

ВЛИЯНИЕ ПРОИЗВОДСТВЕННЫХ ФАКТОРОВ НА ФОРМИРОВАНИЕ ПСИХИЧЕСКОЙ ДЕЗАДАПТАЦИИ У МЕДИЦИНСКИХ РАБОТНИКОВ ВО ВРЕМЯ ПАНДЕМИИ НОВОЙ КОРОНАВИРУСНОЙ ИНФЕКЦИИ COVID-19

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Резюме. Цель исследования – проанализировать современную зарубежную и отечественную научную литературу, посвященную вопросам влияния производственных факторов на формирование психической дезадаптации у медицинских работников, а также возможным методам ее предотвращения и купирования.

Материалы и методы исследования. Проанализированы научные исследования, посвященные результатам изучения негативных психологических реакций и проявления психических расстройств у медицинских работников различного профиля в условиях пандемии COVID-19. Поисковый протокол включал использование различных баз данных, в том числе базы данных PubMed; российского информационно-аналитического портала в области науки, технологии, медицины и образования – научной электронной библиотеки eLIBRARY.RU; данных статистической отчетности, находящихся в открытом доступе, а также официальных сайтов научных журналов по изучаемой тематике.

Результаты исследования и их анализ. Результаты исследования показали, что большинство медицинских специалистов испытывали стресс, вызванный такими организационными факторами, как нехватка средств индивидуальной защиты (СИЗ), опасениями по поводу невозможности оказания качественной медицинской помощи в случае их направления на работу в другое место, опасениями в связи с быстро меняющейся информацией, отсутствием доступа к актуальной информации и коммуникации, отсутствием специальных лекарств, нехваткой аппаратов искусственной вентиляции легких (ИВЛ) и коек в отделениях интенсивной терапии.

В условиях штатной работы здравоохранения большинство специалистов при проведении опросов отмечали напряженность в процессе выполнения профессиональных обязанностей, превышение своих физических и психических возможностей, что являлось одной из основных причин тревоги, нервозности или стресса на работе.

Ключевые слова: медицинские работники, пандемия новой коронавирусной инфекции COVID-19, посттравматический стресс, производственные факторы, психическая дезадаптация, режим повышенной готовности, синдром профессионального выгорания

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INFLUENCE OF ORGANIZATIONAL FACTORS ON THE FORMATION OF MENTAL MALADAPTATION IN MEDICAL WORKERS DURING THE PANDEMIC OF A NEW CORONAVIRUS INFECTION COVID-19

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Summary. The aim of the study is to analyze the modern foreign and domestic scientific literature devoted to the influence of production factors on the formation of mental maladaptation in medical workers, as well as possible methods of its prevention and curing.

Materials and research methods. Scientific studies of negative psychological reactions and manifestations of mental disorders in medical workers of various profiles in the COVID-19 pandemic were analyzed. The search protocol included the use of various databases, including PubMed; Russian information and analytical portal in science, technology, medicine, and education – eLIBRARY.ru; open-access statistical reporting data; and official websites of scientific journals on the subjects under study.

Study results and their analysis. The results of the study showed that most medical professionals experienced stress caused by organizational factors such as a lack of personal protective equipment (PPE), fears of not being able to receive quality medical care if they were sent to work elsewhere, fears of rapidly changing context, lack of access to current information and communication, lack of special medications, shortage of ventilators and beds in intensive care units

In the conditions of regular health care work, most of the professionals noted tension in the process of performing professional duties, exceeding their physical and mental capacities, which was one of the main reasons for anxiety, nervousness or stress at work.

Key words: high availability mode, medical workers, mental maladaptation, new coronavirus infection pandemic COVID-19, organizational factors, posttraumatic stress, professional burnout syndrome

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Introduction

Currently, a person is often in the world of dangers-social, natural, anthropogenic, technogenic, etc. Not even a day passes that the media does not bring reports about the next terrorist act, accident, natural disaster or disaster, in which people were injured or died [1].

For the first time diagnosed in China at the end of 2019, a severe acute respiratory syndrome (sars) spread throughout the world with lightning speed, and on March 11, 2020, the World Health Organization (WHO) announced the beginning of the pandemic of a new coronavirus infection [2–4]. The indicated situation has become an unprecedented source of negative global prospects, the widespread spread of various negative psychological reactions, as well as the development of mental arrangements. People experienced a sense of helplessness, fear of getting sick or dying, they developed elements of stigmatization [5, 6].

