

## **SIMULATION TRAINING METHODS IN THE FORMATION OF THE PRACTICAL COMPETENCE OF A FUTURE NURSE"**

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**Khaydarova Buzulaykho**

*Fergana Medical Institute of Public Health*

Nowadays, the word "innovation" has become a part of everyday life. If we combine a number of concepts, it turns out that innovation is an innovation that ensures an increase in the efficiency of processes or products dictated by the market economy. Like any science, innovation has two directions of development: theoretical and applied, each of which consists of the formation of new knowledge, ideas, and new methods of treating a patient. Given that each scientific field has certain specifics in the education system, these processes involve the improvement of pedagogical technologies, a set of methods, techniques and teaching tools. Currently, innovative pedagogical activity is one of the most important components of the educational activity of any educational institution.

The relevance of research. The activity of a nurse in terms of providing publicly accessible and highly qualified medical care to the population is no less important than the activity of a doctor. After all, the duration and effectiveness of patient treatment depends on the qualified actions of a nurse. Changing the status of a nurse from a manipulator to a competitive specialist who independently carries out nursing activities within the limits of her authority places high demands on her professional competence.

Nursing staff is the largest component of the human resource of the modern healthcare system in Uzbekistan (1-3% of medical staff), the staffing of practical healthcare by nursing staff is about 70%. According to experts of practical healthcare, when applying for employment, graduates of medical colleges face difficulties in carrying out diverse nursing activities, both in providing patient care, and in organizing preventive, therapeutic, diagnostic, rehabilitation measures and in providing emergency care to victims, having a fairly good level of theoretical training.

Overcoming these difficulties is closely related to improving the professional training of future nurses aimed at developing their practical competence. We consider the practical competence of a future nurse to be a leading component of nursing professional activity, which is determined not only by the level of formation of professional knowledge, skills, experience and professionally

important personality traits, but also by the willingness and ability to implement them in practice. The practical competence of a future nurse includes a wide range of competencies: general and professional, communicative and organizational, motivational-targeted and reflexive-evaluative, deontological and psychological, informational and analytical, implemented in the implementation of practical activities.

The insufficient level of existing professional training of future nurses for practical work directs teachers to apply more effective teaching methods. As productive methods that help bring the learning process closer to the real professional environment and form the practical competence of a future nurse, FGOS suggests using simulation training methods, the advantages of which are:

- creating conditions for imitation of a professional environment while mastering the technique of performing nursing services in full and according to standards (formation of general and professional competencies necessary for practical activities);

- formation of practical experience skills without harming the patient's health and ensuring their own infectious safety during manipulation;

- shortening the period of adaptation of a young specialist when "entering into practical activity", etc..Состояние разработанности проблемы исследования.

In the scientific and pedagogical literature, the implementation of the competence approach in the theory and methodology of vocational education is revealed in the works of E.F. Zeer, I.A. Zimnaya, G.I. Ibragimov, G.U. Matushansky, G.V. Mukhametzyanova, F.S. Mukhametzyanova, A.B. Khutorsky; the didactic foundations of the formation of professional competence of a specialist are considered.

B.P. Bepalko, M.I.Dyachenko, R.H. Gilmeeva, V.I. Zagvyazinsky, V.G. Kashev, G.I. Kirilova, A.K. Markova, V.S. Maslennikova, Z.G. Nigmatov, P.C. Safin, H.A. Chitalin, B.C. Shcherbakov, etc., practical readiness for activity - V.By A. Slastenin, N.F. Talyzina, Yu.G. Fokin, I.A. Khaliullin, and others..

The use of simulation methods in the process of professional training was considered by I.G. Abramova, D.N. Kavtaradze, I.Ya. Lerner, E.A.Litvinenko, V.I. Rybalsky, T.Y. Lomakina, M.G. Sergeeva. Of particular importance for our research were the works of scientists S.A. Bulatov, C.I. Dvoynikov, S.A. Mukhina, A.A. Svistunov, A.C. Sozinov, I.I. Tarnovskaya, A.K. Khetagurova, L.B. Shubina, and others who studied the specifics of professional medical education.

