

## AXIOLOGICAL TECHNOLOGIES OF SIMULATION IN TEACHING COMMUNICATION SKILLS IN MEDICAL STUDENTS

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Being able to provide effective clinical care is fundamental to becoming a medical doctor. It is pointed here that complaints about medical doctors by the patients do not deal with clinical competence, but very often with problems of communication. Teaching communication is challenging. The ideas of medical education modernization through using simulation technologies are considered in this article. The author centers on the axiological peculiarities of communication skill teaching process in medical students when using simulation technologies. Pedagogical aspects of teaching medical students' communication skills, as well as simulation technologies, are also described in this article. The article aims to show that good communication between a doctor and a patient increases patient's satisfaction and positively influences health maintenance and recovery.

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The present day situation in the sphere of public health shows that the main reason of conflicts lies not only in insufficient level of professional competence, but in poorly developed communication skills of a medical student. The profession and everyday activity of a medical doctor comprise a lot of skills both theoretical and practical to maintain the utmost respect for human life. People come to physicians for help with their most pressing needs – relief from pain and suffering and restoration of health and well-being. Every tomorrow's doctor needs to orient himself masterfully in great variety of clinical information, make competent conclusions at rapid fire-pace in critical situations and possess practical skills to render effective medical aid. The thing is that a physician should always act according to his/her conscience, and in the best interests of the patient. The health of a patient is the first consideration for the doctor. Doctors must be competent in what they do and be aware not to put patients at risk. But what is more, any medical doctor is considered to be a person with highly developed humanistic values. The main idea of higher medical education modernization consists in the axiological development of student's personality through introduction and applying into training process personality-developing pedagogical technologies (from Greek "techne" – art, skill, mastership and "logos" – conception, teaching, doctrine) from the point of view of medical profession peculiarities connected with saving people's health and life. That's why it is very important and actual to introduce into the practice of medical education so called simulation technologies (from Latin "simulatio" – pre-

tence). The doctor – patient relationship is the cornerstone of medical practice. The primary role of simulation technology is to portray an actual patient.

Having analyzed a great bulk of pedagogical and psychological literature we can't but mention here that simulation technology itself, as any other pedagogical technology, when having the purpose to develop and improve communication skills has the following peculiar features:

- purposefulness;
- orientation to the result;
- integrality;
- planning and programming;
- systematicity;
- projectability;
- functioning within given criteria;
- succession and consistence;
- personally-motivated provision of both student's and teacher's actions [6; 7; 8].

This technology is directed to the formation in each medical student an ability to develop own mode of professional behavior on the basis of moral values, system of values and professional skills on prevention of people's health. Axiological orientations of medical students and deontological rules serve as the basis for making moral decisions [4]. Basic simulation training gives students an opportunity to learn professional behavior in supervised environment that is safe for patients. Considering the rapid advance of medical knowledge, simulation technology is a continual challenge to maintain competence of both medical doctors and tomorrow's doctors.

It is worth pointing out that foreign language occupies specific niche in the process of tomorrow's doctor training. Language,

being cultural phenomenon, executes different functions: instructional, developmental, and educative. That's why in higher medical school special attention is paid to linguo-professional training helping to develop and improve communication skills, and is oriented to the development of the axiological potential of tomorrow's doctor personality [2]. The whole process of training passes through the student's personality, his or her motives, aims, interests, life plans and perspectives, system of values. When using simulation technology from the point of view of communicatively-valuable aspects at the lessons of foreign language, students get the possibility to work off and try out the skills of work with patients under the conditions most closely resembling the real ones.

While speaking about simulation devices we should mention that they are quite variable and include: computer manikins, rescue manikins, virtual simulators, training models, phantoms, and manikins for specific purposes. Advantages of simulation training introduction are evident as they allow medical students, who have successfully passed necessary theoretical training, getting and improving practical skills on simulators. Working with training models, medical phantoms, and simulators gives the students the opportunity to return to the initial point in case of making mistake. The reality of simulation training is determined by using highly technical devices (phantoms and training models) modeling different clinical cases, physiological reactions of a human body, definite organic and functional deviations in patient's living abilities. They allow tomorrow's doctor to see, touch and manipulate every part of a "human body". Simulation training gives an opportunity to learn to manage the mistakes, this helps improve the quality of medical aid and decrease the potential risk for a patient. Medical students can try to make alternative arrangements for the care of the patients [1].

The personal sense of activity of medical student consists not only in acquisition of ready-made system of knowledge, but in formation on its basis integral structure of future professional activity [9]. At the lessons the students activate the skills of history taking, physical examination of a patient, main principles of conducting programs of laboratory and instrumental examination and treatment.

