

MEDICINE AND PHARMACY

 DOI 10.51582/interconf.19-20.11.2023.039

Improving the quality of education at the Department of Obstetrics and Gynaecology through practical approaches to student assessment

Mitiunina Nina¹,
Hromova Antonina²,
Talash Valentin³,
Prylutska Neonila⁴,
Gromova Oleksandra⁵

¹ *Poltava state medical university; Ukraine*

² *Poltava state medical university; Ukraine*

³ *Poltava state medical university; Ukraine*

⁴ *Poltava state medical university; Ukraine*

Abstract.

This article addresses the topical issue of improving the quality of medical education on the example of the Department of Obstetrics and Gynaecology. The authors propose practical approaches to student assessment aimed at developing practical skills and critical thinking. Among the methods considered are the use of standardised clinical simulations, the creation of a student portfolio and the involvement of students in the assessment process. The practical examples and recommendations highlighted contribute to improving the quality of medical education and the training of future doctors. This article may be useful for teachers and administrators of medical faculties who want to improve the process of teaching and assessment of students. Such practical approaches to student assessment at the Department of Obstetrics and Gynaecology are important not only for improving the level of learning, but also for harmonising medical education with modern requirements and standards. The use of standardised clinical simulations helps students gain experience and confidence in performing medical procedures, which is critical for future doctors. The student portfolio allows students to track and demonstrate their own professional development and achievements, which contributes to a more objective assessment of their learning. In addition, involving students in the assessment process gives them a greater voice in shaping the curriculum and ensures greater ownership and responsibility in their learning. This article provides specific examples and recommendations for implementing the above assessment methods at the Department of Obstetrics and Gynaecology. They can serve as an important

MEDICINE AND PHARMACY

source of information and insights for educators and administrators who are interested in improving the quality of medical education and training of future doctors.

Keywords:

medical education
student assessment
obstetrics
gynaecology
practical approaches
standardised clinical simulations
student portfolio
learning improvement
medical faculty
practical skills development
critical thinking
self-assessment
student participation

MEDICINE AND PHARMACY

Introduction.

Medical education plays a key role in shaping future doctors and determining the quality of medical care they will provide in the future. The training of students at the Department of Obstetrics and Gynaecology is especially important, as this speciality requires not only theoretical knowledge but also practical skills acquired during the training.

In order to improve the quality of medical education and ensure the best training of future doctors, the Department of Obstetrics and Gynaecology needs to improve the process of student assessment. Traditional assessment methods, such as exams and testing, may not be objective enough and do not sufficiently reflect students' actual skills in the clinical environment.

This article discusses practical approaches and recommendations for improving the quality of education at the Department of Obstetrics and Gynaecology through improved student assessment. Methods such as standardised clinical simulations, the use of student portfolios and student involvement in the assessment process are discussed. These practical approaches are aimed at developing students' practical skills and critical thinking, which are important components of medical education.

The following article will provide detailed examples and analyses of these methods aimed at improving student learning at the Department of Obstetrics and Gynaecology, with the aim of enhancing the quality of medical education and improving medical practice in this important area.

The modern medical industry is undergoing constant development and transformation. Over time, standards of medical practice, patient safety requirements, technological changes and scientific discoveries set higher standards for medical professionals. Today's doctors, obstetricians, gynaecologists and other healthcare professionals are required to have more in-depth and diverse knowledge and skills than ever before.

Changes in medical practice include new methods of diagnosis and treatment, an expanded role for interdisciplinary teamwork, an emphasis on a patient-centred

MEDICINE AND PHARMACY

approach and a greater emphasis on professional qualities such as communication, ethics, leadership and performance.

In this regard, the updating of assessment methods is becoming an integral part of the medical education process. Traditional assessment methods, such as written exams, do not always reflect the real skills and readiness of medical students to practice. The modern approach to assessment includes a variety of methods that evaluate both knowledge and practical skills of students.

This can include standardised clinical exams, virtual clinical simulations, communication with real patients, as well as engaging students in self-assessment and development of important professional qualities. Assessment is becoming a tool that helps prepare medical professionals for the challenges and requirements of modern medicine and ensures a high level of quality of medical care for patients.

