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ХАРКІВСЬКИЙ НАЦІОНАЛЬНИЙ МЕДИЧНИЙ УНІВЕРСИТЕТ

Клінічна медицина навколишнього середовища

Матеріали науково-практичної конференції з міжнародною участю
Харківського національного медичного університету

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К49 Матеріали конференції вмістили різні гігієнічні аспекти впливу факторів довкілля на здоров'я людини. Основними напрямами стали проблеми профілактики професійної та екологічно обумовленої захворюваності в Україні та країнах ЄС, сучасні глобальні екологічні загрози та наслідки локальних криз, питання відновлення екологічної безпеки постраждалих внаслідок війни регіонів, проблеми психофізіологічної професійної експертизи та багато інших актуальних питань.

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THE IMPACT OF ENVIRONMENTAL FACTORS ON THE PROVISION OF TACTICAL MEDICAL AID DURING MARTIAL LAW

Sukhonosov Roman, Tereshchenko Anatoly, Konoval Nataliia, Ushakova Mariia

- "Confess," Pilate asked quietly in Greek, "are you a great healer?"
"No, Procurator, I am not a healer," the prisoner replied…
"Some thoughts have come to my mind that, I believe, might seem interesting to you, and I would gladly share them with you, especially since you appear to be a very intelligent person."

Relevance: Over the past three years, amid full-scale military aggression, there has been an increasing interest in various aspects of the problem of protecting the environment from depletion, pollution, and degradation. The main reason for the urgent relevance of this issue is the intense transformation of the environment due to anthropogenic activities, especially in areas where hostilities are taking place. This can directly or indirectly affect the health of the local population and military personnel, as well as their living conditions, daily life, and recreation.

Environmental factors play a significant role in the provision of tactical medical aid during combat operations. The impact of the environment on

soldiers' health and the course of military operations can be substantial and requires consideration and adaptation by the medical service.

The aim of our study is to examine the impact of certain environmental factors on the provision of medical care under martial law.

Materials and methods: *Theoretical:* review and analysis of scientific and methodological literature; *practical:* our own research.

Results and conclusions: One of the key aspects of environmental factors is the climatic conditions in conflict zones. Extreme temperatures, high humidity, dust, and air pollution can worsen the condition of the wounded and complicate the provision of medical care and primary surgical wound treatment. Medical personnel must be prepared to work under extreme climatic conditions and provide appropriate care for the wounded.

Another important factor is the environmental state of the combat areas. Soil and water contamination with toxic substances, including chemical weapons, can cause chemical burns and poisoning, which requires specialized medical care. Medical teams must have access to detoxification agents and antidotes to treat the affected. Epidemiological aspects related to the environmental situation should also be taken into account. Military conflicts can lead to violations of sanitary conditions and the spread of infectious diseases. The link between the rise in infectious diseases and wartime conditions has been clearly observed during recent local wars. Medical personnel must be able to implement infection prevention and epidemic control measures. It is important to note that environmental factors may vary depending on the specific military operation and region. Therefore, military medical services must have a flexible action plan and adapt their practices according to the current environmental situation.

The environmental sustainability of military medical operations also depends on effective resource management and adherence to bioethical standards, which represents the third factor. Military medical personnel must follow ethical guidelines when providing care to the wounded, including the principles of fairness and non-discrimination. This is especially important in conditions of limited resources, where decisions regarding treatment priorities must be fair and well-justified.

In addition, the use of advanced technologies, such as telemedicine and unmanned medical drones, can improve the efficiency and accessibility of medical care on the battlefield. These innovations enable medical teams to quickly receive consultations from specialists and deliver medical supplies and equipment to remote and hazardous areas. It is important to note that the development and application of modern technologies in tactical medicine also involve issues of cybersecurity and the protection of medical systems from cyberattacks. This is becoming increasingly relevant given the potential threats associated with cyber warfare.