Honestly speaking, simulation training is directed to the organization of such educational area where medical students consciously accomplish professional actions and improve communication skills in the atmosphere simulating real one. Simulation is used to assess clinical skills or competence. Simulation technology make students aware of the professional values and these values are reflected positively within school curricula. Value of simulation technology consists in problematization, heuristicity and projectivity.

Problematization manifests itself in overcoming distance from educational area.

Heuristicity produces subjectively new information when providing creative activity allowing building up original ideas and finding out proper solutions activating projectivity process.

Projective activity is the process of passing from cognitive component of axiological potential of medical student for creating axiological perspective of the personality himself or herself.

Having studied the results of simulation technology introduction, we have to mention that it allows:

- providing succession and continuity in realizing practical skills;
- improving monitoring of student's theoretical knowledge;
- conducting autonomous work of medical students;
- helping in establishing communicative and deontological skill of intercourse with patients.

The system of axiological orientations of tomorrow's doctors defines their cognitive motivation in professionally determined reality. During the process of studies the value system establishment of a medical student takes place. All pedagogical conditions have to be created to allow and support interiorization of such moral values as "human", "health", "life", "mercy", "compassion". It is worth pointing out that all values of socium become personal because of their selectiveness and subjectivity as they are the results of conceptualization, experience, and evaluation by a person the events of surrounding reality [3].

Applying simulation technologies in the purpose of improving communicative skills should be considered from the point of view of three aspects: gnoseological, praxiological, and axiological. Gnoseological aspect allows us pointing out:

- getting and processing information;
- forming and developing gnostic skills and actions with cognitive value;

– decision making.

Under praxiological aspect we should mention:

- skills and actions connected with topical area of professional activity;
- skills and actions having organizational character;
- information skills;
- communication skills of professional intercourse.

In axiological aspect simulation work allows considering and disclosing the peculiarities of medical student as a whole through:

- attitude of tomorrow's doctor to the surrounding world, people and substantive work;
- self-regulation and the attitude of medical student to himself / herself as to the subject of professional activity;
- understanding professionally important features;
- assumption of professional values.

The use of simulation technologies in the educational process of higher medical school helps mobilize student's knowledge through application of different means of exercising professional practical skills, and emotional maintenance that contribute to realization of their motivationally-valuable attitude towards their future professional activity. In the process of technology realization every student can independently assess the level of preparation, disclose gaps in knowledge and take attempts to liquidate them. Medical student has got an opportunity to put theoretical knowledge into practice and use it as an instrument for achieving definite aim – to render effective medical aid. The acquired knowledge and practical skills, including communication ones, when using simulation technologies help understanding life priorities and values in the strategy of personal development of tomorrow's doctor. The core idea of educational area of medical higher school involves getting professional knowledge and practical skills on rendering medical aid. But it is impossible to bring up a good doctor without displaying initiative, adherence to principles, and due care in realization of his/her professional activity. As part of axiological approach the use of simulation technologies receives accomplished character: from the aim of action, its motives, operations, means of regulation, and its correction up to the control and analysis of its final result. The simulation technology gives an opportunity to know and exemplify the core values of medicine, especially compassion,

competence, life and health. These values along with respect for fundamental human rights serve as the foundation of medicine. In order to deal with the patient's problems, the physician must identify the symptoms that the patient is experiencing and their underlying causes and must want to help the patient achieve relief. Patients respond better to treatment if they perceive that the physician appreciates their concerns and is treating them rather than just their illness.

The problem of formation and development of personal qualities of tomorrow's doctor, the problem of bringing up competitive ability of a competent specialist come to the foreground. The formation of professional (clinical) thinking is of enormous issue which allows modeling integral subject and social content of future professional activity and motivation.

Not unimportant, as we have already mentioned, this technology allows students improving psychological basis of interaction in mode "doctor – patient", train students to avoid conflict situations or effectively overcome them, orientating students to communication, interaction and cooperation being accomplished in the process of axiological development of a personality. Good communication skills do not come naturally to most people; they must be developed and maintained.

