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## Methods of State Qualification Certification of Medical College Graduates in “Pharmacy” Specialty

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### Keywords:

State qualification certification, theoretical training, practical training, practical training centers

### Abstract.

The article presents the basic directions of state qualification certification of medical college graduates in the specialty 5.12020101 “Pharmacy”. In order to improve practical and theoretical training of graduates at the departments of pharmacy, department of organization and economy of pharmacy and technology of pharmaceuticals, chemistry of pharmaceutical faculty practical-training centers were created enabling students to improve the practical skills in various areas of pharmacy. State certification was conducted on the base of training success, assessment of the quality of graduates’ solutions of the tasks provided by education and qualification characteristics and level of competency to solve activity problems that may occur. State qualification certification was conducted in the form of comprehensive qualifying examination including theoretical and practical stages. Theoretical stage included the assessment of theoretical material of vocational and practical subjects using the method of computer complex testing.

During the practical stage pharmacist’s skills and quality of solving typical problems of the future professional activities according to production functions were assessed. Passing the State qualification certification students showed deep knowledge and professional mastering of practical skills. Prospective pharmacists consistently, correctly and logically did tasks, associated theory and practice, easily coped with practical tasks, explained their decisions, demonstrated the diversity of skills and techniques fulfilling practical work. State final exam assessed practical skills, theoretical knowledge of graduates, demonstrated the ability of future professionals to work in pharmacy establishments.



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Due to the rapid development of the pharmaceutical industry and pharmaceutical market formation the problem of creating pedagogical conditions of qualified training of future pharmacists in a college, and formation of professional competency is of particular relevance today [1].

The main goal of higher educational institutions, including colleges, is training of an educated and creative professional, focused on the personal and professional self-development as well as formation of values, where human health and its protection get a priority.

Occupation of a pharmacist is socially important because it is aimed at health preserving and strengthening, disease prevention and has its own characteristics [1-2].

Training of junior specialists with a specialization in "Pharmacy" at the Medical College of Ivano-Frankivsk National Medical University has been conducted since 2012 on the basis of basic and complete secondary education. The first graduation of pharmacists was in 2014.

Practical training of students in higher educational institutions of I-II accreditation levels with a specialization in "Pharmacy" is performed at practical training classes under the supervision of a teacher, as well as during their propaedeutic, pharmacognostic, technological and pre-graduation practice at city and region pharmacies with the right of manufacturing medicines under the leadership of teaching and practice supervisor.

Practical-training centers are created in order to improve practical and theoretical training of graduates in the departments of pharmacy, organization and economy of pharmacy and technology of pharmaceuticals, chemistry of pharmaceutical faculty enabling the students to improve their practical skills in various areas of pharmacy.

Organization and procedure of the State qualification certification with a specialization in 5.12020101 "Pharmacy" at the Medical college of Ivano-Frankivsk National Medical University is conducted in accordance with the laws of Ukraine, developed provision on the basis of educational qualification characteristics of "Junior specialist" and Educational and professional program for "Junior specialist" with a specialization in 5.12020101 "Pharmacy" of 1202 "Pharmacy" as major, which are approved by the Order of Ministry of education, youth and sports of Ukraine №649 of June 24, 2011, according to Exemplary curriculum of 2011 [2].

State certification was based on the analysis of the training success. The quality of graduates' solution of tasks provided by EQC, and levels of competency to solve problems of activity that may occur, was assessed. State qualification certification was conducted in the form of comprehensive qualifying examination with a specialization in "Pharmacy" including two stages. The first stage (theoretical) assessed the knowledge of theoretical material in practical vocational subjects using the method of computer complex testing. The second stage (practical) assessed the quality of a pharmacist's skills and solving of typical problems of the future professional activity of a pharmacist in accordance with the production functions.

The list and the number of subjects to be submitted to the State qualification certification with a specialization in "Pharmacy" correspond to the industry standard and the curriculum [2].

According to the Exemplary curriculum (2011) for Junior specialists with a specialization in 5.12020101 "Pharmacy" in higher educational institutions of I-II accreditation levels of Ukrainian Ministry of Health the study is completed with a comprehensive qualifying examination with a specialization in 5.12020101 "Pharmacy".

A comprehensive qualifying examination was conducted in two stages:

I. Theoretical – in the disciplines "Occupational Health and Occupational Health in Pharmacy", "Pharmaceutical Chemistry", "Pharmacognosy", "Pharmacology", "Pharmaceutics", "Organization and economy of pharmacy". II. Practical – in the disciplines of "Pharmacology", "Pharmaceutics", "Organization and economy of pharmacy".

The theoretical stage of a comprehensive qualifying examination was conducted by the method of an integrated testing in the computer classroom at the department of Information

Analytical Support. The theoretical stage involved test questions including the following subjects: elements of occupational health and occupational health in pharmacy, pharmaceutical chemistry, pharmacognosy, pharmaceuticals, pharmacology, organization and economy of pharmacy.

Practical stage of integrated qualification examination was conducted on the basis of practical-training center "Pharmacy" and made it possible to assess the ability of each graduate to conduct realization of non-prescription drugs and health products; to prepare medicines at the pharmacy; to work with pharmacy and laboratory facilities and equipment; to carry out the necessary calculations. We evaluated the ability of a pharmacist to solve typical problems in his future professional activities according to production functions.

During the practical stage of the complex practical qualification examination in the discipline "Pharmaceutics" students produced extemporaneous dosage forms, solved calculated tasks on computing needs and costs for the industrial manufacturing of drugs, carried out quality control of finished dosage forms.

During the practical stage of the complex practical qualification examination in discipline "Organization and economics of pharmacy" students chose complex tasks. These tasks contained prescriptions from population to conduct the reception control, to make the reception evaluation and accounting; CMR notes and Drug Tariff received by the economic agent to perform incoming inspection of drugs or order requirements for their posting; documents and tasks of the economic activities of pharmaceutical companies for calculations and analysis.

Practical stage of integrated qualification examination in the discipline "Pharmacology" included prescriptions for correction and situational tasks. The aim was to check the correctness of the prescription written out; doses of toxic and potent drugs; distribution of drugs for the pharmacological groups.

Passing the State qualification certification students showed deep knowledge and professional mastering of practical skills. Prospective pharmacists consistently, correctly and logically did tasks, associated theory and practice, easily coped with practical tasks, explained their decisions, demonstrated the diversity of skills and techniques fulfilling practical work.

Teachers work to improve control systems on the basis of objective assessment, introduce modern teaching technologies in practice. In practical training centers of departments of pharmacy, organization and economy of pharmacy and pharmaceuticals, chemistry of pharmaceutical faculty future specialists constantly work to improve the level of training in various areas of pharmacy.

State final exam with a specialization in 5.12020101 "Pharmacy" gave an assessment of practical skills and theoretical knowledge of graduates, demonstrated their ability to work in pharmacies.

The problem of formation of professional competency of pharmaceutical college students is important. Promising areas of research involve the development and implementation of personality-oriented technologies, the formation of personality traits of future pharmacist, research and implementation of the principle of continuity in the formation of professional competence of students of different educational levels.

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