In the dissertations of L.B. Shubina (2011), N.L. Nesterova (2010), the issues of the use of simulation methods in the system of vocational education are considered. M.P. Kryukov (2011), L.Y. Ustinova (2010) describes the process of formation of

technological, professional and practical competence through the organization of industrial practice. K.A. Starodub highlights the process of forming the practical competence of managers of the hotel industry.

The process of professional competence formation among future nurses is presented in the works of A.T. Araslanova (2008), S.G. Vasilyeva (2005), N.G. Korshever (2007), J.V. Komarova (2012) and others.. In particular, communicative competence is described in the works of L.A. Murashova (2012), T.A. Tikhonova (2008); deontological competence - I.P. Slyusarova (2009); legal competence of medical workers - M.A. Soboleva (2013). The works of G.V. Vasilyeva (2011), S.I. Glukhykh (2012), and N.F. Mikolishina (2011) are devoted to the creation of an optimal educational environment for the qualitative acquisition of competencies; A.D. Rapoport (2012). Researchers G.M. Zlobina (2010) and H.A. Fomina (2011) in their works considered the features of postgraduate training and approaches to the management of nursing activities; S.A. Krasnova (2012) reveals the importance of practice-oriented technologies in the process of retraining secondary medical personnel. The improvement of the social status of a nurse and the formation of work motivation were studied by E.V. Bogacheva (2012), E.V. Zasyapkina (2013).

Despite the existing achievements of scientific knowledge, the aspect of the systematic application of a complex of imitative non-game and game-based teaching methods remains insufficiently illuminated. Educational and methodological materials on the application of a set of simulation methods in the framework of the implementation of the Federal State Educational Standard for the specialty "Nursing" have not been systematized. Control and evaluation tools have been developed to diagnose the level of the formed practical competence of the future nurse. These circumstances actualize the problem of developing and implementing a set of simulation training methods as an effective means of forming the practical competence of a future nurse.

The educational goals of using technology in medical education include facilitating the acquisition of basic knowledge, improving decision-making, enhancing perception variations, improving skill coordination, practicing actions in non-standard and stressful situations, learning in a team, and improving psychomotor skills [1-102].

The identified characteristics of learning through simulations include providing feedback when performing medical manipulations, integrating educational and practical activities, and providing the opportunity to practice the acquired learning skills at different levels of complexity, develop multiple learning strategies, taking into account clinical variations, as well as carry out both group and individual training, while simultaneously evaluating students using

benchmarks. Although research in this area needs to be improved and refined, high-quality medical simulations are educationally effective, and simulation-based education complements medical education in the context of patient interaction[1-103].

Thus, the analysis of the state of development of the theory and practice of training nurses for practical work makes it possible to identify contradictions between:

- the objectively existing needs of modern healthcare for nurses who are ready and able to carry out practical activities productively, and the existing system of professional training with established methods and forms of education, which does not allow to adequately form the practical competence of a future nurse;
- the presence of disparate experience in using simulation teaching methods in the practice of training a future nurse and the lack of scientific and methodological support for their integrated application in order to form the practical competence of a future nurse.

The study of the theory and practice of using simulation methods and the identification of contradictions allowed us to identify the problem of research: what is the scientific and methodological support for the use of a set of simulation teaching methods in the formation of the practical competence of a future nurse. The need to solve this problem determined the choice of the research topic: "Imitation teaching methods in shaping the practical competence of a future nurse."

The purpose of the study: to develop and implement a set of simulation training methods in the formation of the practical competence of a future nurse.

The object of the research is the formation of the practical competence of a future nurse in the process of studying at a medical college. Subject of the research: simulation training methods in the formation of practical competence of a future nurse. Research hypothesis: the formation of practical competence of a future nurse will be effective if:

- to model and apply, when mastering professional modules, a set of imitative non-game and game-based teaching methods based on the theory of a contextual approach in the process of organizing step-by-step, gradually becoming more complex educational activities (transformation of educational and cognitive activity into professional through quasi-professional);
- to identify and substantiate the organizational and pedagogical conditions for the implementation of a set of simulation methods (creation of an educational and simulation educational environment, preparation of teachers for the implementation of a set of simulation teaching methods, development and application of educational and methodological support for a professional module,



development of diagnostic tools for assessing the formation of practical competence of a future nurse).

