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## FEATURES OF TEACHING THERAPEUTIC DISCIPLINES TO STUDENTS OF THE TRAINING DIRECTION "LABORATORY DIAGNOSTICS" OF THE EDUCATIONAL LEVEL "BACHELOR"

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**Summary.** The article highlights the experience of teaching the disciplines of the therapeutic profile at the department of care of patients and the higher nursing education to future laboratory assistants for the credit transfer system.

**Key words:** laboratory diagnostics / лабораторна діагностика, bachelor / бакалавр, care for patients / догляд за хворими, internal medicine / внутрішня медицина.

**Резюме.** У статті висвітлено досвід викладання дисциплін терапевтичного профілю на кафедрі догляду за хворими та вищої медсестринської освіти майбутнім лаборантам-бакалаврам за кредитно-трансферною системою.

**Introduction:** Dynamic development and reform of medical education in Ukraine, its orientation to international standards, conditioned by modern requirements to the level of quality education, dynamic changes in the health care system of Ukraine.

The process of treating a sick person is extremely complex and requires the involvement of specialists in different specialties. The correctness and speed of the diagnosis, the control of the effectiveness of treatment depend not only on the level of knowledge of the clinician, but also on the degree of effectiveness of the laboratory's post office, without a close contact with which it is difficult to imagine the activity of a doctor of any field of medicine. In other words, the clinical thinking of the physician is based on generalization, comprehension of the data obtained during the laboratory examination, in combination with the clinical manifestations of the disease and in close connection with the data of other methods of examination. Obtaining reliable laboratory information, including monitoring the effectiveness of treatment of patients, can be realized on the basis of modern laboratory technologies and further effective clinical use of the results [4].

Laboratory diagnostics, without exaggeration, remains the key to health care in the modern developed state, the level of development of which determines the quality of medical services and, accordingly, the quality of life and health of people, economic and social development of society. This can be solved by improving the training of skilled professionals [1, 2].

The main part. At the Department of Nursing and Higher Nursing Education of the Higher state educational institution "Bukovinian State Medical University" students are trained in the field "Laboratory diagnostics" (educational level - "Bachelor") according to the requirements of the European Credit Transfer and Transfer System (ECTS) [3]. In accordance with the educational and qualification characteristics and educational and professional training program of laboratory assistants - bachelors compiled curricula for teaching therapeutic

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disciplines. The use in the educational process of innovative and interactive technologies creates conditions for improving the quality of practical training of future specialists.

Professional training of students is an integral part of educational work and is carried out with the purpose of acquiring professional skills to make independent decisions in real conditions. It is intended to prepare future specialists for real practical work, to ensure the proper level of their professional training.

From the first lessons, teachers explain to the students the structure of the module, the organization and conduct of practical classes, the calculation of points of current progress. Each student has an opportunity to get acquainted with a directory of each discipline, which contains all the necessary information: lecture plans, practical classes, independent work, a list of questions for modular control, criteria for assessing knowledge and skills, a list of basic and additional literature.

Students study at the second course during the entire academic year (3-4 semester) in the discipline "Care for the sick and medical manipulative technique". The study of this discipline is allocated a total of 75 hours, of which: 40 hours - practical classes, 35 hours - independent work. The purpose of teaching is the mastering of the basic methods of professional activity of the younger nurse based on the profound knowledge and understanding of the peculiarities of functioning of the body of a sick person, observing the principles of medical ethics and deontology. Studying this discipline involves the mastering of theoretical knowledge and practical skills and skills in professional communication; Observation and care of patients; Performing medical manipulations in accordance with the standards and rules of infectious safety; Prevention of occupational diseases and intra-hospital infection; Formation of active attitude towards healthy lifestyles among students. Practical classes on separate topics are held at the center of practical training of the university, a cabinet of instrumental research, which has the necessary methodological support, multifunctional phantoms, dummies, instruments, educational equipment and other objects of diagnostics and care of patients, which allows, in preclinical conditions, to imitate the real conditions of this performance, working in the clinic. After studying the discipline students pass the industrial practice "Care for the sick and medical manipulation technique" in the surgical and therapeutic departments of the hospital, during which they have the opportunity: to carry out the sanitary treatment of the patient; To prepare disinfectant solutions; Sterilize medical instruments; To feed seriously ill patients; Measure body temperature, determine pulse, blood pressure, diuresis and water balance; To perform simple physical therapy procedures; To apply medicines in external, enteral and parenteral ways; To prepare the patient for laboratory and instrumental (X-ray, endoscopic, ultrasound) examination; Maintain medical records; Give recommendations on a healthy lifestyle, tempering, rational nutrition; Carry out sanitary-educational work (sanitary ballots, conversations, lectures).

