, and hospital staff) on a case-by-case basis. In this case study,



an extensive web-based platform was used so that people could answer the research questionnaires without the need for a face-to-face consultation. In this case study, an extensive web-based platform was used so that people could answer the questionnaires without the need for a face-to-face consultation. The Pittsburgh Sleep Quality Questionnaire (PSQI) and the HADS questionnaire were used. In addition to completing the questionnaires of this study, each person was assessed for information such as gender, age, marital status, history of COVID-19. The HADS questionnaire has 14 questions, each of which has four answers, often to no time at all. In this scale, seven questions related to anxiety symptoms (questions 12, 9, 8, 5, 4, 1 and 13) and seven questions about depressive symptoms (questions 11, 10, 7, 6, 3, 2 and 14). The Pittsburgh Sleep Quality (PSQI) Questionnaire has 18 terms and the answers to these items are in the form of a four-point Likert from 0 to 3. The Sleep Quality Questionnaire was developed to assess sleep quality over the past month and includes 18 items. Numerous studies have shown the high validity and reliability of the sleep quality questionnaire. COVID-19 lead to inadequate sleep duration.

**Moral considerations:** during this study, all the principles of ethics in the analysis are determined in line with the directions of the National ethics panel. (Code of Ethics: IR.SSU.SPH.REC.1399.134) In this study, people were randomly designated, whereas no coercion or pre-determined selections were applied to medical staff. For the statistical analysis multivariate logistic regression analysis was used to identify the factors affecting anxiety, depression, and insomnia of hospital staff. Also, the adjusted odds ratio (OR) and 95% confidence interval (CI) were calculated. Data analysis was performed using SPSS software version 19. All statistical analyzes were performed at a significance level of 0.05, and all values were expressed as Mean  $\pm$  Standard Deviation.

The study shows that more than 50% of medical staff are exposed to excessive insomnia. Out of 972

medical staff, 438 had anxiety symptoms (Mean = 6.71, Standard Deviation = 5.80) and 313 (32.2%) had depressive symptoms (Mean = 5.16, Standard Deviation = 5.23) and 380 (39.1%) People had insomnia symptoms (Mean = 3.87 Standard Deviation = 4.70). The prevalence of anxiety, depression, and insomnia ranged from moderate to high in nurses, doctors, and hospital staff, respectively, 16.9, 10.3, and 11.2%. One of the strengths of this study is the assessment of anxiety, depression, and insomnia in a large sample of medical staff in the COVID-19 epidemic in Iran. Anxiety, depression, and insomnia are the most common mental health characteristics. According to the results of logistical regression, nurses had a better likelihood of anxiety, depression, and insomnia than doctors and hospital staff (OR = 0.8,  $p = 0.03$ ). Another strength point was the analysis of anxiety, depression and insomnia in a massive sample of medical employees within the COVID-19 epidemic in Asian countries. In study, there are limitations, including the fact that the mental health status of medical staff in other parts of Iran, especially in areas with a relatively low or high prevalence of coronary artery has not been fully and separately shown. This study had some limitations. The questionnaires were administered online to modify speedy assessment. Young Medical Staff contributed a lot within the study, and older Medical Staff were less probably to participate. A number of the queries were designed so that folks may well be answered in less time because of restricted web access.

### Keywords

Insomnia, Depression, Mental Health, COVID-19, Hospital Staff

### References

Brooks, S. K., Webster, R. K., Smith, L. E., Woodland, L., Wessely, S., Greenberg, N., & Rubin, G. J. (2020). The psychological impact of quarantine and how to reduce it: rapid review of the evidence. *The Lancet*.



- Chen, H., Guo, J., Wang, C., Luo, F., Yu, X., Zhang, W., . . . Gong, Q. (2020). Clinical characteristics and intrauterine vertical transmission potential of COVID-19 infection in nine pregnant women: a retrospective review of medical records. *The Lancet*, 395(10226), 809-815.
- Gong, F., Xiong, Y., Xiao, J., Lin, L., Liu, X., Wang, D., & Li, X. (2020). China's local governments are combating COVID-19 with unprecedented responses—from a Wenzhou governance perspective. *Frontiers of Medicine*, 1-5.
- Huang, C., Wang, Y., Li, X., Ren, L., Zhao, J., Hu, Y., . . . Gu, X. (2020). Clinical features of patients infected with 2019 novel coronavirus in Wuhan, China. *The Lancet*, 395(10223), 497-506.
- Li, L., Wan, C., Ding, R., Liu, Y., Chen, J., Wu, Z., . . . Li, C. (2015). Mental distress among Liberian medical staff working at the China Ebola Treatment Unit: a cross sectional study. *Health and quality of life outcomes*, 13(1), 1-6.
- Malik, Y. S., Kumar, N., Sircar, S., Kaushik, R., Bhat, S., Dhama, K., . . . Ghoshal, U. (2020). Coronavirus disease pandemic (COVID-19): challenges and a global perspective. *Pathogens*, 9(7), 519.
- Pfefferbaum, B., & North, C. S. (2020). Mental health and the Covid-19 pandemic. *New England Journal of Medicine*.
- Ranard, L. S., Ahmad, Y., Masoumi, A., Chuich, T., Romney, M.-L. S., Gavin, N., . . . Rabbani, L. E. (2020). Clinical pathway for management of suspected or positive novel coronavirus-19 patients with ST-segment elevation myocardial infarction. *Critical Pathways in Cardiology*, 19(2), 49-54.