CONTENTS

ABBREVIATIONS

AMEE – Association for Medical Education in Europe
ASPE – Association of Standardized Patient Educators
ASPiH – Association for Simulated Practice in Healthcare
GEPP – Gynecological educational professional patient
GTA – Gynecological Teaching Associate
INACSL – The International Nursing Association of Clinical and Simulation Learning
PI – Patient-instructor
SESAM – Society for simulation in Europe
SOBP – Standards of Best Practice
SSH – Society for Simulation in Healthcare
USMLE – United States Medical Licensing Examination
EPC – Educational and production complex
OSCE – Objective structured clinical exam

INTRODUCTION

Today the problem of high-quality mastering of practical skills and professional competencies is one of the most acute problems of higher medical education in Ukraine. Legal and ethical aspects significantly limit students' access to patients in clinical settings. A student does not have the opportunity to master complex competencies in the real conditions of a medical institution – his admission to a seriously ill patient is even more limited for objective reasons. The situation with interns is somewhat better, but there are quite a lot of limitations in mastering complex skills and communicating with "difficult patients".

When hiring, employers, like patients, want to see a professional who fully masters the necessary number of skills but not a young inexperienced doctor who continues his training at the workplace and deals with the most of the manipulations for the first time, and who needs to be trained a few more years after the end of the internship. So, today there is no doubts that simulation technologies should be an integral part of the modern training of a highly qualified doctor.

Practising skills on mannequins, robots, simulators and virtual patients certainly increases the level of training. However, the limitation of funding opportunities for a powerful base of medical simulators, which with intensive use wear out quickly and require constant updating, the inability to completely replace the process of communication and examination of a real patient, even with the most complex and realistic works, forces us to look for new ways and approaches to the methodology and didactics of the educational process in medicine.

Even with access of medical students to real patients at the university clinic, the teacher cannot provide a 100 % control of the correctness of the skills in all the students. This is practically impossible:

- there are not enough patients giving a consent to communicate with students;
- insurmountable ethical obstacles when real patients communicate with students (the vast majority of patients, even after giving consent are not ready for an open talk with students by certain issues);

• a limited academic time for individual teacher's work with each student;

• a limited academic time to conduct a complete clinical examination of each patient.

Taking into account that today all educational programs have a competency-based approach, being student-centered and primarily focused on the acquisition of high-quality professional competencies, and taking into account the global experience of solving the issues of acquiring professional competencies by young doctors, in particular communication skills, general examination and physical examination, one of the most effective ways is to introduce the institute of simulated patients into the educational process at all levels (from nurses to trainee doctors).

Although the use of simulated patients has certain disadvantages, the main of which are cost (the methodology requires special personnel and financial resources) and "inauthenticity", these disadvantages are overcome and fundamentally do not affect the social significance of the advantages and the positive final economic effect (significant reduction of time and finances for the training of a qualified specialist). According to world experience, the cost of creating and maintaining the functioning of an institute of simulated patients is much lower than the constant updating of the necessary number of highly realistic simulator robots. As for "inauthenticity" – many studies show that well-trained standardized patients are practically indistinguishable from real patients. For example, Beullens (1997) described studies that found that standardized patients who anonymously visited a doctor with real patients were detected only in 0–18 % cases. At the same time, in most cases, detection occurred only when specifying the number of the insurance policy or some passport data already at the end of the attendance.

This textbook defines the main concepts of the "Simulated patient" methodology, gives recommendations for its implementation, describes the main steps of creating a database of simulated patients, their preparation for work, the use of the methodology in the educational process and during exams, criteria for evaluating the quality of services provided by simulated patients, criteria for evaluating the acquisition of practical skills by education seekers and their acquisition of professional competences

using this methodology on the example of its implementation at the Odesa National Medical University (ONMedU). The "Simulated patient" method is an integral part of the educational process and a component of the Objective Structured Clinical Examination (OSCE) at ONMedU, in particular during quarantine measures and distance learning during martial law.

The "Simulated patient" method is a modern and effective tool for mastering and evaluating certain knowledge-skills by medical students, which provides an opportunity to check their professional competence and the integrity of clinical thinking, which cannot be evaluated by other traditional forms of assessment, in particular: communication skills, skills physical examination and general examination of the patient, reproduction of common, non-standard and complex clinical cases.

We do not diminish the importance of medical simulators, robots and mannequins for training a medical professional. The main task of this publication is to find a worthy place for a standardized patient in the system of simulation training in medical education in Ukraine, which is not opposed to simulators, but significantly complements them and removes their shortcomings.

