



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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У тезах доповідей науково-практичної конференції з міжнародною участю лікарів, науковців та молодих вчених, подаються стислі відомості щодо результатів наукової роботи, виконаної учасниками конференції.

С 37 **Медична симуляція – погляд у майбутнє (впровадження інноваційних технологій у вищу медичну освіту України)** (для лікарів, науковців та молодих вчених) : наук.-практ. конф. з міжнар. участю. Чернівці, 19.02.2021 року: тези доп. / Чернівці: БДМУ. – 267 с.

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Conclusions:

1. The concept identified long-term directions for the implementation of strategic tasks.
2. A number of positive results are expected to be achieved after the implementation of the concept of further development of the higher education system for the period up to 2030.
3. Ten higher education institutions operating in our country will be included in the list of the first 1000 internationally recognized organizations. The National University of Uzbekistan and Samarkand State University will take the first 500 places.

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LEARNING THROUGH SIMULATION IN OBSTETRIC EMERGENCIES

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During the period of highly developed technologies, obstetric management requires high quality providing of services. In this context, the constant improvement and acquisition of knowledge and practical skills is necessary. It is also needed to have an appropriate approach in the medical act to guarantee efficient fulfillment of the attributions by the providers. Simulation in obstetric emergencies is the art of transposing, through scenarios, the evolution of important clinical cases or rarely encountered in practice. The simulation allows the acquisition of new knowledge through interactive communication between the trainer(s) and the team, and the management of errors. Communication facilitates the understanding of team members and contributes to the quick resolution of clinical situations, representing a complex process of providing information, exposing ideas and feelings, and allows better interrelationship between people at the communicative, interactive, and perceptual levels.

The study aimed to assess the importance of simulation, multidisciplinary teamwork, and communication for the training of obstetric emergency service providers.

The training experienced by simulation in obstetric emergencies, of a total number of 196 people is presented. A number of 18 courses were spent, of 3 days each, within the Simulation Center, at the 3rd Level Perinatal Center, Institute of Mother and Child, from Chisinau, Republic of Moldova. The simulation was a complex training, keeping the principle "at the patient's bedside" and ended always in a positive way. A number of 78 people were surveyed, of which 41 doctors (52.6%) and 37 nurses (47.4%), who accepted without hesitation to participate.

Multidisciplinary teams included doctors obstetricians and anesthesiologists, midwives, and nurses in anesthesia and intensive care. A number of five scenarios were presented: fetal distress and vacuum/forceps extraction; shoulder dystocia; severe preeclampsia/eclampsia; postpartum hemorrhage, and maternal cardiac arrest. The cognitive learning model was

implemented through factual articulation (saying and/or showing how to do it) and conceptual articulation (saying and/or showing why or for what it is done). Communication was performed through the components: verbal and nonverbal. In order to assess the degree of satisfaction of the participants, an anonymous survey was developed, which included 43 questions, 5 answers being proposed (a total agreement, agreement, partial agreement, partial disagreement, total disagreement).

Participants highlighted a general interest in simulation training in 76 cases (97.4%). However, when they were informed about the need to participate in the course, 37 people (47.3%) had some reservations, asking about its usefulness and necessity. It should be emphasized that after the training, in all cases the opinion changed to a positive one, being exposed as "a positive experience, which must be repeated at least once a year".

The simulation consisted of three stages: briefing, simulation, and debriefing. The trainees were monitored directly and indirectly (by video and audio). One of the peculiarities was the presentation of theoretical information, which pointed out the most important management aspects in each clinical situation, referring to the international and national protocols. In the debriefing, both the trainers and trainees provided a structured and constructive feedback, focused on action and not on personality. The actions performed were thoroughly characterized. The reflection on feelings, reactions, and behavior was encouraged. Likewise, actions such as judging or criticizing the participants were avoided. The need to emotionally support their colleagues involved in the scenario was emphasized in 74 cases (94.9%). Particular attention was paid to the positive aspects, weaknesses were analyzed, the importance of team communication was emphasized. The trainees tried to develop with the trainers the standard management for each scenario. Each team had the opportunity to repeatedly perform the simulation scenario, to strengthen their knowledge and skills, and to complete the quality of the communication process.

All participants specified that the proposed scenarios were well adapted. The beneficial atmosphere created by the trainers in the simulation and the high compliance between the proposed theoretical information and its application in practice was appreciated, which facilitated the involvement of trainees. In all cases, people certainly emphasized the need and importance of communication between trainers and team members, as well as within the multidisciplinary team. Through effective communication, useful information was shared, which encouraged the implementation of practical skills, correct decision-making and attitude. All this was important to obtain a positive result and a high efficiency of the medical act.

Increased attention was given to the activity of each team member and teamwork, according to 76 people (97.4%). The participants emphasized the need to work together, to find solutions, to help each other, and to ask for help, if necessary. The need for the presence of a leader, a person with decision-making power, who has the ability to get involved, explain and perform was determined (75 cases – 96.2%). The participants also observed the stages of team formation: familiarization with each other; interrelating by establishing one's position and arguing it; establishing the rules and modalities of communication and common work. In the end, the structured teamwork led to high performance and positive results, and in 75 cases (96.2%) people managed to attach to the members of their team. In the process of developing the scenarios, the team members avoided conflicts by cooperating. Group integration was observed, and psychological contact was established.

Participants were interviewed to what extent they perceived the SimMom simulator as a "patient". At the beginning of the simulation, only 39 cases people (50%) perceived it as such, but during the repeated development of the scenarios, due to the high fidelity simulator and the

"realistic" atmosphere, the participants managed to perceive the simulator as a patient in 71 cases (91.0%).

The importance of simulation as a training process kept its high value for 77 participants (98.7%), and 75 people (96.15%) underlined its positive influence in dealing with obstetric emergencies at work. The participants concluded that a simulation is an essential tool in maintaining the high level of training of specialists in the field. Moreover, in 68 cases (87.2%), participants believe that they will bring the knowledge and skills acquired to the workplace and will try to implement them in practice.

Conclusions. The simulation allowed the training of teamwork and the education of medical staff in making prompt decisions in obstetric emergencies, in order to maintain patient safety. The simulation allowed the acquisition and/or strengthening of the level of competence in the implementation of theoretical knowledge, practical and communication skills. The cognitive training model allowed motivation, focus, error management, and the formation of a mental pattern for participants. The importance of working in a multidisciplinary team and the need to repeat training through simulation was determined, as a model of continuous education.

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