

Results

About half of the students in this group had no prior experience with scientific work, but more than 90% of them rated their involvement in the research project as high or moderate. Based on the research results, the students determined that the fastest readaptation was observed in Group 2 — 180 ± 23 minutes until readiness for discharge. In Group 1, this figure was 200 ± 24 minutes (differences from Group 2 were statistically significant, $p \leq 0.05$). In the control Group 3, the recovery time was the longest — 242 ± 12 minutes — and severe pain requiring additional analgesics (tramadol) occurred more frequently, which prolonged the length of hospital stay.

Discussion

85% of the students expressed a desire to explore this study more deeply and thoroughly and, in the future, to publish a scientific article. According to more than 70% of the students, the instructor's role in motivating participation in research is decisive.

Conclusions

Research work is an integral part of the educational process for medical students, but indicators of student engagement in research require continuous improvement. An important aspect of addressing this issue may be the incorporation of research elements into practical classes.

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THE USE OF THE HARVEY+ SIMULATOR IN TRAINING EMERGENCY MEDICAL TECHNICIANS IN THE CLINICAL AND PROGNOSTIC ASSESSMENT OF PATIENTS WITH STABLE CORONARY ARTERY DISEASE AND HYPERURICEMIA

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Abstract. Simulation-based training is an effective tool for developing clinical reasoning. This study evaluates the effectiveness of using the Harvey+ simulator to train emergency medical service physicians in the clinical and prognostic assessment of patients with stable ischemic heart disease and hyperuricemia. It is shown that the use of simulation technologies contributes to improved interpretation of auscultatory data, risk stratification, and clinical decision-making.

Scientific specialty: 3.2.3. Public Health and Health Care Organization, Sociology and History of Medicine.

Relevance

Stable ischemic heart disease combined with hyperuricemia is associated with an increased cardiovascular risk, which requires an accurate clinical and prognostic assessment as early as the prehospital stage. Emergency medical technicians are often limited in terms of time and diagnostic capabilities. Simulation training using highly realistic manikins, such as Harvey+, allows for the practice

of diagnostic and risk stratification skills without putting the patient at risk.

Objective

To evaluate the effectiveness of using the Harvey+ simulator in training emergency medical service physicians to perform clinical and prognostic assessments of patients with stable ischemic heart disease and hyperuricemia.

Materials and Methods

The study included emergency physicians who underwent simulation training using Harvey+. The training included scenarios involving patients with stable ischemic heart disease and varying levels of uric acid. Skills in auscultation, clinical interpretation of data, risk stratification, and decision-making were assessed before and after training. Checklists and objective structured clinical examinations (OSCE) were used.

Results

After completing the simulation training, a statistically significant improvement in auscultation skills ($p < 0.05$) was observed, along with increased accuracy in clinical assessment and risk stratification. Participants demonstrated more confident decision-making and a reduction in diagnostic errors when evaluating patients with comorbid conditions.

Discussion

The use of Harvey+ allows for the simulation of a variety of cardiology scenarios and the development of clinical reasoning in conditions that closely resemble real-world practice. Of particular value is the ability to integrate risk factors, such as hyperuricemia, into the training process. This promotes a more comprehensive approach to patient care.

Conclusions

Simulation training using Harvey+ is an effective tool for training emergency medical service physicians. It improves the clinical and prognostic assessment of patients with stable ischemic heart disease and hyperuricemia and can be recommended for implementation in medical education and accreditation programs.