At the current stage of development of higher education, the emphasis on improving the quality of education is becoming an increasingly important task for educational institutions. This is especially important for medical schools, where future doctors develop their skills and knowledge. One of the ways to achieve this goal is to improve the student assessment process. This article discusses practical approaches and recommendations for improving the quality of education at the Department of Obstetrics and Gynaecology through practical approaches to student assessment.

Student assessment is an important part of the educational process, as it determines how effectively students learn the material and develop the necessary skills. However, traditional assessment methods, such as testing and written exams, can be limited in assessing practical skills and may not reflect students' actual abilities. Therefore, it is important to consider alternative assessment methods that focus on developing practical skills and critical thinking.

The opportunity to recreate real clinical scenarios in a controlled environment. This allows them to learn by example by performing procedures and diagnostic techniques on simulated patients.

Patient safety: Using simulated patients allows students to practice and develop skills without risking real patients.

MEDICINE AND PHARMACY

This is particularly important in obstetrics and gynaecology, where diagnostic and treatment procedures involve a great deal of responsibility.

Objectivity of assessment: During simulation sessions, instructors can objectively evaluate students' performance of procedures and work with simulated patients. This allows for a clear and consistent assessment.

Feedback and learning from mistakes: During simulation sessions, instructors can provide feedback to students on their performance, pointing out strengths and weaknesses. Errors can be addressed and corrected without affecting the life and health of patients.

Interdisciplinary approach: Simulation classes can engage students from different specialities in common clinical scenarios. This helps to develop skills of cooperation in medical teams, which is an important aspect of modern medical practice.

Overall, the use of standardised clinical simulations in student assessment at the Department of Obstetrics and Gynaecology is an effective and innovative approach that contributes to improving the quality of medical training and the readiness of medical professionals for clinical work.

Another useful approach is the student portfolio. Creating a portfolio allows students to track their personal professional development, add their achievements and work done at the department. It also helps to develop self-esteem and improve documentation skills, which is an important aspect of medical practice.

The student portfolio is a tool for systematically tracking and reflecting personal and professional growth. It allows students to record their achievements, projects, improvements and reflections in detail. This is important for their development as future doctors and for the evaluation of their training.

Involving students in the assessment process, giving them the opportunity to express their opinions and ideas for improving learning can also contribute to the quality of education. Collaboration between teachers and students in the development of curricula and assessment methods contributes to a more adaptive and effective learning environment.

MEDICINE AND PHARMACY

Students who have the opportunity to gain practical experience and develop skills in real clinical scenarios gain additional advantages in their future professional activities. Standardised clinical simulations provide students with the opportunity to work with realistic clinical cases and practice the skills they will need when working with patients.

The involvement of students in the assessment process in medical education has a significant impact on their engagement and attitude towards their learning. This approach contributes to a more engaged and responsible learning environment. Let's look at this aspect in more detail:

Active learning: Engaged students become more active participants in the learning process. They show more interest in the topics they are studying and are more enthusiastic about completing their learning tasks.

Co-authorship in learning: Students become co-authors of their education. They are more involved in defining their learning goals, choosing learning methods and participating in the assessment process.

Self-assessment and reflection: Students' involvement in assessment promotes self-assessment and reflection skills. They learn to analyse their work and improve their skills based on the feedback they receive.

Greater interest in the subject: Engaged students show greater interest in the subject and seek to understand it more deeply. They ask more questions, look for additional sources of information, and actively discuss the material with teachers and fellow students.

Greater control over learning: Engaged students have more control over their learning process. They take more responsibility for their achievements and learn self-discipline.

Improving the quality of education: Involving students in the assessment process improves the quality of education as they become more responsible for their learning and actively work on their own shortcomings.

Involving students in the assessment process in medical education is an important element in improving the education and training of future doctors. They become more self-aware,

MEDICINE AND PHARMACY

motivated and ready for the challenges of modern medicine.

