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TECHNOLOGIES IN THE TRAINING OF FUTURE HEALTHCARE WORKERS IN THE WAR CONDITIONS IN UKRAINE

У статті висвітлено теоретичні аспекти використання цифрових технологій у професійній підготовці майбутніх медичних працівників. Обґрунтовано необхідність упровадження методик електронного дистанційного навчання в українських університетах в умовах воєнного стану. Визначено найбільш дієві засоби інформаційно-комунікаційних технологій (ІКТ) у навчанні студентів-медиків, що здійснюється у таких формах, як: онлайн-курси, онлайн-консультування, онлайн-тренінги, хакатони, вебінари, віртуальні лабораторії, соціальні мережі, відвідування інтерактивних музеїв науки, створення платформ спілкування за науковими інтересами, міжнародні конкурси з рішення науково-технічних задач, віртуальні технопарки та інші. Авторами представлено результати емпіричного дослідження щодо використання цифрових технологій у роботі з студентами в умовах війни, яким охоплено науково-педагогічних працівників Івано-Франківського національного медичного університету.

Ключові слова: цифрові технології, майбутні медичні працівники, воєнний стан, професійна підготовка.

Summary. The article highlights the theoretical aspects of the use of digital technologies in the professional training of future healthcare staff. The authors argue that over the past few decades, family medicine has become an important part of the undergraduate medical curriculum around the world, and general practice hospitals have become education centers for undergraduates. Therefore, while the doctors professional training is carried out under martial law, usually in a remote format, they face difficulties concerning practice-oriented teaching. When Ukrainian students can do internships in hospitals where their help is necessary (many wounded soldiers), then foreign students' study in Ukraine mostly online. This process requires an effective digital educational environment for high-quality professional training of future specialists at a medical university. After all, the implementation of the electronic healthcare system involves the shift of focusing on providing healthcare from a medical and hospital-oriented approach to a patient-oriented approach and rehabilitation using digital technologies. Undoubtedly, the study of these digital systems is extremely important in university education for their further use in medical practice, in particular: a) to compile patients' health data into a united Electronic

Medical Card, accessible to various medical professionals; b) for the use of electronic prescriptions to provide patients with mobility for easier access to prescribed medicines, etc.

It was determined that the development of digital technologies had contributed to the emergence of telemedicine, eHealth, and scientific research "in silico", provoking rapid progress in the life science branches, introducing "omics" technology development into medical research, to study the gene, to work with protein and glycol (Zayachkivska, 2018), also case-study learning.

The necessity to implement electronic distance learning methods in Ukrainian universities under martial law conditions has been substantiated. The most effective means of information and communication technologies (ICT) in the process of medical students' training are determined and carried out in such forms as online courses, online tutoring, online training, hackathons, webinars, use of virtual laboratories, social networks, visits to interactive science museums, creation of communication platforms based on scientific interests, international competitions for solving scientific and technical problems, virtual technoparks and others.

The importance of enriching electronic educational content (library and information resources for training, education, management, conducting educational and scientific research; resources of library information centers; collections of electronic medical educational resources, and the content of sites for distance learning of educational institutions) has been proved.

Considerable attention is paid to the use of ICT in the student's individual work, as well as the training of future healthcare professionals by means of gamification in healthcare as an innovative teaching method. The authors gave convincing arguments that with the help of game concepts repetition, for example in digital format, information is better consolidated, and practical skills are developed (simulation simulators for memorizing visual information, studying physiology, anatomy, performing medical manipulations, endoscopic procedures, or diagnostic studies).

The authors presented the results of the empirical research on the use of digital technologies in working with students in war conditions, which included 52 scientific and pedagogical staff of Ivano-Frankivsk National Medical University.

According to the survey data, it was revealed that only 3 persons (5.8%) fully support distance learning under martial law. Most of the respondents (65.4%) partially support and 25% are categorically against such training. They explain their answers by the fact that they cannot guarantee the safe organization of the educational process due to constant threats of massive missile strikes on the territory of Ukraine, the increase in emotional tension among all participants in the educational process, periodic air raids, power outages, etc.

Among the most common difficulties experienced by teachers in working with medical students in the conditions of martial law, we found the following: the biggest barrier and destabilizing factor are air raids, expressed by almost 70% of respondents (36 out of 52 surveyed); a significant part of higher medical education seekers (53.8% of the total number of respondents) suffer from psycho-emotional tensions during martial law, the loss of relatives and friends who are fighting (or died) for the Motherland, or are considered missing; at the same time, the statistics regarding the situation in the east and south of the country, where the Ukrainian military is facing the Russian aggressor in an unequal battle, are alarming, which also negatively

affects the young specialists' psyche. Mental disorders (depression, PTSD, acute psychoses, etc.) among the civilian population, in particular students, during the war are a very common phenomenon: 40.4% of respondents pointed to the problems of establishing pedagogical interaction due to experienced stressful conditions related to the war; as well as 28.8% – lack of (low) motivation to study or interest in acquiring a relevant professional specialty. At the same time, 23.1% of respondents faced difficulties in adapting to new living conditions, traditions, requirements of the educational institution, etc. A fourth of all respondents (25%) have problems of a technical nature regarding the organization of educational activities at the university (for example, low-speed internet or its absence).

The authors argue that the widespread implementation and further development of digital technology education are necessary, considering the societal challenges of the Covid-19 pandemic and the war in Ukraine. For this, it is necessary to create a proper digital educational environment at the medical university, which serves as an integral component of the internal system of ensuring the quality of education.

Key words: digital technologies, future medical workers, martial law, professional training.