PUBLIC HEALTH AND HEALTHCARE ОБЩЕСТВЕННОЕ ЗДОРОВЬЕ И ЗДРАВООХРАНЕНИЕ

https://doi.org/10.33266/2070-1004-2021-4-27-31 UDC 614.23:616.89-008.454:578.834.1 **Review article**© Burnasyan FMBC FMBA

MENTAL HEALTH SUPPORT MEASURES FOR MEDICAL PROFESSIONALS IN THE CONTEXT OF COVID-19 PANDEMIC: GLOBAL AND DOMESTIC EXPERIENCE

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Abstract. A new coronavirus infection COVID-19 has been declared a pandemic by the World Health Organization (WHO). Medical professionals, who play the leading role in the fight against the spread of the dangerous virus, work under conditions of high and prolonged stress. There is an urgent need for psychologists to intervene and to develop support measures for medical professionals to maintain and to preserve their mental health.

In connection with the need to determine the state of mental health of medical professionals and to assess international and domestic experience in the implementation of measures to support it, the analysis of scientific publications for 2020, devoted to the issue of mental health of medical workers in the pandemic COVID-19 was conducted.

The conclusion is made that the organization of psychological help and psychological support as well as positive world experience of the realized measures of support will allow to keep mental health of medical professionals during the pandemic.

Key words: anxiety, depression, medical professionals, mental health, new coronavirus infection COVID-19, pandemic, stress, support measures

Conflict of interest. The authors declare no conflict of interest

For citation: Plutnitskiy A.N., Rodionova A.L., Savchenko N.A. Mental Health Support Measures for Medical Professionals in the Context of COVID-19 Pandemic: Global and Domestic Experience. *Meditsina katastrof* = Disaster Medicine. 2021;4:27-31 (In Russ.). https://doi.org/10.33266/2070-1004-2021-4-27-31

https://doi.org/10.33266/2070-1004-2021-4-27-31 VДК 614.23:616.89-008.454:578.834.1 **Обзорная статья** © ФМБЦ им.А.И.Бурназяна

МЕРЫ ПОДДЕРЖКИ ПСИХИЧЕСКОГО ЗДОРОВЬЯ МЕДИЦИНСКИХ СПЕЦИАЛИСТОВ В УСЛОВИЯХ ПАНДЕМИИ COVID-19: МИРОВОЙ И ОТЕЧЕСТВЕННЫЙ ОПЫТ

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Резюме. Новая коронавирусная инфекция COVID-19 объявлена Всемирной организацией здравоохранения (BO3) пандемией. Медицинские специалисты, играющие ведущую роль в борьбе с распространением опасного вируса, работают в условиях высокого продолжительного стресса. Существует острая необходимость в оказании психологами мер поддержки медицинским специалистам с целью поддержания и сохранения их психического здоровья.

Для определения состояния психического здоровья медицинских специалистов и оценки мирового и отечественного опыта по реализации мер по его поддержке проанализированы научные публикации за 2020 г., посвященные вопросу психического здоровья медицинских работников в условиях пандемии COVID-19.

Сделан вывод, что использование положительного отечественного и мирового опыта организации оказания психологической помощи и психологического сопровождения медицинских специалистов позволит сохранить их психическое здоровье в период пандемии.

Ключевые слова: депрессия, медицинские специалисты, меры поддержки, новая коронавирусная инфекция COVID-19, пандемия, психическое здоровье, психологи, стресс, тревога

Конфликт интересов. Авторы статьи подтверждают отсутствие конфликта интересов

Для цитирования: Плутницкий А.Н., Родионова А.Д., Савченко Н.А. Меры поддержки психического здоровья медицинских специалистов в условиях пандемии COVID-19: мировой и отечественный опыт // Медицина катастроф. 2021. №4. С. 27–31. https://doi.org/10.33266/2070-1004-2021-4-27-31

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Introduction

Throughout 2020, humanity has been under severe stress due to the spread of the new coronavirus infection COVID-19. The pandemic that erupted in 2019 still poses a serious threat to public health.

Experience shows that in the context of COVID-19 pandemic, we should take very seriously a possible disruption of not only physical, but also mental health, including in the long term.