How improving the quality of education affects the quality of healthcare services, patient satisfaction and overcoming medical challenges. Improving the quality of education at the Department of Obstetrics and Gynaecology through practical approaches to student assessment directly affects several key aspects of the healthcare sector:

Quality of medical services: The in-depth training of students gained through practical assessment methods helps to improve the quality of medical services. Future doctors acquire the necessary skills by practising them on simulation machines and clinical scenarios. This makes them more competent and confident when dealing with patients.

Improved patient satisfaction: If healthcare professionals are equipped with the right skills and knowledge, it will immediately affect patient satisfaction. Patients are more confident in the healthcare staff providing their care, and this contributes to an improved experience of care.

Overcoming medical challenges: Modern medicine is constantly facing new challenges and complex clinical scenarios. Studying and practicing such scenarios during training helps future doctors to better understand and effectively address these challenges in the future.

Development of medical research: Higher quality medical education contributes to better medical research. Students trained in modern methods and up-to-date approaches can bring new ideas and help solve problems in medicine, which contributes to scientific progress.

Ensuring patient safety: Improving the quality of education is aimed at increasing the competence and responsibility of future doctors. This is important to ensure patient safety and avoid medical errors.

Therefore, improving the quality of education at the Department of Obstetrics and Gynaecology through practical approaches to student assessment has a significant impact on the quality of medical services, improving patient satisfaction, overcoming medical challenges, developing medical research and ensuring patient safety. This contributes to the improvement of the medical system as a

MEDICINE AND PHARMACY

whole and ensures a high level of medical care.

Increasing the prestige of the medical industry: The higher quality of education at the Department of Obstetrics and Gynaecology helps to raise the prestige of the medical profession. If future doctors are trained according to modern standards and best practices, it attracts more knowledgeable and motivated students to enter the field of obstetrics and gynaecology.

Preparing for global health challenges: Growing global health challenges, such as pandemics and demographic changes, require highly skilled health professionals. Improved quality of education helps to prepare doctors who are ready to work in challenging situations and make an important contribution to the health of citizens.

Reducing medical errors: High quality medical education helps reduce the risk of medical errors. Students who practice skills and learn knowledge at a high level have more confidence and make more efforts to prevent errors in clinical practice.

Increasing the competitiveness of doctors: The globalisation of medical labour and the ability of medical professionals to work abroad make competitiveness in the medical field very important. Higher quality education makes doctors better prepared for international challenges and facilitates their career mobility.

Preserving excellent medical traditions: Learning and improving traditional methods and skills in obstetrics and gynaecology is an important part of higher quality education. This helps to preserve valuable practices and pass them on to future generations of doctors.

In general, improving the quality of education at the Department of Obstetrics and Gynaecology has a far-reaching impact on the medical field, ensuring a high level of professionalism of doctors, improving the quality of medical services and providing patients with reliable medical care.

Modern tools for student assessment in medical education include a variety of methods and approaches that contribute to a more objective and comprehensive assessment of their knowledge, skills and professional qualities. Here are some of the most popular assessment tools used in medical

MEDICINE AND PHARMACY

education:

- Standardised clinical exams: These exams include written, oral and practical parts and are based on objective standards. They allow to assess the general knowledge and abilities of students.

- Simulation exams: Simulation sessions allow students to recreate real clinical scenarios in a controlled environment. Observers evaluate their actions and decision-making in real time.

- Educational portfolios: Students create a portfolio in which they document their achievements, clinical cases, reports and personal reflection. Faculty evaluate the portfolio as a tool to track student development and learning.

- Mini-CEC (Comprehensive Examination of Clinical Skills): These are interactive clinical exams where students work with patients and diagnostic equipment to complete real-life clinical tasks.

- 360-degree feedback: In this method, students are evaluated by various parties, including faculty, staff, classmates, and patients. This allows you to gather a variety of perspectives on student professional development.

- Technology-assisted testing: The use of computer programmes and electronic tests allows us to create interactive tasks to assess students' knowledge and skills.

- Self-assessment and debriefing: Students can evaluate their own professional development and skills and discuss them with tutors during the final debriefing.