The technological basis of communication skills development consists in integration of simulation training with the modes of humanitarian technologies (case study, role play, simulated patient, etc.). The work with virtual simulators provides medical students with the opportunity to utilize and expand upon the conversation techniques acquired during communication. The advantage of role play is that all students are involved in the process. They work in groups and may play different roles: doctors, patients; they may as well develop other roles (based on the experiences of friends and families). At the lesson the teachers move between the group of students, listening, making comments and suggesting may be different ways of solving the problems. The thing is – the students are taught communication within realistic context of basic medicine. The students participate in discussion of interviewing techniques. Case histories serve as the basis for the examination and discussion of the exchange of information concerning prognosis or probability of health-related issues. Tomorrow's doctors are given cases and are asked to work independently on key

components of the cases in small groups to learn about illnesses from diagnosis to treatment and follow-up. Students can receive the information about the patient ahead of time and decide among the group members an approach to interviewing the patient. Future specialists in medicine can divide the interview into various categories, depending on the size of the group. After each interview the students and “the patient” (using simulation technologies) have an opportunity to return feedback and discussion [5]. These categories of communication may include:

- interview instructions;
- current symptom assessment;
- past and family history;
- diagnosis;
- treatment plan;
- follow-up.

To achieve the aim of formation of communication skills we have to solve such tasks as:

- to form in students of higher medical school linguistic skills, provide (foreign language) oral activity;
- to prepare the student for the participation in professional and socio-everyday communication;
- to improve common standard of culture of medical students on the basis of perfection, the skills of oral communication.

To establish good rapport with patients nowadays communication requires much more of doctors. They must provide patients with all the information they need and want to know about their diagnosis, prognosis and treatment options. Doctors should make every reasonable effort to probe their patients’ understanding. Communicative culture of tomorrow’s doctor is one of the most significant professional values, displaying itself as personality’s ability to assess other persons adequately, finding specific way of communication to every patient. Communicative culture is considered to be integrative quality of a personality of tomorrow’s doctor (which provides successful interaction of doctor and patient), creating new attitude towards himself/herself as a representative of medical profession, people surrounding medical student and world on the whole. The structure of speech communication in the mode “doctor – patient” includes: subjects, i.e. participants of the communication (doctor and patient), as well as object – i.e. the ground of communicative relations. This involves respecting the skills and contributions of colleagues and other professionals, and developing effective communication with other members of the

team and with patients. Medical students must learn to build valuable relationships with patients based on openness, trust and good communication. They must establish and maintain effective relationships with sick people and act responsibly and appropriately.

In the training process a student acquires skills in establishing valuable contact with patient making communication with a patient productive. Frank conversation (listening and questioning, explaining and advising, involving patient in management) helps discovering and understanding the essence of disease process, i.e. pain relief and the fastest recovery. This will help students gain confidence in their ability to interview. In a teaching session, the simulation will be used as a focus for learning about a problem. Students can observe and try a variety of approaches to interviewing the patient.

The medical interview should follow a logical progression. The student gets an opportunity to invite questions from the patient and be empathetic to patient’s condition. It’s important to assess the patient’s perceptions and understanding through exploratory questions and to gauge the dialogue accordingly. Communication between doctors and patients has been clearly shown to affect many aspects of patient care.

When carrying out professional activity on rendering medical aid doctor has to explain, elucidate, persuade, prove and sometimes even make a patient change his/her mind. In other words, when using simulation technology valuable communication skill becomes one of the defined clinical skills of professional characteristic of tomorrow’s doctor personality. We might as well mention here, that one of the main tasks of simulation technology applying is to improve the efficacy of mastering manual, therapeutic – tactical and communication skills through introduction into learning environment of medical schools highly technological, robotized training models, virtual simulators, simulated patients, etc. with the purpose to make the quality of both theoretical and practical preparation better.

Medical students participating in this work were surveyed at the beginning and end of the course. The survey assisted in self-assessment of their skills and an evaluation by means of a questionnaire. As a result the students exhibited a considerable increase of communicative skills. It was also observed that medical students had a greater degree of self-assessed competence following training. The empirical results of the study showed that simulation

technology enabled students to acquire specialized competence in communication. The personal meaning of tomorrow's doctor activity was shown to consist in the formation on the basis of received theoretical knowledge, practical and communication skills of integral structure of professional activity. And it is well seen that the effective realization of communication skills provides benefit for both doctors and patients.

Overall, competent doctor has to recognize the signs of illness and know how to restore good health. The empirical findings of our study indicate pressing usefulness of simulation technologies in teaching communication skills in tomorrow's doctors. This is impossible without well-developed communication skills which are fundamental in clinical practice. As part of medical education, simulation technologies underline the importance of good communication in patient – centered care and provide the valuable ground for training communication skills that are required of tomorrow's doctors in specific clinical settings, involving the application of medical science and technology for restoration of health and well-being of the

patient. In other words, axiological technologies of simulation when teaching communication skills help to achieve the main goal of medical education as well as public health – improved health of all people.

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