



SECTORAL RESEARCH XXI: CHARACTERISTICS AND FEATURES

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MASTERING OF CLINICAL SKILLS BY APPLICANTS OF EDUCATION DURING SIMULATION MEDICAL SCENARIOS DIRECTED TO TREATMENT OF PATIENTS WITH SEIZURE ACTIVITY

Emergency medical conditions are life-threatening and need immediate intervention of professionals. Such cases are the most critical for the people's vital health care. It is crucial for emergency departments to create the fastest solutions in such issues.

In this meaning, simulation scenarios are the most effective method to improve skills on operational, tactical and strategic decisions about emergency medical conditions [1]. Medical simulation as an educational approach allows applicants of education to use their previously received skills and base knowledge in solving clinical situations of complex conditions to experience critical thinking [2, 3].

The most common emergency conditions we are currently considering as the most lifethreatening are:

1) Stroke;

- 2) Seizures (Convulsions);
- 3) Heart attack;
- 4) Head trauma;

5) Burns.

All of these have their own featured signs such as pathological processes [4] and big differences in treatment and medical management [5, 6].

It was estimated that about 3.4 million people have active epilepsy nationwide — and more than 65 million globally. Also, about 1 in 26 people will develop epilepsy at some point during their lifetime.

In the Department of Simulation Medical Technologies of Odessa National Medical University, simulation trainings are conducted using high-fidelity simulation equipment and mannequins for applicants of education in different medical specialties. One of the main scenarios is Epilepsy and Seizures. In addition to the above-mentioned the most common emergency conditions, scenarios are also carried out for such urgent cases as: anaphylactic shock in adults and children, hypo/hyperglycemia in adults and children, pulmonary edema, severe attack of bronchial asthma, acute coronary syndrome and all scenarios according to BLS, ACLS, PBLS, PALS.

Typical scenario execution includes:

- Briefing (brief explanation of goals and objectives, dummy capabilities and expected results)

- Scenario (a group of students (interns) of 5-6 people on their own without the presence of a teacher, cope with a clinical task on high-fidelity mannequins)

- Debriefing (analysis of the scenario based on video recording, conclusions) [7].

We observed knowledge and clinical skills of 216 applicants of education, students -156 people, and the number of interns was 60. They were assessed during our specific updated scenario of patients with Seizure activity.

The examination was carried out on a 100-point scale. The interns` overall score was significantly better than students` and amounted to - 79.18 ± 0.13 . The average mark after passing the scenario for students was -65.12 ± 0.21 . After completing the training cycle, detailed briefing, scenarios and debriefing, the assessment showed a improvement in students results - 74.16 ± 0.23 , and a slight improvement in interns - 82.28 ± 0.13 . The assessment gives us a conclusion about insignificant data results among interns - it might be due to the experience of interns at clinical sites and initially high marks.

Our department consider the implementation of such assessments during scenarios as an important key point in understanding of receiving clinical skills and competencies for the applicants of education.

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