Humanity, which has entered the new century, is concerned about such dangers and threats. It is trying to understand them, to predict the future development of events, to clarify and adjust the goals, sources and pre-deposits of development, meaning and criteria of progress.

One of the main problems facing the whole world is the contradiction between the needs of socio-economic development and the need to preserve the habitat in its original form. It is worth noting that scientific and technological progress not only contributes to the increase in labor productivity and improving its conditions on the working meals of all categories of workers, the growth of material wealth and scientific-intellectual potential of society, but also leads to an increase in emergency situations (Emergencies) and the risks due to their advent.

It is obvious that it is necessary to look for more effective ways of harmonious development of the techno and biosphere, radically change the psychology of people as consumers of material and spiritual goods, increase their safety and reliability of protection in regular situations and in emergency situations [7].

At the moment, the emphasis of the concern of experts has shifted from such consequences of emergency and extreme situations as mortality, physical diseases, injuries and injuries,

on their consequences, which have a negative impact on the psychoemotional state and health of the society and participants in the liquidation of the consequences of emergencies, in particular, medical workers.

Immediate emergency psychological assistance, as close as possible to the time of injury, avoids many undesirable consequences and their further transition to a chronic form - a mental illness [8].

The new coronavirus infection had a huge impact on the healthcare system as a whole and each medical worker in particular. During the pandemic, many cases of professional burnout and post-traumatic stress were recorded. Consequently, attention to the wellbeing of medical workers around the world has become mandatory for their proper support and monitor their condition [9–12].

The indicated situation makes certain requirements on the ability of medical specialists to carry out self-regulation of mental states, to manage chronic stress and to apply knowledge, skills and skills [13].

In connection with the foregoing, the analysis of modern foreign and domestic scientific literature devoted to the impact of production factors on the formation of mental maladaptation among medical workers, as well as possible methods for preventing it and stopping it is currently especially in demand.

Materials and research methods. Scientific studies are analyzed by the results of the study of negative psychological reactions and the manifestations of mental disorders in medical workers of various profiles in the conditions of pandemic Covid-19. The search protocol included the use of various databases, including the PubMed database; Russian information and analytical portal in the field of science, technology, medicine and education-the scientific electronic library Elibary.ru; statistical reporting data in the public domain, as well as official sites of scientific journals on the studied topics.

It is worth noting that a large amount of scientific publications in domestic and foreign sources is devoted to the stressful effect of Covid-19 pandemic on employees of medical institutions who directly provide urgent and emergency medical care of various profiles [14].

So, on the request of "The Psychological Impact of Covid-19", only 4,861 result was obtained in the Pubmed search engine, while the "explosive leap" of the number of sources was noted-in 2020 the search engine issued 1622 work; in 2021 - 3514; As of August 23, 2022 - 2157 works. When clarifying the request for The Psychological Impact of Covid-19 The Mental Healthcare Professionals, 670 results were obtained (187-for 2020 and 320 for 2021; 163-as of August 23, 2022).

The results of the study and their analysis. During outbreaks of infectious diseases, various negative psychological reactions, as well as mental disorders in the population, are widely used. The situation that arose in connection with the pandemic Covid-19 caused a general atmosphere of alertness and uncertainty, the manifestations of which were different for various professional groups, especially among medical workers [15–19].

Even in the conditions of full -time health care, most medical specialists during polls note tension in the performance of professional duties, excess of their physical and mental capabilities, which, along with low wages, is one of the main causes of anxiety, nervousness or stress at work. In all relevant literature, there is a consensus regarding the fact that medical workers are at increased risk of high levels of stress, anxiety, depression, emotional burnout, dependence and post -traumatic stress disorder, which may have long -term psychological consequences. The level of recorded occupational incidence does not reflect the actual professional risk to the health of doctors, and the practice of taking into account the professional burnout syndrome as an occupational disease is absent today [20, 21].

The largest number of experts was experienced by stress caused by organizational factors as lack of personal protective equipment (PPE), fears due to the inability to provide quality medical care in case of deployment in a new area, fears due to rapidly changing information, lack of access to relevant information and communications, lack of special drugs, lack of artificial ventilation apparatus (IVL) and beds in intensive care units [22].

Some groups of medical workers indicated difficulties due to the need to care for a large number of seriously ill patients and significant changes in their everyday social and family life [23, 24].

The situation is complicated during outbreaks of infectious diseases in connection with fears about the rapid spread of the Covid-19, the severity of its symptoms, which it can cause in some of the infected ones, a lack of knowledge about the disease and mortality from it among medical workers. During epidemic emergency situations, as happened during the Covid-19 pandemic, medical specialists significantly increase the load, they become more vulnerable to infection due to their direct contact with patients, which in turn increases their anxiety about the possibility infection of family members and colleagues [25].