This issue is especially relevant for medical professionals working in conditions close to those of an emergency. In such conditions, the preservation and maintenance of their mental health, as well as a decrease in the level of their psychological traumatization, depend on measures taken in time

By the end of 2020, there were 83.43 million infected and 1.81 million deaths from COVID-19 [1, 2] — Figures 1, 2. The pandemic has dealt a serious blow to the global economy, changed everyone's lifestyle, and affected peo-

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ple's mental health. The health care systems of almost every country in the world are under tremendous pressure and excessive strain [3, 4].

Personnel of medical treatment organizations are at high risk of infection.

The new SARS-CoV-2 coronavirus infection has multiplied the workload of both medical professionals directly caring for patients with COVID-19 and of other healthcare workers [6, 7]. The need to provide medical care to a much larger number of patients, often in a new environment, forces to change the usual algorithm of medical staff actions. Stress caused by high mortality rate from COVID-19, shortage of medical staff, fears of possible infection of a medical specialist or his family members, and obligation to be in personal protective equipment for a long time — all this causes emotional burnout and psychological trauma to doctors and — especially — to nursing staff [6, 8]. Even in the first months of the pandemic, this caused concern among mental health professionals and health care

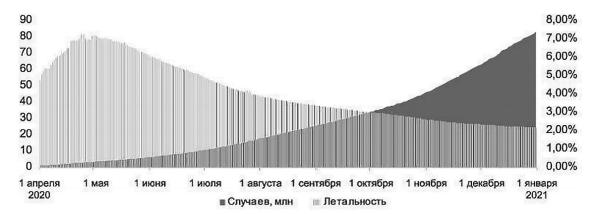


Рис.1. Пандемия COVID-19: заболеваемость и летальность в мире [2] **Fig. 1.** COVID-19 pandemic: global morbidity and mortality [2]

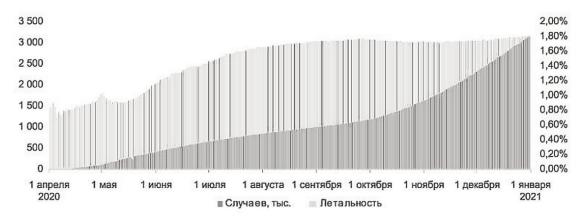


Рис.2. Пандемия COVID-19: заболеваемость и летальность в Российской Федерации [5] **Fig.2.** COVID-19 pandemic: morbidity and mortality of COVID-19 in the Russian Federation [5]

organizers about the potential impact of these factors on the mental health of medical workers [9]. This was particularly true for medical professionals working in intensive care units, observing and caring for critically ill patients (10).

In the nearest future, this tension can lead to the emergence of new problems of psychological nature. In this connection, it is very important to effectively organize accessible psychological support for all medical workers. Specialists in the field of mental health must pay attention to this problem and take measures to preserve the psychological stability of persons in these populations [11].

Experience in 2020 has shown that factors such as highrisk environments, direct contact with infected patients, length of work shift, and professional experience also affect the psychological well-being of health care workers. These factors can be controlled to some extent, thus reducing the intensity of the impact of the stressful situation.

Psychological support should be conducted systematically. At the same time it is necessary to pay special attention to the study of each aspect of mental health [12].

The study of the virus and issues related to its impact on physical and mental health in the long term is not only an issue of COVID-19 control, but also one of the public health priorities at the international level.

Even during the first wave of COVID-19 diseases there was a high psychological burden and impact of stress factors on the world population. At present, the negative impact of COVID-19 pandemic on the psyche of the population and — especially — on health care professionals continues to persist. Health professionals, as a high-risk group, have been in direct contact with the virus for a long time. As a result, their mental health requires close attention from specialists [13, 14]. Since the onset of the pandemic, tension, anxiety and other negative emotional reactions began to spread on a large scale. This caused the onset of a psychological crisis for both medical professionals and health care organizers [11].

Heads of medical treatment organizations experienced additional stress due to the responsibility they had for organizing safety measures, for the state of human resources and for their ability to respond quickly to all changes.