In accordance with the set goal, object, subject of research and hypothesis, it is necessary to solve the following research tasks: - to reveal the features of the content and structure of simulation teaching methods in the context of the formation of the practical competence of a future nurse; - to substantiate and develop a set of simulation training methods aimed at developing the practical competence of a future nurse; - to identify and substantiate the organizational and pedagogical conditions for the implementation of a set of imitation non-game and game teaching methods in the process of forming the practical competence of a future nurse; - to experimentally test the effectiveness of using a set of simulation teaching methods in the process of forming the practical competence of a future nurse.

The theoretical and methodological basis of the research consists of:

- pedagogical theories that reveal the conceptual foundations of priority approaches: competence-based (V.A. Bolotov, E.F. Zeer, G.I. Ibragimov, D. Ravena, V.V. Serikov, A.B. Khutorskoy, N.K. Chapaev, etc.), modular competence-based (A.A. Muravyeva, O.N. Oleinikova, A.A. Skamnitsky, P.A. Yutseviciene, etc.) personal-activity (B.G. Ananyev, B.F. Lomov, A.B. Petrovsky, etc.), contextual (A.A. Verbitsky, etc.);

- the theoretical foundations for the development and implementation of simulation teaching methods are disclosed in the works of Yu.S. Arutyunov, A.A. Balaev, B.N. Krutikov, A.M. Novikov, E.A. Litvinenko, V.Ya. Platov, V.V. Dinovsky, V.I. Rybalsky, and others;

- the didactic foundations of game modeling in the educational process were proposed O.S. Anisimov, M.J. Arstanov, A.A. Verbitsky, M.V. Klarin, A.P. Panfilova, and others, and in particular business games - N.K. Akhmetov, J.S. Khaidarov, P.I. Pidkasist, A.M. Smolkin, and others.;

- empirical experience of the introduction of imitative teaching methods in the system of professional medical education is revealed in the works of S.I. Dvoynikov, P.V. Kudryava, S.A. Mukhina, L.B. Naumov, G.M. Perfileva, E.M. Ukolova, and others;

- psychological and pedagogical research on the formation of professional competence of a future specialist is proposed in the works of V.P. Bespalko, I.A. Zimnaya, A.K. Markova; the future nurse is S.G. Vasilyeva, G.M. Vasilyeva, E.A. Maksimova, N.I. Mikolishin, and others.

To conduct this research, it is important to present a working interpretation of the concept of "practical competence of the future medical profession", interpreted

by the dissertation as an integral personality quality characterized by willingness and ability to realize a set of formed general and professional competencies in the implementation of practical nursing activities in the healthcare system. The main components of the practical competence of a future nurse are: motivational – targeted, cognitive, active, reflexive-evaluative.

The following research methods were used to solve the tasks and test the hypothesis:

- theoretical: analysis and synthesis in the study of normative, educational and methodological documentation, philosophical, psychological, pedagogical sources, dissertations and abstracts, conference materials and professional periodicals;

- comparison - comparison of different views of scientists, identification of research directions and conceptual and categorical apparatus; comparison and generalization of pedagogical experience in the application of imitative teaching methods;

- empirical: direct and indirect observation, interviews, questionnaires with future nurses and teachers; testing, the method of expert assessments; monitoring to study the dynamics of indicators of the formation of practical competence of a future nurse, a pedagogical experiment to identify the effectiveness of the introduction of a set of imitative teaching methods; - mathematical methods of processing experimental results for the purpose of qualitative and quantitative analysis.

Scientific novelty.

