THE ROLE OF SIMULATION-BASED LEARNING IN FAMILY MEDICINE

Yashkina T. O.
Doctor of Philosophy (Medicine),
Assistant at the Department of Family Medicine of FPE
and Propaedeutics of Internal Medicine,
Dnipro State Medical University
Dnipro, Ukraine

The COVID-19 pandemic and the war in Ukraine have permanently changed the approaches to medical education. Primary care physicians, who work under uncertain conditions and are closest to patients, bear the initial impact in any situation, including emergencies. The intensification of modern educational processes and the widespread adoption of remote and blended learning formats have created conditions for the rapid implementation of simulation-based learning. This approach allows necessary skills to be practiced and knowledge to be reinforced [1].

The advantages of simulation-based learning include reduced stress levels for learners during their initial independent procedures, the possibility of repeated practice to ensure proper skill acquisition, development of individual abilities and teamwork capabilities, objective assessment of performance, and increased engagement in the educational process. At the Department of Family Medicine and Propaedeutics of Internal Medicine, simulation-based learning is an integral part of the training of young family doctors. Initial clinical skills are best acquired on simulators that closely replicate real working conditions under the supervision of an experienced specialist. Some skills, such as cardiopulmonary resuscitation, can only be practiced on simulators in training centers [2, 3].

The reduced time interns spend at medical education institutions presents new challenges in teaching, ultimately necessitating the optimization of the educational component. During simulation-based training, instructors focus not only on the knowledge and skills of family doctors but also on their attitudes towards patients [4]. Checklists, scenarios, and appropriate pedagogical methods are created for each skill.

Debriefing with reflection, where students can evaluate their achievements and analyze their experiences, is particularly beneficial. Our department's staff uses parallel assessment involving interns to enhance objectivity. The implementation of peer-to-peer learning, where knowledge and skills are transferred from more experienced to less experienced peers, has proven to be very effective.

Moreover, simulation-based learning opens opportunities for introducing innovative teaching methods such as virtual and augmented reality. These technologies allow students to immerse themselves in virtual clinical situations, further enhancing learning effectiveness and enabling practice of rare or complex clinical scenarios. This is especially important when access to clinical settings is limited due to the pandemic or other emergencies.

The modern challenge is to teach each student to provide constructive feedback to colleagues and instructors. This issue receives significant attention from the very beginning of interaction. Communication skills are the main tool of a family doctor, and practicing them during simulations significantly improves professional qualifications.

Thus, the Ukrainian education system faces the task of not only enduring in a hostile environment but also ensuring maximum results with minimal budget expenditures while prioritizing student safety. The use of modern simulation-based learning technologies is an integral part of pregraduate and early postgraduate training. Even in

the absence of certain equipment, some skills, such as communication, can be practiced without significant costs.

Simulation-based learning not only enhances the professional competencies of future family doctors but also prepares them to work in complex and unpredictable conditions, making it an indispensable element of modern medical education.

Bibliography:

1. Симуляційне навчання в оптимізації практичної підготовки студентів з акушертства і гінекології / Гнатко О. П. та ін. «Освітній процес підготовки лікарів в умовах сучасного світу: виклики та перспективи» : матеріали науково-практ. конф. за міжнар. участі, м. Київ, 2022. С. 38–41.

2. Руснак К. Р. Роль симуляційного навчання у підготовці студента-медика: автореф. Doctoral dissertation. Чернівці, 2022. 254 с.

3. Bashkirova N., Kramarchuk V., Rosytska O. Self-evaluation of professional competencies among medical interns. Věda a perspektivy. 2023. No. 2(21). URL: https://doi.org/10.52058/2695-1592-2023-2(21)-316-320

4. The opinion of interns in the specialty "general practice – family medicine" regarding the acquisition of cardiopulmonary resuscitation skills / I. Vysochyna et al. *Perspectives and innovations of science*. 2024. Vol. 6, no. 40. P. 1015–1022.