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SIMULATION TECHNOLOGIES IN TRAINING FOR THE ASSESSMENT OF CARDIOMETABOLIC RISK IN GENERAL PRACTICE

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Abstract. Assessing cardiometabolic risk requires the integration of clinical, laboratory, and behavioral factors. This study evaluated the effectiveness of simulation-based training in developing comprehensive risk stratification skills among general practitioners. The use of scenarios involving comorbid conditions made the training more

closely resemble real-world clinical practice. The study demonstrated that simulation technologies improve clinical reasoning and increase the accuracy of risk assessment. **Scientific specialty:** 3.2.3. Public Health and Health Care Organization, Sociology and History of Medicine

Relevance

The rising prevalence of cardiometabolic disorders, including dyslipidemia and hyperuricemia, requires physicians to adopt a systematic approach to patient assessment. In outpatient settings, decisions are often made under conditions of uncertainty and time constraints. Traditional educational approaches do not sufficiently develop data integration skills. Simulation training allows for the recreation of complex clinical situations without risk to the patient.

Objective

To evaluate the impact of simulation technologies on the development of skills for comprehensive assessment of cardiometabolic risk among general practitioners. Additionally, to examine changes in clinical reasoning and the accuracy of data interpretation. To determine the retention of acquired skills after the completion of training.

Materials and Methods

The study included general practitioners ($n = XX$) who had completed a simulation course. Scenarios were used that combined coronary artery disease, dyslipidemia, and hyperuricemia of varying severity. Assessments were conducted before and after training using OSCE, checklists, and analysis of clinical decisions. Statistical analysis included a comparison of indicators using significance criteria.

Results

After training, a statistically significant improvement in the accuracy of risk assessment and interpretation of clinical data was observed ($p < 0.05$). Participants began to take comorbid factors into account more frequently and adopt a comprehensive approach. The frequency of errors associated with underestimating laboratory test results decreased. An increase in confidence when making decisions was also noted.

Discussion

Simulation technologies promote the development of integrative clinical thinking and allow for the practice of complex scenarios. The ability to repeatedly simulate clinical situations is particularly valuable. The inclusion of comorbid conditions enhances the realism of the training. This makes the training more closely aligned with a physician's actual practice.

Conclusions

Simulation-based training effectively improves skills in assessing cardiometabolic risk. It promotes a systematic approach to patient care and reduces the likelihood of diagnostic errors. The results confirm the value of incorporating these technologies into physician training. Their use in continuing medical education programs is recommended.

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SIMULATION TRAINING AS A TOOL FOR DEVELOPING PRACTICAL COMPETENCIES IN PHYSICIANS SPECIALIZING IN INTERNAL MEDICINE

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Abstract. The development of practical competencies is a key objective of modern medical education, especially given the increasing demands on the quality of medical care. This study evaluates the effectiveness of simulation-based training in developing practical skills among physicians specializing in internal medicine. The use of realistic clinical scenarios brought the educational process closer to the conditions of actual clinical practice. The study demonstrates that simulation technologies improve the quality of clinical procedures and increase specialists' confidence in decision-making.

Scientific specialty: 3.2.3. Public Health and Health Care Organization, Sociology and History of Medicine

Relevance

The modern system of medical education is focused on developing competencies that include not only theoretical knowledge but also well-established practical skills. However, opportunities to fully practice these skills in real clinical settings are limited by ethical, organizational, and time-related factors. This is particularly relevant for general practitioners who treat a wide range of diseases and clinical conditions. Under these conditions, simulation-based training serves as an effective tool for recreating clinical situations of varying complexity without risk to the patient. The implementation of simulation technologies helps improve the quality of training and bridge the gap between theoretical education and practical work.

Objective

To evaluate the effectiveness of simulation-based training in developing practical competencies among general practitioners. To examine the impact of simulation technologies on the quality of clinical skill performance and the sequence of actions. To determine the degree of clinical reasoning development and readiness for independent professional practice. To assess the retention of acquired skills after the completion of training.

Materials and Methods

The study included general practitioners ($n = XX$) who underwent training at a simulation center. The educational program comprised a series of simulation scenarios designed to practice key clinical skills, including taking a medical history, performing a physical examination, interpreting data, and making clinical decisions. Assessments were conducted before and after training using standardized checklists, expert evaluation, and elements of an objective structured clinical examination (OSCE). Additionally, parameters such as task completion time, number of errors, and sequence of actions were analyzed. Statistical