INCREASED LEVELS OF ANXIETY AND DEPRESSION AS A FACTOR OF REDUCED EFFICIENCY OF MEDICAL WORKERS DURING THE COVID-19 PANDEMIC

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Introduction. The spread of the coronavirus infection COVID-19 has caused enormous psychological stress for people around the world, and healthcare workers are no exception. The increased physical and emotional stress in life-threatening conditions for medical workers had a direct impact on the psychological state, as well as on the occurrence of mental illness. Doctors and nursing staff who are in direct contact with infected people are especially susceptible to such conditions.

Burnout syndrome is formed against the background of constant and insurmountable stress, which leads to complete personal and emotional-energy exhaustion of the body. Negative emotions, fatigue, non-compliance with the work and rest schedule, lack of close contact with family and friends - lead to the first signs of burnout syndrome in workers who, as part of their professional activities, are required to constantly contact the infected population.

Psychosocial responses to infectious disease outbreaks are varied and can vary in intensity, including feelings of anxiety, shame, failure or weakness in the individual and society; underestimating the likelihood of survival; overestimating the likelihood of infection; a strong desire to escape the flash; excessive, inappropriate precautions; increased demand for medical services at a time of critical shortages. There is little epidemiological evidence of mental health and mental illness problems among individuals suspected or diagnosed with COVID-19, and among the healthcare providers who treat them. Therefore, the best practices that would be effective in addressing a mental health problem during an outbreak remain unexplored.

In China, a study was carried out, during which the factors influencing the mental state of health workers who were at risk of contracting coronavirus infection were identified: the majority showed symptoms of depression, anxiety, insomnia and distress [1]. According to the level of anxiety, the division into groups from the highest to the lowest was carried out, as a result of which the maximum indicators of anxiety were expressed in nurses, then in doctors and other medical workers. Among the causes of anxiety were identified: loss of control, vulnerability, fear for their own health and the spread of the virus [2].

Cross-sectional studies used self-reporting tools close to or during the peak of the pandemic to assess doctors and nurses in hospitals (n> 1200 total) in China [1] and first- and second-line health workers (n> 1300) in Italy [3]. The prevalence of moderate to severe mental symptoms was as follows: anxiety 12-20%, depression 15-25%, insomnia 8%, traumatic stress 35-49%.

In addition, about a quarter to a third of the treatment staff had mild symptoms [1].

Another cross-sectional study assessed nearly 300 inpatients and nurses caring for COVID-19 patients in Singapore in February and March 2020 using self-report screening tools [4]. Relatively small numbers of caregivers tested positive for anxiety, depression, and post-traumatic stress disorder (PTSD; approximately 5-10%), which the authors attributed to better preparedness based on their previous experience with the 2003 severe acute respiratory syndrome (SARS) epidemic.

The work related to the organization of support for health workers during the COVID-19 pandemic was also studied: the release of medical workers from tasks and obligations not related to the performance of functional duties, the provision of free nutritious meals, rest breaks [5].

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Emotional stress contributes to an overstrain of regulatory mechanisms and a decrease in a person's adaptive capabilities. Dissatisfaction with the results obtained for a long time, uncertainty and hopelessness in solving the assigned tasks, restraint of emotional reactions can contribute to a violation of the emotional balance of medical personnel. All these factors together increase nervous tension, which can subsequently transform into a state of persistent psychoemotional stress [6]. The medical worker constantly experiences the whole burden of social, professional, economic and family problems, concerning both themselves and their patients. Delving into the problems of patients, doctors and nurses are forced to push their personal concerns into the background, which in turn contributes to their own increased risk of asthenia, the development of anxiety-depressive disorder, the aggravation of the course of existing diseases, and, as a result, decreased performance. Depression is currently one of the main causes of disability [7].

Nurses, doctors, ambulance drivers, paramedics and other professionals who provide direct care to COVID-19 victims may be exposed to additional stressors: stigmatization towards those who work with COVID-19 patients and their remains; strict biosecurity measures (physical exertion from protective equipment; physical isolation, which reduces the level of comfort for those who are sick or in distress; constant responsibility and stress; adherence to strict procedures that exclude spontaneity and autonomy); increased demands at work, including an increase in the length of the working day, the number of patients; the need to track the latest information on COVID-19; reduced use of social support due to busy work schedules and stigma; lack of personal resources or opportunities for self-care, especially among people with disabilities; insufficient information on the duration of exposure to COVID-19 on persons infected with it; fear of infecting relatives and friends with COVID-19 [8].

The aim and objectives of the study were to study the mental state of medical workers involved in helping patients with coronavirus infection, to determine the level of anxiety and depression using the hospital anxiety and depression scale (HADS), and to determine the effect of anxiety-depressive syndrome on the performance of medical workers.

Research results. The mental state of doctors and nurses was studied by conducting an online survey using the HADS scale of anxiety and depression (The hospital Anxiety and Depression Scale Zigmond A.S., Snaith R.P.). The validity, sensitivity and specificity of this questionnaire has been demonstrated in earlier conducted and published studies [9]. In connection with the quarantine measures introduced in the Republic of Kazakhstan during this study, this survey was conducted in a remote format using Google Forms.