Doctors and nurses often had to take on overwhelming tasks. Health care workers, especially in organizations converted to deal with COVID-19, were more vulnerable than the general population. They were in an environment of high risk of infection, as well as of further spread of the virus to their families and colleagues. Post-traumatic stress disorder — PTSD (ICD-10 - F43.1), as well as severe anxiety and depressive disorders associated with PTSD can lead to psychological traumatic experiences in a delayed perspective [15-17].

According to a number of domestic and foreign studies, in the COVID-19 pandemic, health care workers were exposed to negative factors affecting not so much their physical health as their mental health [18-22]. One of the factors reinforcing the psychotraumatic effect of the COVID-19 pandemic was that health care workers caring for patients with a new coronavirus infection were often stigmatized by friends, family, and the public [23, 24]. Lack of support from the community and society has been shown to be a predictor of declining mental health in countries where social and psychological support measures for

health workers have been insufficiently addressed by the state. The most frequent indicators of psychological impact were anxiety and depression, which inevitably affected the quality of medical care [25, 26].

Such indicators as length of stay in the "red" zone, work in intensive care units, lack of personal protective equipment, having a family member with a confirmed COVID-19 diagnosis increase the degree of stress and the risk of developing negative, including long-term, consequences [27].

Despite the fact that the above factors are temporary, the consequences of the pandemic will affect health care workers for a long time [28]. In this situation, measures to support health care workers must be taken not only during the pandemic, but also for a long time after its end.

As the experience of past epidemics and the results of studies conducted in 2020 have shown, in addition to meeting basic needs and creating satisfactory working conditions (rest and adequate nutrition, sufficient number of PPE sets and shift work schedules), support measures should be provided to optimize the conditions of health workers in and out of their workplaces [8, 16, 29]. The experience of many countries has shown that the organization of logistics, accommodation, delivery of meals and activities with children of medical workers has a beneficial effect not only on their physical state, but also on their mental health. At the same time, systematic monitoring of their mental state and accessible psychological support for medical personnel both on the territory of the treatment organization and outside of it is necessary. This includes the organization of support hotlines and other measures of communication and feedback.

Currently, the epidemic situation in the Russian Federation is under control. In this regard, the stress of medical personnel can be relieved in a systematic and step-by-step manner, engaging all possible resources for the development of psychosocial and mental support for medical professionals [23, 30, 31].

At the same time, support from medical workers themselves is also important. Since the team of medical specialists has common work experience, common working conditions and solves the same tasks, the use of these factors directly depends on the manager's ability to organize competent and effective work communication [12].

It is important to take into account the experience of previous epidemics and other disasters, when medical workers were "on the front line". During the Ebola outbreak, for example, medical professionals were prone to higher levels of psychosomatic disorders, depression, anxiety, and obsessive compulsions. During the MERS coronavirus outbreak (ICD-10 - B34.2), a large proportion of health care workers were susceptible to obsessive thoughts about contracting MERS and felt unsafe in the workplace. The same experience was also reported during the spread of SARS, with health care workers reporting high risk of infection of themselves and of their immediate environment, emotional distress, insecurity, and stigmatization [27, 31].

Conclusion

Working in a COVID-19 pandemic environment makes health care workers particularly vulnerable to psychological distress. Research show high levels of depression, stress, anxiety, distress, anger, fear, insomnia, and possible consequences in the form of PTSD. This fact requires further research in order to study long-term effects and to

organize measures for support and psychosocial rehabilitation of medical workers.

The psychological and mental health of medical professionals, greatly affected by the COVID-19 pandemic, should be taken very seriously. Although past studies and research on the effects of the COVID-19 pandemic have shown that the mental impact of any major disaster has a broader and more lasting impact on society than physical trauma, the mental health of health professionals is currently receiving much less attention.

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The pandemic has greatly altered the usual pace of life and accelerated reorganization in all areas of our country's economy. At the same time, in order to maintain the sustainability and flexibility of the health care system during any crisis situation, as well as to respond effectively to the crisis situation, it is important to maintain a focus on human resources and their support measures, thereby increasing the adaptability of not only the individual health care provider, but also the entire health care system.

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The material was received 16.04.21; the article after peer review procedure 01.12.21; the Editorial Board accepted the article for publication 13.12.21 Материал поступил в редакцию 16.04.21; статья принята после рецензирования 01.12.21; статья принята к публикации 13.12.21