1. A set of imitative teaching methods is proposed and substantiated, which presupposes the formation of the "practical competence of a future nurse" based on the theory of contextual learning by A.A. Verbitsky in terms of the transformation of educational and cognitive activity into professional through quasi-professional. The implementation of a set of simulation methods is carried out with the consistent introduction of non-game and game-based learning methods. Non-game methods are represented by methods of solving and self-designing situational tasks and problematic situations, analyzing specific situations, using the case method, and performing exercises according to instructions. Game methods include: simulating activities on simulators, acting out situations, using role-playing, organizational-activity, business games, internships with functional responsibilities, moderation.

2. The content and structure of the concept of "practical competence of a future nurse" as an integral personality quality characterized by willingness and ability to realize a set of formed general and professional competencies in the implementation of practical nursing activities in the healthcare system are

disclosed. The structural components of the practical competence of a future nurse are highlighted: motivational-targeted (awareness of the importance and prestige of the profession, professional orientation, interest in practical activities through the formation and improvement of general and professional competencies), cognitive (mastery of professional knowledge necessary for practical activities, the formation of educational and cognitive activities (understanding educational material, comprehension, analysis, generalization, transformation of information), activity (a complex of Gnostic, design, operational, communicative and organizational skills applicable in practical activities), reflexive-cognitive (evaluative attitude to the results of one's own activities (self-analysis, self-control, readiness for further professional growth, self-improvement in practical activities).

3.The organizational and pedagogical conditions for the effective implementation of a set of simulation teaching methods have been identified and tested.:

- creation of a training and simulation educational environment that ensures the integrity and quality of the future nurse's training for practical work in conditions that simulate a professional environment;

- preparation of teachers for the implementation of a set of imitative teaching methods (organization and holding of meetings of schools of pedagogical excellence highlighting the specifics of the use of imitative teaching methods, providing methodological assistance to teachers in designing methodological developments for classes in professional modules);

- development and application of educational and methodological support for the professional module "Participation in medical, diagnostic and rehabilitation processes" (educational and programmatic: the working program of the module, the program of educational practice and educational and methodological documentation: methodological developments of classes on "Nursing care for various diseases and conditions in patients with a surgical profile" for the teacher, practical recommendations for students on the organization of classroom and extracurricular (independent) wodevelopment and application of educational and methodological support for the professional module "Pants";

- development of diagnostic tools for assessing the level of practical competence of a future nurse that meets the requirements of the state educational standard, expressed in monitoring and evaluation tools (case studies, situational tasks, specific situations for analysis, test tasks). A manipulation log, an electronic work folder, a self-assessment sheet and an assessment of competencies acquired during the study of the module). The theoretical significance of the research lies in the fact that: - the concept of "practical competence of a future nurse" was

introduced into scientific circulation and contributed to the development of the theory and methodology of the competence approach in education; - A. A. Verbisky's theory of contextual approach was enriched in terms of theoretical justification of its use in the gradual formation of the practical competence of a future nurse (from educational cognitive activity through quasi-professional to professional).

The practical significance of the research lies in the fact that the developed: educational and methodological support, represented by the educational program (work program for the educational practices of this module) and educational and methodological documentation (methodological developments of software classes for the teacher, practical recommendations for students on independent work, methodological manuals on "Nursing care for various diseases and conditions in patients with a surgical profile"), implemented during the development of the professional module "Participation in medical, diagnostic and rehabilitation processes" with the creation of a training and simulation educational environment in the process of forming the practical competence of a future nurse;

- control and evaluation tools (situational tasks, specific situations, standards of responses to them, test tasks; manipulation logbook, portfolio (case folder), self-assessment sheet and assessment sheet), allowing to assess the level of practical competence of the future nurse. The author's personal involvement consists in modeling a set of simulation teaching methods based on the theory of A.A. Verbitsky's contextual approach.; in obtaining the results of the effectiveness of the complex of imitative teaching methods described in the dissertation and published in printed works. The dissertation research is the result of the author's many years of practical experience in the system of professional medical education, on the basis of which educational and methodological support, methodological recommendations for teachers on the implementation of a set of simulation methods, control and evaluation tools for diagnosing the level of practical competence of a future nurse have been created.

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