98 medical workers of the city of Almaty were examined: 42 doctors and 56 people with secondary medical education, of which 82 are women and 16 are men. The average age of the respondents was 36.14 years. Single / single - 35, married - 49, separated - 10, widower / widow - 4. 52 people have children.

When interpreting the data, the total indicator for each subscale was taken into account, while three areas of values were distinguished: 0-7 points - the norm; 8-10 points - subclinically severe anxiety / depression; 11 points and above - clinically expressed anxiety / depression [10].

So, on the subscale of anxiety, the following results were obtained: 32 respondents corresponded to the norm, which corresponds to 32.65% of respondents, in 58 (59.18%) people, the number of points scored corresponded to subclinical anxiety, and in 8 (8.16%) people clinically expressed anxiety was observed. Subclinically expressed and clinically expressed anxiety was observed in 6 men out of 16 and in 60 women out of 82, which corresponds to 37.5% and 73.17%. 45 (68.18%) respondents from this sample have children, 43 (65.15%) respondents are in a marriage relationship. From this it can be concluded that women are more prone to anxiety than men; having a spouse and children also increases the risk of increased anxiety, which can be explained by worries about spouses and children.

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On the depression subscale, the following results were obtained: 63 (64.29%) respondents corresponded to the norm, 33 (33.67%) people had subclinical depression, the number of points scored in 2 (2.04%) people corresponded to clinically pronounced depression.

Also, an open-ended question was added to the questionnaire, in which respondents could indicate factors that negatively affect their well-being and performance during a pandemic, among which were: a sharp increase in the volume of work, an increase in the amount of time spent in the workplace, non-compliance with work and rest, work in personal protective equipment (long-term stay in PPE, inconvenience of going to the toilet, as a result of which - forced wearing of diapers, lack of eye contact, difficulty in identifying the identity of work colleagues), fear of contamination of oneself and loved ones, separation from family members to reduce the risk of infection (feelings of social isolation and loneliness), an increase in morbidity and mortality among colleagues, work with difficult patients (a feeling of helplessness and guilt due to the lack of proper medical equipment and drugs).

Conclusion.

This study points to the importance of identifying anxiety-depressive states in healthcare workers in order to provide them with timely assistance.

Prolonged psycho-emotional stress associated with working conditions during the spread of coronavirus infection causes the development of mental disorders, which in the future can lead to a sharp increase in the number of somatoform and psychosomatic disorders.

It is necessary to carry out preventive work with medical workers through the organization of psychological and psychiatric care, as well as at early stages to identify problems and factors affecting the development of mental diseases for further work to eliminate them together with the heads of medical organizations.

References

1. Factors Associated With Mental Health Outcomes Among Health Care Workers Exposed to Coronavirus Disease 2019 / Jianbo Lai, Simeng Ma, Ying Wang, Zhongxiang Cai, Jianbo Hu, Ning Wei, Jiang Wu, Hui Du, Tingting Chen, Ruiting Li, Huawei Tan, Lijun Kang, Lihua Yao, Manli Huang, Huafen Wang, Gaohua Wang, Zhongchun Liu, Shaohua Hu // JAMA Netw Open. 2020. № 3(3): e203976. DOI: 10.1001/jamanetworkopen.2020.3976;
2. Wong Tai W., Yau Josephine K. Y., Chan Cecilia L. W. The psychological impact of severe acute respiratory syndrome outbreak on healthcare workers in emergency departments and how they cope // European Journal of Emergency Medicine. 2005. Vol. 12. Iss. 1. P. 13–18;
3. Rossi R, Socci V, Pacitti F, et al. Mental Health Outcomes Among Frontline and Second-Line Health Care Workers During the Coronavirus Disease 2019 (COVID-19) Pandemic in Italy. JAMA Netw Open 2020; 3:e2010185;
4. Tan BYQ, Chew NWS, Lee GKH, et al. Psychological Impact of the COVID-19 Pandemic on Health Care Workers in Singapore. Ann Intern Med 2020;
5. James G. Adams, Ron M. Walls. Supporting the Health Care Workforce During the COVID-19 Global Epidemic // JAMA. 2020. Vol. 323. № 15. P. 1439–1440. DOI: 10.1001 / jama.2020.3972;
6. Akarachkova E.S. Chronic stress and impaired adaptation of medical workers // Difficult patient.-2006.-№8. - S. 35-39;
7. Glushkov R.G., Andreeva N.I., Aleeva G.N. Depression in general medical practice // Russian medical journal. - 2005. - T. 13. - No. 12. - S. 858-860;
8. IASC Reference Group on MHPSS in Emergency Settings (Circulated on: 17 March 2020). P-3;
9. Andryushchenko A.V., Drobizhev M.Yu., Dobrovolsky A.V. Comparative assessment of the CES-D, BDT and HADS scales in the diagnosis of depression in general medical practice // Journal of Neurology and Psychiatry. - 2003. - No. 5. P. 116;
10. Smulevich A.B. Depression in general medicine. A guide for doctors. M., Medical Information Agency, 2001, - 782 p.

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