Health care workers are a category of workers at high risk of infection. Thus, the data obtained showed that 74% respondents indicated the existence of a very high risk of occupational disease, 22% health workers they attributed it to low risk, and 4% subjects mentioned that they do not know what the occupational risk of illness is.

Also, it was found that during the period of the pandemic, 64% of medical workers were infected with the SARS-CoV-2 virus at the workplace, of which 26% physicians and 74% nurses, this is due to the specifics of work, being at the forefront in the fight against the pandemic exposed to a high risk of infection through contact with patients with COVID-19, when communicating with relatives of victims, potentially infected etc. The vast majority of 94% of respondents indicated the presence of professional contact with biological factors - viruses, bacteria, fungi. In this context the, 80% of those surveyed mentioned that they have enough protective equipment, provided by the institution where they work, and 20% believe that there is insufficient protective equipment, which considerably increases the risk of infection.

At the same time, the data obtained, indicate the presence of chronic diseases in 35% medical workers, the most common being chronic gastritis, pancreatitis, ulcer indicated by 18% respondents, hypertension suffered by 18% medical workers and 6% participants in the study mentioned bronchitis, chronic sinusitis, allergy etc.

## Conclusion

Prehospital emergency care services is an important part of health care, but is subject to many security threats and despite the fact that in recent years there has been an improvement in working conditions and the modernization of medical institutions of Republic of Moldova, in terms of occupational health and safety, it remains a little studied area, but an important and priority one. Given the essential role of health in the life of every person and appreciating the increased work of medical workers, it is necessary to focus on improving the state policy, ensuring a high social status of the medical personnel. Biological risk requires an integrated approach to risk assessment and risk management, which is complicated by the wide variety of biological agents, work environments and work practices that can determine exposure. It is also very important and necessary to develop an effective system of measures to prevent and combat occupational diseases of the medical personnel of the ambulance teams in the Republic of Moldova.

## PROGNOSTIC CONSEQUENCES OF THE HOSTILITIES IMPACT ON THE ENVIRONMENT AND PUBLIC HEALTH Boiko Y. M.<sup>1</sup>, Quinn J.M.V.<sup>2</sup>, Melnyk V.H.<sup>1</sup>, Vlasenko O.M.<sup>1</sup>, Kozak N.D.<sup>1</sup>, Martynenko S.O.<sup>1</sup>, Dema O.V.<sup>1</sup> Bogomolets National Medical University<sup>1</sup>

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The deviant behavior of Russia made millions of people of our country suffer, provoking an armed conflict that caused a huge number of deaths and disability of the military and civilian population of Ukraine. The war forced people to leave their homes and become internally displaced persons. The destruction of health care

facilities, critical infrastructure and homes of our compatriots, creation of a communication deficit and environmental deterioration have disrupted normal life and provoked significant changes in public health. The increase of targeted attacks on medical facilities has complicated the process of providing competent care to people of all ages and genders. All of this constitutes about violation of the laws and customs of warfare (Hague Conventions on the Laws and Customs of War of 1899 and 1907, Geneva Protocol for the Prohibition of the Use of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare, 1925, and the Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Methods of Warfare, 1976) and, accordingly, international human rights, which are considered as war crimes. The World Health Organization (WHO) reported 780 attacks affecting healthcare facilities across the country over the past year, while the Ministry of Education and Science of Ukraine reported damage to over 500 educational facilities.

The consequences of the negative impact of war on health can be seen in all segments of the population, which further puts an additional burden on the health care system. Armed conflicts pose a threat of possible outbreaks of infectious diseases and their complications due to poor sanitary conditions, inadequate medical care, increased resistance to antimicrobial drugs, and minimal access to clean water and food.

The territory of Ukraine has suffered a large-scale environmental disaster due to fires, explosions, ammunition combustion products, destruction of industrial facilities and the release of chemicals and toxic gases that released into the environment, pollute the air, soil and water and pose a threat due to their toxicity, mutagenicity and carcinogenicity. According to research under the auspices of the OSCE Project Coordinator in Ukraine and a comprehensive analysis and synthesis of available data, more than 500 accidents and cases of disruption of the operation of enterprises that created environmentally hazardous situations have been recorded since the beginning of the conflict (Yasynivka and Avdiivka coke plants, Lysychansk oil refinery). In the areas affected by the hostilities from ammunition of various calibers (Kramatorsk, Mariupol), there were systematic inctrasing of levels in 1.1-2 times of mercury, non-radioactive strontium, cadmium, and vanadium.