Chapter 1
LEGAL ASPECTS OF IMPLEMENTING THE "SIMULATED PATIENT" PROGRAM

1. Law of Ukraine No. 2145-VIII "On Education" dated September 5, 2017.
2. Law of Ukraine No. 1556-VII "On Higher Education" dated July 1, 2014.
3. Resolution of the CMU dated April 29, 2015 No. 266 "On approval of the list of fields of knowledge and specialties for which higher education applicants are trained" (with changes and additions).
4. Resolution of the CMU of January 20, 1998 No. 65 "On approval of the Regulation on educational and qualification levels" (degree education).
5. Resolution of the CMU No. 302 dated March 27, 2018 "On approval of the Procedure for conducting a unified state qualification exam for holders of a master's degree in the field of knowledge "Health Care".
6. State standards of higher education.
7. Order of the Ministry of Health of Ukraine No. 35 dated 24.02.2000 "On approval of the regulations on the peculiarities of graduate education in the medical field" (registered in the Ministry of Justice of Ukraine on 26.06.2000 under No. 370/4591).
8. Order of the Ministry of Health of Ukraine dated February 19, 2019 No. 419 "On approval of the procedure, conditions and terms for the development and conduct of a unified state qualification exam and criteria for evaluating the results" (registered in the Ministry of Justice of Ukraine on March 20, 2019 under No. 279/33250).
9. Orders and instructions of the Ministry of Education and Science of Ukraine.
10. Qualification standards.
11. Educational-professional programs at the ONMedU.
12. Regulation on the organization of the educational process at the ONMedU.
13. Regulation on standardized patients at the ONMedU.
14. Recommendations of the Association for Medical Education in Europe (AMEE).

15. Recommendations of the Association of Standardized Patient Educators (ASPE).

16. Recommendations of the National Board of Medical Examiners (NBME).

17. Standards of the International Nursing Association of Clinical and Simulation Learning.

Chapter 2
HISTORY OF THE METHOD

The use of pre-trained actors as "patients" in medical education dates back to the 60s of the 20th century. The pioneer and real "guru" of this approach was the world-famous Howard Barrows, a professor of neurology at the University of South Carolina (USA). The role-playing games he proposed to teach and evaluate the clinical and communication skills of students, in which ordinary citizens were involved, made a real revolution in medical education at that time. Over the past sixty years, the technique has changed significantly from the actor's imitation of individual symptoms of the disease to the simulation of whole "performances" with several participants (the patient, his loved one, another medical professional, etc.), which was also facilitated by the enthusiasm and creative approach of Howard Barrows.

The first such actor-patients were called "programmed patients" by H. Barrows himself. The first programmed patient prepared by him in 1963 simulated the history and examination results of a patient with multiple sclerosis complicated by paraplegia. Besides of the clinical simulation, the patient evaluated the student's work according to the so-called "checklist", which was also developed by H. Barrows within the framework of the proposed methodology. Due to its relative simplicity and high informativeness, this method had a rapid spread and many supporters.

Already in 1970, at the University of Arizona, Dr. Paula Stillman created a group and called it "simulated patients". Local actors trained by her simulated clinical situations on behalf of the mothers of fictional sick children. The main skills that allowed her to master and control her technique were: the ability to make a conversation with the mother of a sick child, collecting all components of the anamnesis with their further interpretation and conducting differential diagnosis.

Since 1984, a number of medical schools in the north-eastern United States have implemented the use of patient actors, which have been termed "standardized," in the qualifying examinations at the end of their residency programs. Since then, the term "Standardized patient" (SP) has replaced "programmed" and "simulated" patients in many educational settings.

Following US medical schools, the Medical Council of Canada in 1993 was the first in the World to introduce standardized patients into official qualifying examinations for obtaining a medical license. This practice was quickly spread in many countries, including the United States. Since 1998, the US Education Commission has introduced a clinical skills exam using standardized patients to confirm the diploma of graduates of foreign educational institutions. This exam was later transformed into the USMLE Step 2 Clinical Skills and became mandatory for medical licensure in the US and for American students.

As for terminology, since the 90s, the most common name for actors (animators) who participated as patients in the educational process and evaluation has become the term "standardized patient", which was denoted by the abbreviation "SP". This designation of a standardized patient is currently accepted in most countries of the world, so we suggest its use in Ukraine as well. We use both terms ("standardized" and "simulated" patient), which we will explain in the following chapters.

In 30 years after the first use of an actor as a patient, in 1993, Howard Barrows, based on his own experience and the experience of other medical schools, formulated the advantages of SP in relation to real patients: accessibility, flexibility, standardization of simulation of the clinical situation, the possibility repeatedly and identically reproduce a standard clinical case, absolute safety of the learning environment for the patient and student, feedback from the SP that cannot be provided by a real patient.

The main general conclusion reached by all researchers of medical schools in Europe, the USA, and Canada, who work in the field of medical education methodology, is that the training of a future doctor should not begin at the bedside of the patient, but with training certain skills at the preclinical stage, which today it is impossible to imagine without the participation of actor-patients.