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XV МЕЖДУНАРОДНА НАУЧНА КОНФЕРЕНЦИЯ

**„НАУКАТА В ПОЛЗА НА БИЗНЕСА.
СЪВРЕМЕННИ ПРОБЛЕМИ НА НАУКАТА,
БИЗНЕСА, ОБРАЗОВАНИЕТО И ТУРИЗМА“**

**ПОСВЕТЕНА НА 150 ГОДИНИ ОТ СЪЗДАВАНЕТО
НА БЪЛГАРСКА АКАДЕМИЯ НА НАУКИТЕ**



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**DEDICATED TO 150 YEARS OF FOUNDING OF
THE BULGARIAN ACADEMY OF SCIENCES**

INTERDISCIPLINARY INTEGRATION OF TEACHING OF PATHOLOGICAL PHYSIOLOGY AND INTERNAL MEDICINE AT THE MEDICAL UNIVERSITY

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МІЖДИСЦИПЛІНАРНА ІНТЕГРАЦІЯ ВИКЛАДАННЯ ПАТОЛОГІЧНОЇ ФІЗІОЛОГІЇ І ВНУТРІШНЬОЇ МЕДИЦИНИ У МЕДИЧНОМУ УНІВЕРСИТЕТІ

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Abstract. The article considers the importance of interdisciplinary integration of fundamental theoretical and clinical disciplines as a factor of improving teaching at the departments of pathological physiology and internal medicine of Vinnytsya National Pirogov Memorial Medical University. Appropriate approach to teaching these subjects contributes to a more complete and profound mastering of study material by students, It allows not only to fully master the basic provisions of the educational material of the discipline, which are laid out in the curriculum, and assess their significance for understanding the issues facing practical medicine, as well as to direct students' thinking to a deep understanding of the theoretical and practical problems they are studying.

Key words: interdisciplinary integration, pathological physiology, internal medicine, clinical thinking, knowledge, skills, abilities.

The formulation of the problem.

Higher education is one of the leading criteria that largely determines the degree of development of the socio-economic and political spheres of any state and Ukraine in particular. Modernization and improvement of higher education in our country in recent years is aimed at training specialists at the level of international requirements, which, in turn, contributes to Ukraine's accession to a civilized world community. The leading place in this case has a medical education. In today's conditions, which are characterized by increased flow of information, the accumulation of large material in various fields of medical knowledge, as never before need to revise and change teaching as the general theoretical medical disciplines, in particular, pathological physiology, and clinical disciplines - internal medicine. In turn, it contributes to the formation of students' ability to logical thinking, analysis and synthesis of facts, ability to evaluate individual biological phenomena and medical and theoretical questions from faithful methodological positions. A prerequisite for further professional activity of a future doctor who has received higher

medical education is the possession not only of a certain amount of theoretical knowledge, but above all of their skillful, conscious application in future practice, which highlights the task of the formation and development of clinical thinking. Accordingly, the quality of training a specialist in modern conditions is determined not only by the level of his knowledge, but also by professional skills that allow him to creatively solve the problems that arise, actively interact with people on the basis of establishing subjective relationships [5, p. 289; 2, p. 58].

Analysis of the recent research and publications.

Problems of vocational training of future specialists obtaining medical education, require the search for new organizational forms, methods of training and education. The task of modern medical education in shaping the personality of a future specialist who is ready for successful professional activity, updating of professional knowledge, ability to design professional and personal growth have been considered by many scientists (S. Chechotina, V. Milyeryan, G. Lezhchenko, O. Nikitiuk, K. Khomenko, A. Zavołovych, V. Bachynskyi, O. Vanchuliak). The problem of interdisciplinary integration in education has been studied for a long time. Deficits, lack of knowledge, or insufficient depth of interdisciplinary integration often led, on the one hand, to the duplication of individual issues in different sciences in the absence of training time, and on the other - to the inadequate assimilation of students by a number of topics in disciplines (Voloshchuk N., Pashynska O., Ivanytsia A., Taran I., Petunyn O., Olar O., Boyechko V., Proshkyn V., Bagriy M., Voronych-Semchenko N., Popadynets O., Dmytrenko A.).

Basic material.

One of the leading areas for improving the teaching of general theoretical disciplines, in particular pathological physiology, is interdisciplinary integration in students' study of the main issues of general pathology with clinical disciplines that students study at the following courses. Therefore, it is important to create and correct work programs, methodical recommendations of the course of pathological physiology at all faculties, taking into account the possibility of integrating the educational process with such departments as internal medicine. Appropriate approach to teaching these subjects contributes to a more complete and profound mastering of study material by students, It allows not only to fully master the basic provisions of the educational material of the discipline, which are laid out in the curriculum, and assess their significance for understanding the issues facing practical medicine, as well as to direct students' thinking to a deep understanding of the theoretical and practical problems they are studying. The integration of vertical teaching in many respects helps students to acquire the following knowledge and skills on a rather strong theoretical basis. This contributes to the development of clinical thinking and the application of a general biological approach to solving many problems of various types of human pathology [3, p. 263; 6, p. 167].