In the domestic and foreign literature there are works in which the consequences of the effects of pandemic Covid-19 are more deeply studied and the presence of several stages of emotional burnout, including the dominant emotional exhaustion, as well as the stages of depersonalization

and reduction of personal achievements, has been proved. At the same time, the authors indicate that their presence and severity are associated with the personal characteristics of medical specialists [26].

Additional risk factors were also identified, including a feeling of insufficient support, fears about their own health, fear of conveying infection to family members or other persons, lack of rapid access to testing, if necessary, isolation, a feeling of uncertainty and social stigmatization, excessive workload Or unreliable affection [27].

A number of experts noted such anxiety sources that negatively affect their psycho-emotional state as uncertainty in their own professionalism due to changes in the type of medical department or profile of the medical institution into which they were translated.

Thus, the main factors associated with the consequences for mental health include: limited hospitals resources; the threat of infection with the virus as an additional professional risk; longer shifts; violation of sleep regime; The balance between work and personal life, subsequent aggravated dilemmas regarding the responsibilities of the patient and fear of influencing family members, neglect of personal and family needs with increased workload and lack of sufficient communication and updated information. All this was defined as the main factors that contribute to increased physical and mental fatigue, anxiety, stress and emotional burnout. The main danger of acute and - especially - protracted psycho -traumatic situations is that the mental and neurological disorders caused by them often have chronic development. The direct consequence of prolonged psycho-emotional stress can be damage to the cardiovascular, digestive and endocrine systems and the development of immunodeficiency states [28].

There is no doubt that the professional activities of medical specialists often make special requirements for their ability to simultaneously make a number of decisions as soon as possible.

The special interest of many researchers in the development of recommendations for the timely conduct of preventive measures to prevent mental maladaptation is natural.

First of all, this is the prevention of infection, including the cessation or slowdown of everyday activity, social distance, reducing interaction between people, wearing masks and providing high -quality ventilation in order to reduce the possibility of repeated infection [29].

It is extremely important that the medical organization timely ensures the basic physiological needs of medical workers. This involves providing proper nutrition, compliance with the rotation / schedule for sufficient rest and restrictions on possible overwork, as well as protective equipment such as masks. According to most studies, in the system of preventive measures aimed at ensuring safe working conditions, an important place is occupied by personal protective equipment. The use of PPE is a prerequisite for personnel working with harmful and dangerous production factors, as well as means aimed at reducing risks in case of emergency at the workplace. And although some employees indicate discomfort and difficulties in breathing, they are aware of the importance of using PPE and their role as part of a common

system aimed at reducing the transmission of infection from patients to medical staff. The correct use of PPE is aimed at maintaining their limited reserves, which will ensure their sufficient resource in the case of a further possible epidemic surge and in emergency situations such as a pandemic [30–32].

Social support and support of colleagues were also defined as the main protective factor from the impact of injury and maintaining general mental well-being [33]. Therefore, routine support processes, i.e. Supporting colleagues that provide information about the potential psychological consequences that may arise at such moments have (a pandemic) educational goal. The provision of psychological support on the spot in a comfortable environment showed its usefulness under previous epidemics [34, 35].

It is worth noting that for the most effective treatment and restoration of patients, the psycho-emotional state of medical workers is important, therefore, when conducting rehabilitation measures, it is so important to take into account the measures of support for medical workers, including the development of their psychological sustainability, protection against overwork, professional burnout, depressive and alarming disorders.

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Conclusion

Thus, the analysis indicates that the pandemic of the Covid-19 can be considered as a massive traumatic event. The global scale of the pandemic, its negative impact on all aspects of society is carried out to the greater extent, the more the availability of information about it through the Internet and social networks increases. The widespread dissemination of information in the world, including not always reliable and relevant, creates the possibility of a massive traumatic event with an unprecedented effect on global mental health. At the same time, medical workers who are in the epicenter of events are at the same time. In this regard, it is necessary to pay special attention and provide psychological assistance to medical workers in various emergencies [36].

It is obvious that the maintenance of the psychoemotional state of medical workers in stressful working conditions, which include the conditions of the pandemic, sets the leadership of medical institutions the task of creating and developing psychological services or the presence of a full-time psychologist directly in medical institutions.

Constant monitoring of research on the study of the influence of production factors on the formation of mental maladaptation among medical workers during emergencies of various orientations and intensity is necessary for planning future prevention strategies.

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