Thus, modern technologies, consideration of environmental factors, and adherence to bioethical standards play a significant role in improving the effectiveness of tactical medical aid. The commitment to continuously improving medical practices and adapting to rapidly changing conditions allows for saving lives and providing the best possible care to the wounded. Environmental factors have a significant impact on tactical medical aid in military settings. Taking these factors into account and adapting to the environment are essential parts of medical personnel's work during armed conflicts. Effective management of environmental risks can contribute to the more successful provision of medical care to injured military personnel.

ANALYSIS OF THE DEGREE OF PERCEPTION BY FIRST- AND SECOND-YEAR HIGHER EDUCATION STUDENTS OF SHORT TIME INTERVALS DURING DIFFERENT STUDY PERIODS UNDER MARTIAL LAW

Sukhonosov Roman, Konoval Nataliia, Nadozirna Sofiia, Halycha Mariia

Labor est etiam ipsa voluptas. Manilius.

A characteristic of modern wars is that they are waged not only by the army but by the entire country as a whole. During war, the material and spiritual forces of the people and the nation are mobilized. The economy is restructured to a military mode. The focus of science and educational processes in educational institutions also changes. The surrounding situation directly affects the psycho-emotional state of vulnerable groups of the population, including students.

The perception of time plays an extremely important role in helping a person orient themselves in the surrounding world and adapt to stressful situations that change rapidly. The physiological basis of time perception is the conditioned reflexes that are constantly developed in a person. The interaction of sensory analyzers, through which a person perceives aspects of surrounding phenomena, underlies this process. The analysis of time perception is influenced by an individual's personal attitude. The degree of subjectivity in assessing time also depends on a person's age.

The aim of the study was to determine the degree of optimal perception of short time intervals between air raid alerts by first- and second-year higher education students during the educational process in online mode throughout the semester.

During the study, conducted in two stages (under normal learning conditions during the semester and between repeated air raid alerts), 40 respondents aged 17–22 were surveyed. Before the start of each stage, the respondents were informed about the study conditions and the methodology used.

To study time perception, a method for evaluating short time intervals was used, aimed at analyzing the accuracy of time interval assessment, based on Y.V. Koryagina's modification. The procedure included 10 trials, in each of which the respondent had to estimate a certain time interval within 1–120 seconds. The respondent evaluated the duration and recorded it in the assessment protocol according to the given instructions.

When interpreting the results obtained during the semester, it was found that 50% of students overestimated the time intervals, 30% underestimated them, and only 20% assessed the intervals accurately. Analyzing the results of the second stage, between repeated air raid alerts, it was found that the number of students who overestimated time increased. Specifically, 80% of respondents overestimated the time intervals, 17% assessed them accurately, and 3% underestimated the time. The data from this stage significantly differed from the results of the first stage.

It was revealed that under psychological stress (particularly between air raid alerts), the number of students who overestimated short time intervals increased, while the number of those who underestimated time significantly decreased, and the proportion of students who assessed time intervals accurately remained almost unchanged.

Thus, it can be assumed that a certain level of anxiety, present in most students between repeated alerts, affects their perception of time and depends on both internal personal factors and external influences.

ABOUT INTERNATIONAL AND INTERDISCIPLINARY APPROACH TO COMBAT VIRAL HEPATITIS B

Shcherban Mykola, Bezrodna Anastasiia, Mudenda Victor

At Kharkiv National Medical University, scientific research has been conducted for a long period to study the impact of many classes of surface-active substances (surfactants) on the body of experimental animals with the aim of subsequently substantiating the levels of state hygienic standards for the content of these substances in water bodies. An invaluable amount of information has been accumulated about the impact of surfactants on the body of warm-blooded animals and water bodies and the processes of self-purification.

In 2018, based on the results of research work carried out at Kharkiv Medical University by order of the Ministry of Health of Ukraine, a recommendation was made regarding the need to continue targeted scientific and practical research on the impact of surfactants on the health of the population due to the formation of the statement among the performers of scientific work that a new pathology has already formed in the population in Ukraine, the factors of which are surfactants [1].