Limited access to medical services and lack of care continuity can lead to an increase in acute and chronic diseases, such as aortic aneurysm, myocardial infarction, hypertensive crises, cancer, chronic respiratory diseases, diabetes mellitus, which make up the main group of diseases that cause mortality among people of working age.

The short-term and long-term consequences of the war can be devastating for the health care system of the occupied territories and provoke an increase in infectious and non-communicable diseases, including those of psychosomatic origin.

Literature:

1.Імплементація норм міжнародного гуманітарного права на національному рівні в Україні. Київ: Global Rights Compliance, 2020. 325 с. URL:<u>https://www.asser.nl/media/794858/2021-the-domestic-implementation-of-ihl-in-ukraine-updated-</u>

## <u>%D1%83%D0%BA%D1%80%D0%B0%D1%97%D0%BD%D1%81%D1%8C%D0</u> %BA%D0%B0.pdf

2.<u>ЮНІСЕФ Великобританія (unicef.org.uk)</u> https://www.unicef.org.uk/press-releases/more-than-half-of-ukraines-children-displaced-after-one-month-of-war-unicef/

З.Екологічні та гігієнічні проблемі при надзвичайних ситуаціях / Калашченко С.І., Шевчук К.В., Дема О.В., Стополянський О.В., Бойко Ю.М.// Матеріали науково-практичної конференції з міжнародною участю «Екологічні та гігієнічні проблеми сфери життєдіяльності людини» (Київ, 16 травня 2018 р.) / за загальною редакцією професора О.А. Никитюка та професора С.Т. Омельчука. – К., 2018. – С. 102 - 104.

4. Оцінка екологічної шкоди та пріоритети відновлення довкілля на сході України. – К.: ВАІТЕ, 2017. - 88 с

5. Готовність системи охорони здоров'я щодо реагування на надзвичайні ситуації / Білозір Т.Ю., Гринзовський А.М., Калашченко С.І., Кузін І.В., Черненко Л.М., Луцак О.О., Чала С.К. // Матеріали науково-практичної конференції з міжнародною участю «Екологічні та гігієнічні проблеми сфери життєдіяльності людини» (Київ, 16 березня 2022 р.) / за загальною редакцією член-кор. НАМН України, професора С.Т. Омельчука. – К., 2022. – 18-20 с.

6. Гринзовский А. М. Медицинская полиция как междисциплинарная комплексная государственная доктрина сохранения общественного здоровья в XVIII начале XX века // Актуальні проблеми сучасної медицини: Вісник української медичної стоматологічної академії. 2014. №2 (46).

## MODEL MONITORING OF POLLUTANTS IN THE ENVIRONMENT Dychko A.O.<sup>1</sup>, Minaieva Y.Y.<sup>2</sup>, Minaieva K.A.<sup>3</sup>

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The system of monitoring of the environment is characterized by the lack of a systematic approach to the analysis of the state of natural reservoirs, as well as the accurate and operative measurement of the qualitative and quantitative indicators of environmental safety of the hydrosphere. Modelling and forecasting as components of state of natural and engineering water drainage systems in the presence of pollution sources (natural and anthropogenic) have exceptional importance. On the one hand, while designing industrial enterprises, transport highways, storages of toxic waste, landfills, etc. it is necessary to assess the future impact of these objects on the environmental state, using adequate models of distribution, migration and metabolism of pollution in the average conditions of the operation of these objects throughout the term of their work. On the other hand, using appropriate models can help to identify risks in the event of natural or man-made disasters and formulate scenarios for the elimination of the consequences of such accidents. Finally, the simulation of pollution spreading processes and the interaction of several existing pollution sources can help to determine source contribution to the actual environmental state and propose measures to compensate or minimize this impact. In addition, using