



## Матеріали

науково-практичної конференції  
з міжнародною участю

### “Симуляційна медицина погляд в майбутнє”

(впровадження інноваційних технологій  
у вищу медичну освіту України)

м. Чернівці  
19 лютого 2021



МІНІСТЕРСТВО ОХОРОНИ ЗДОРОВ'Я УКРАЇНИ  
БУКОВИНСЬКИЙ ДЕРЖАВНИЙ МЕДИЧНИЙ УНІВЕРСИТЕТ

# **МАТЕРІАЛИ**

**НАУКОВО-ПРАКТИЧНОЇ КОНФЕРЕНЦІЇ**

**З МІЖНАРОДНОЮ УЧАСТЮ,**

## **“МЕДИЧНА СИМУЛЯЦІЯ - ПОГЛЯД В МАЙБУТНЄ”**

*(впровадження інноваційних технологій  
у вищу медичну освіту України)*

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## **ADVANTAGES OF MODERN SIMULATION CENTERS IN MEDICAL UNIVERSITY**

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Simulation in modern medical education is a technology of training and assessment of knowledge, skills and practical skills, which is based on realistic modeling of the clinical situation, using electronic, mechanical and virtual (computer) models. In Ukraine, simulation training is becoming an important part of the activities of institutions of higher medical education. Simulation training should precede and complement clinical training, due to which there is an opportunity to significantly increase the level of clinical competence of the doctor. To date, there is no real access for students and interns to patients. And so there are several explanations. Working conditions and patient requirements have changed, and medical interventions have become so complex that it is impossible for people to master and improve them. Previously, patients themselves sought to get to clinical bases, where professors were consulted, new methods of treatment were used, and they were not very worried that there were students who would take part in their examination, observe the operation, and so on. At present, patients do not want to see "trainees" at their bedside, and young doctors have a certain psychological barrier before the first visit to the patient, especially when it comes to complex interventions. Until such manipulations are automated, the barrier between doctor and patient will remain.

In 2009, the World Alliance for Patient Safety, with the support of the WHO, published a Guide to Patient Safety for Medical Institutions, which emphasized the need to create a safe educational environment for the acquisition of clinical skills (including simulation technology). After all, in this way the future doctor or specialist who masters new skills will not be afraid to make mistakes, practice the technique and at the same time feel the degree of his responsibility

for the result of medical care. All over the world there is a tendency to change the approach to medical care, insurance medicine guards the safety of the patient, the emphasis is on medical errors. On the other hand, everyone understands that the training of a qualified doctor is impossible without his practical participation in solving real problems of patient rescue, although again the priority of practice "at the patient's bedside" is treatment, not student training. This dilemma can be solved only thanks to the latest approaches in doctor training. That is why the world is so actively implementing simulation technologies for the training of health professionals, which make it possible to objectively assess the professionalism of the doctor and at the same time guarantee patient safety.

The experience of using simulation technologies in higher medical institutions allows us to analyze the first results and identify some of its advantages. First - on the organization of the educational process. Simulation training clearly has a positive effect on its organization. You do not have to wait until a thematic patient appears in the clinic, you can simulate a complex or rare case at any time and repeat it. Training with the help of virtual patients significantly reduces the time of learning practical skills, reduces the anxiety that the student feels when performing a certain manipulation at the patient's bedside, which will have a positive impact on the quality of treatment in the future. In addition, the simulators are able to simulate a variety of emergencies, the treatment of which may involve several health professionals. Thus, in the course of training not only clinical skills are developed, but also the ability to communicate with colleagues and patients.

Secondly, from the standpoint of safety for the patient is an extremely important point that you can reproduce everyday and critical situations without endangering the life and health of the patient.

Thirdly, the use of simulation technologies helps to increase the efficiency of the educational process and the level of professional training of students, provides them with the safest and most effective transition to medical activities in real conditions. This type of training of medical students is promising and has its advantages: clinical experience without risk to the patient, stress reduction during the first independent manipulations, practice and maintenance of acquired skills and practical skills, the ability to create clinical situations as close as possible to real, repeated for the formation of appropriate skills and elimination of errors, improving interactions in teamwork.

To sum up, before starting the examination and treatment of real patients, it is optimal to study in simulation centers equipped with computerized mannequins, high-tech simulators with pharmacological and pathophysiological modules of behavior that can be programmed for the most "natural" reactions in response to any -what are the actions of the student and which allow to model various clinical conditions. Of course, the opening of simulation centers in medical institutions is primarily limited by the high cost of equipment. However, the modern development of medical science and practice initiates the development of this area. Undoubtedly, Ukraine is only taking the first steps towards simulation technologies in medical education, but we cannot do without speeding up the process, as we claim full integration into the world community and declare our intention to comply with international standards.

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## **PSYCHOLOGICAL ASPECTS OF SIMULATION IN BREAST GLAND CANCER**

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Breast cancer is the most common tumor that occur women around the world, with a growing frequency. The correct treatment is multidisciplinary, the sequentiality of therapeutic methods and their aggression being conditioned by the histopathological type, tumor size, the presence of lymphadenopathy, the patient's age, the presence of hormone receptors, HER2 and menopausal status. The negative psychological impact of cancer on the public consciousness is due to the nature of the incurable disease, which continues to be one of the major causes of death worldwide. More than 47% of cancer patients develop psychiatric disorders, about 90% of which are reactions to the diagnosis and treatment of the disease.

**Materials and methods:** Theoretical analysis of some psychological aspects of simulation in the process of diagnosis and treatment of mammary gland cancer.

**The goal:** Research into some psychological features of the simulation in cancer of the mammary gland and the possibility of preventing or reducing it's occurrence.

**Results:** Simulation of surgical treatment methods in mammary gland cancer requires an individual approach, as it often causes emotions of anxiety, fear, compassion and insecurity. Similarly for patients diagnosed with cancer, it most often presents a series of adaptive responses, such as: shock / distrust, immediate and partial denial, anger, revolt, anxiety, depression, etc. In parallel with these emotional reactions that the patient experiences, changes in the person's value sphere also occur. Feelings of worthlessness or guilt may include negative judgments about one's own worth, which do not correspond to reality, or an exaggeration in self-attribution of guilt for minor past failures. Some people almost completely lose interest in activities that they once considered enjoyable, also the availability for professional activities, leading to retirement from social and professional life.

The treatment in mammary gland cancer is very mutilating and lasting, and the lack of explanations, which are absolutely necessary, on medical techniques may cause to student fear and worries. The person's attitude towards this disease (what does she/he think about it), towards the simulation techniques that are needed to be performed, the support of the medical team, attitudes such as optimism, courage, hope, faith, active involvement can work great in what