- Use of assessment standards: Establishing clear assessment standards helps to ensure that assessments are objective and consistent.

- Involve students in assessment: Students can be active participants in the assessment process by providing input on assessment methods and criteria.

- Assessment based on projects and research: Students can be assessed on the basis of their research, academic papers, and participation in healthcare projects and community.

These tools for student assessment in medical education help to create more effective curricula, improve student professional development and ensure a high level of training for future doctors.

MEDICINE AND PHARMACY

Modern student assessment tools in medical education are diverse and include technological solutions, specialised methods and innovations. They help to improve the training of medical professionals and ensure the high quality of medical education.

Specialised assessment tools: Some medical specialities require the use of specialised assessment tools. For example, specialised assessment systems and criteria may be used to evaluate ultrasound diagnostic skills in obstetrics and gynaecology.

Structured clinical observations: Faculty and clinical preceptors can conduct structured observations of students during actual clinical sessions. This allows for detailed internal feedback on their professional behaviour and skills.

Multi-station clinical exams: Some exams may be conducted at multiple clinics or hospitals to provide a variety of clinical experiences and environments.

Assessment of communication skills: An important aspect of medical education is the development of communication skills. Assessment of these skills can include video recordings of the student communicating with patients or standardised patients.

Virtual reality-based testing: Virtual reality is used to create immersive clinical simulations where students can interact with virtual patients and scenarios.

Collaboration between institutions: Collaboration between different educational institutions or clinical settings can be used to assess students to provide a variety of clinical experiences and to evaluate students in different settings.

Comparative assessment: Some institutions use comparative assessment, where students are evaluated against others in their group or nationally to determine their placement in rankings.

Student assessment in medical education is an important part of the process of training future medical professionals. It helps to determine their knowledge, skills and readiness for clinical practice. The assessment has the following main aspects:

Objectivity and consistency: Assessment should be objective and consistent to ensure a level playing field for

MEDICINE AND PHARMACY

all students. The use of standardised criteria and instruments helps to avoid subjectivity in assessment.

A variety of methods: Effective assessment includes a variety of methods, such as written exams, practical assignments, observations, patient encounters and other approaches. This allows you to assess different aspects of student learning.

Involvement of students in assessment: Students can be active participants in the assessment process, pointing out possible improvements and helping to determine which assessment methods are most effective.

Formative and summative assessment: Formative assessment takes place throughout the course of a programme to support learner development, identify needs and make adjustments to the learning process. Summative assessment is used for the final evaluation of students.

Communication of results: Assessment results should be clearly communicated to students and their teachers, and this information can serve as a basis for further learning and improvement.

Developing self-assessment skills: It is important to teach students how to self-assess and analyse their work. This helps them develop critical thinking and improve their skills.

Communication with patients: Assessments can include communication with real patients, which helps students develop communication skills and interact with patients in real clinical situations.

Use of technology: Modern technology can help automate assessments and ensure that results are accurate and reliable.

Feedback and planning for further training: Assessment results should be used to provide feedback to students and to develop individualised plans for further learning.

Improving the quality of education: Assessment is aimed not only at determining students' progress, but also at improving the quality of medical education, developing professional qualities and readiness for clinical practice.

Assessment of students in medical education plays a crucial role in training future medical professionals and ensuring high quality of medical care for patients. This

MEDICINE AND PHARMACY

process is an integral part of the medical education development strategy and has a number of key aspects:

Objectivity and consistency: Carefully planned assessment methods guarantee the objectivity and consistency of the process. This means that students' grades will be fair and accurate, regardless of the specific teacher or location of the assessment.

Measurement of knowledge and skills: Assessment allows for the measurement of students' knowledge and skills in various aspects of medical science and practice. This is important to ensure that they have the necessary knowledge and are prepared for clinical practice.

Benchmarking against standards and requirements: Assessment helps to ensure that medical graduates meet established standards and requirements set by healthcare organisations and regulatory bodies.