At the same time, the main task of interdisciplinary integration is to intensify and update the student, when studying a certain topic of clinical discipline, previously acquired

knowledge, skills and abilities that are necessary for the study of this topic. The application of knowledge and skills obtained during the study of such fundamental preclinical disciplines as pathological physiology, further in the study of internal medicine contributes to optimizing the process of mastering clinical thinking, clearly demonstrates causative relationships, encourages the student to systematize knowledge of clinical medicine [1, p. 18-19].

One of the forms of interdisciplinary integration is the method of formation of meaningful connections. Thus, in the study of pathological physiology, detailed attention is paid to general nosology, examines the main periods of the disease, classification, peculiarities of the influence of pathological factors, the influence of heredity and age on the development and course of diseases, etc. The next is the study of typical pathological processes, such as allergy, inflammation, hypoxia, metabolic disorders, fever, tumors, etc., underlying diseases. Further, the obtained knowledge is used to study the pathogenesis of diseases of individual systems and organs, taking into account prophylactic (based on aetiology) and therapeutic (based on the pathogenesis and symptoms of diseases) measures, with due consideration of compensatory and adaptive mechanisms and decompensation. At classes on pathology of blood and cardiovascular diseases it is compulsory to work with hemograms and electrocardiograms, while studying the pathology of the respiratory system disassemble spirometry, the pathology of the kidneys and liver is studied with a compulsory urine analysis and various biochemical studies. Such a theoretical and practical approach to learning contributes to the formation of clinical thinking of future physicians, which, in turn, is improved at clinical departments, in particular, internal medicine [7, p. 68].

Today at the departments of the Vinnytsya National Pirogov Memorial Medical University, in particular, at the department of pathological physiology and internal medicine № 3, many different forms of teaching and control are used for teaching disciplines. These are classroom classes (lectures, practical classes, consultations), individual tasks, classroom and non-auditing independent work of students, final types of control, credits, exams. Creating graphological schemes of lectures and practical classes, teaching and methodological recommendations for both classroom and non-audiences independent work of students creates opportunities for more accurate teaching of each section of disciplines. Particular attention in the study of pathological physiology in practical classes is given to the analysis of clinically oriented situational tasks, which include data on the history of the disease, the main clinical manifestations, clinical and biochemical tests of blood, urine, acid-base state, electrocardiograms, etc. The training sessions are organized in such a way that under the leadership of the teacher there was formed active independent work of students on solving clinical problems and the basis for the formation of clinical thinking was created. This involves not only the creative mastery of theoretical knowledge, the mastery of modern experimental techniques for the modeling of pathological processes, and also provides the opportunity for the practical use of these knowledge and skills in the study of internal medicine at subsequent courses. Clinically

oriented situational tasks as separate issues are also used later in the final examination and examination of these disciplines.

Ability to have practical skills is an obligatory part within the framework of practical classes, both in pathological physiology and in internal medicine. The use of knowledge, skills and abilities acquired in the vertical system of interdisciplinary integration (in particular, pathological physiology - internal medicine) provides the basis for a clinical examination of the patient, establishing a diagnosis of the disease. The ability to recognize and evaluate the significance of symptoms and syndromes in the diagnosis of diseases, to conduct a survey of a particular patient according to the history of the disease is a practical training with the formation of professional skills and abilities. Therefore, one of the most important forms of independent work in carrying out practical internship training is the clinical consideration of thematic patients. Students independently collect complaints, anamnesis of illness and life, conduct a review, formulate a preliminary diagnosis, make a survey and treatment plan, and determine the prevention and prognosis. They use deontological skills when working with a patient. If it is necessary to receive additional information, the student has the opportunity to consult and communicate with both the doctor of the department and other "narrow" specialists, which promotes the formation of collegial communication skills and collegial decision of complex clinical situations [7, p. 68-69].

One of the main goals of teaching students at the Department of Internal Medicine №3 is to obtain scientific data not only from existing textbooks, manuals and electronic information carriers, but also in close conjunction with the mastery of practical skills of a doctor's work. In order to improve the work of students at the Department of Internal Medicine №3, consolidation of theoretical knowledge and their integration into practical skills is achieved in a systematic direct communication with patients. A student must demonstrate his or her result in working with patients during the study of internal medicine in the form of writing a medical history of the disease after exercising curation chosen by the teacher of the patient. When choosing patients for coaching, the teacher tries to cover as many different kinds of somatic pathology as possible so that each student works individually with his patient, developing his personal clinical thinking. When selecting patients for observation, the teacher tries to cover as many different kinds of somatic pathology as possible so that each student works individually with his patient, developing his personal clinical thinking. This approach makes it possible to form basic practical skills and abilities, necessary for the future physician when providing medical care to the patient. [4, p. 108].

The conclusion.

Thus, the teaching of pathological physiology and internal medicine at the Vinnytsya National Pirogov Memorial Medical University is constantly improved in order to meet the modern requirements of both medical science and higher medical education. Interdisciplinary integration of teaching pathological physiology and internal medicine

plays a leading role in shaping the basic principles of clinical thinking, responsibility, interest and understanding of the need for constant replenishment of knowledge and skills.

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