At the second year (4 semester), students study the discipline "Propedeutics of internal medicine". To study this discipline, 2,5 credits have been allocated: a total of 75 hours (12 hours - lectures, 28 hours - practical classes, 35 hours - independent work). The ratio of the number of hours of classroom studies to independent and individual work is (%): classroom classes - 53% independent and individual work - 47%.

The purpose of studying this discipline is to provide the student with the first skills of methodically correct communication with the sick person and a practical approach to its examination: the issue of diagnosis, proper objective examination of the patient, collection of anamnesis, symptoms of diseases. During practical classes the students' attention is focused on mastering of interviewing skills and physical examination of patients and analysis of their results in the clinic of internal diseases; The ability to analyze the results of basic laboratory and instrumental research methods; To identify the leading symptoms and syndromes in the clinic of internal diseases.

As a result of studying this discipline, the student must know: the basic principles of deontology and medical ethics; Mechanisms of development and causes of the occurrence of major pathological processes in the human body; Main clinical syndromes and symptoms of diseases of the internal organs and mechanisms of their occurrence; Basic objective methods of diagnosis of clinical symptoms and syndromes of major diseases of internal organs; Laboratory and instrumental diagnostic methods and their role in the diagnosis of diseases; As well as be able to: conduct questioning and physical examination of the patient; To evaluate the revealed symptoms, explain the causes and mechanisms of their occurrence; To draw up a plan of laboratory and instrumental examination of the patient; To evaluate the results of laboratory and instrumental research methods; Independently diagnose the main clinical syndromes.

Discipline "Internal Medicine with the assessment results" students studying in the third year (5 semester). The purpose of this course is to familiarize and train future technicians bachelors recognize the most common manifestations of major human diseases, diagnosis of diseases, including physical, laboratory and instrumental examination of patients, the ability to provide patient qualified emergency medical care in accordance with the profile of pathology, comprehensive formation of students the most important professional and spiritual foundations of his future professional activities.

The topics of the lectures reveal the etiology, pathogenesis, classification, clinical manifestations of diseases of the internal organs. Particular attention is paid to the practical aspects of organizing the work of laboratory assistants in the clinical laboratory. During mastering of practical skills the student must master the methods of evaluation of the obtained data, logical methods of analytical approach to the definition of pathological processes in the formation of the preliminary diagnostic conclusion. Practical classes include clinical examination of patients (surveys, reviews, palpation, percussion, auscul-

tation); Formulation of the preliminary diagnosis; Differential diagnostics; Drawing up a plan for patient screening; Interpretation of laboratory tests based on pathology; Preparation of the treatment program.

Thus, knowledge about the pathology of the organism as a whole is formed, which makes it possible for the laboratory assistant to be guided in any section of medicine. Gradually, clinical and laboratory thinking is underway, thanks to which the future bachelor's assistant will become a doctor's consultant on laboratory diagnostics of diseases.

ECTS requires students to work everyday on mastering the material. In preparation for practical classes, they are assisted by electronic training courses (ENCs) on the server of distance learning of the university in the environment of "MOODLE". Distance learning enables you to implement interactive storytelling technologies. ENCs contain the necessary information: methodical instructions, notes, situational tasks, self-monitoring tests, video and audio information, presentations. This ensures the student's internal motivation to learn, contributing to its effectiveness.

At each practical lesson the level of assimilation of students of the program material of a discipline is estimated. The control of knowledge disciplines students, educates the responsibility, provides systematic work on the study of discipline. Evaluated both theoretical and practical knowledge of students, for which the department uses a variety of tools: individual oral and written surveys, tests (from the open source test tasks of the license test "Step B. Laboratory diagnosis" "Testing Center" at the Ministry of Health of Ukraine), situational tasks and control of the practical skills provided by the curriculum of each discipline. Solving clinical situational problems requires a student of logical thinking, and not just the choice of the correct test response. During an oral response, students learn to express their thoughts, communicate more.

Independent non-auditing work of students is aimed at independent search of thematic literature, self-study of the fragments of the curriculum, performance of individual tasks of the teacher.

## Conclusions

- 1. At the Department of Care of Patients and Higher Nursing Education, appropriate conditions for the acquisition of theoretical material and the acquisition of practical skills in the disciplines of the therapeutic profile according to the ECTS are created, which allows qualitative training of a laboratory assistant.
- 2. Future laboratory assistants will be able to make the right decisions by choosing adequate laboratory tests, and will be able to help clinicians in interpreting the results that will improve the diagnostic process.

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