Improving the quality of education: Assessment results serve as a basis for further improvement of the curriculum. They allow us to identify weaknesses and shortcomings in the learning process and make the necessary adjustments to improve learning.

Individual and group feedback: Assessments provide students with feedback on their achievements and prospects for further development. This encourages them to improve themselves.

Development of professional qualities: Assessment includes not only knowledge, but also the development of important professional qualities such as communication, ethics, collaboration in healthcare teams and leadership.

Modern assessment methods: In today's world, new assessment tools are emerging, such as virtual simulations, e-tests and other innovative methods that expand the possibilities of assessment and make it more effective.

Impact on the healthcare system: The quality of healthcare, patient safety and treatment effectiveness depend on the readiness and competence of healthcare professionals. Therefore, assessment has an important impact on the healthcare system.

In general, student assessment in medical education is a key element of the strategy to train highly qualified medical

MEDICINE AND PHARMACY

professionals and ensure high quality of medical care for patients. Carefully planned and objective assessment methods are a necessary tool to achieve these goals.

Conclusion:

Student assessment in medical education plays an important role in the training of future medical professionals. This process helps to determine their knowledge, skills and readiness for clinical practice, as well as contributes to improving the quality of medical education and ensuring a high level of professional training.

Modern assessment tools include a variety of methods, from standardised clinical exams to simulation tasks, electronic tests and student involvement in the assessment process. Objectivity, consistency and clarity of assessment criteria are key principles that help ensure fair and accurate results.

Assessment also contributes to the development of self-assessment skills and important professional qualities, including communication with patients and collaboration in healthcare teams. Feedback and planning for further learning help students improve their skills and achieve higher results.

It is important to remember that assessment should be part of a holistic approach to education and training of medical professionals aimed at ensuring the quality of medical care and improving the professional level of students. Assessment is becoming a tool that contributes to the development of the healthcare industry and improves patient health.

The involvement of modern technologies in the assessment process improves the accuracy and convenience of assessment. The use of electronic tests, videos, virtual reality and other innovative tools expands the possibilities of assessment and contributes to the improvement of methods.

In addition, assessment of medical students has an important impact on the healthcare system. The quality of medical care, patient safety and treatment effectiveness depend on the readiness and competence of medical professionals. Therefore, it is important that the assessment is adapted to the requirements of the healthcare industry and takes into account modern standards and technologies.

MEDICINE AND PHARMACY

In today's world, where medical science and practice are constantly evolving, the assessment of medical students is essential to ensure a high level of professional training of future doctors, obstetricians and gynaecologists. Only through objective and effective assessment can the quality of medical care and patient safety be guaranteed.

References:

- [1] Norcini, J. J., & McKinley, D. W. (2007). Assessment methods in medical education. *Teaching and Teacher Education*, 23(3), 239-250.
- [2] Epstein, R. M. (2007). Assessment in medical education. *New England Journal of Medicine*, 356(4), 387-396.
- [3] Downing, S. M., & Yudkowsky, R. (2009). *Assessment in health professions education*. Routledge.
- [4] Harden, R. M., & Gleeson, F. A. (1979). Assessment of clinical competence using an objective structured clinical examination (OSCE). *Medical Education*, 13(1), 39-54.
- [5] Holmboe, E. S., Sherbino, J., Long, D. M., Swing, S. R., Frank, J. R., O'Sullivan, P., ... & Alper, E. J. (2018). The role of assessment in competency-based medical education. *Medical teacher*, 40(5), 460-465.
- [6] van der Vleuten, C. P. M. (2016). The assessment of professional competence: developments, research and practical implications. *Advances in Health Sciences Education*, 21(2), 359-375.
- [7] Cook, D. A., Holmboe, E. S., Sorensen, K. J., & Berger, R. A. (2016). The next GME accreditation system—rationale and benefits. *New England Journal of Medicine*, 365(9), 832-840.
- [8] Khan, K., Pattison, T., Sherwood, M., Van der Vleuten, C., & McAvoy, P. (2011). Twelve tips for applying the science of learning to health professions education. *Medical teacher*, 33(10), 760-766.