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Organizational and methodological principles of teaching the elective discipline "Modern Aspects of Medical Parasitology" for students of the Educational and Research Institute of Nursing

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Abstract. Based on the training of nurses according to the generally accepted international educational standards, the most effective way to attain a higher standard of education for future specialists is to incorporate optional courses that provide a novel approach to learning. The purpose of this study was to present the experience of the Department of Medical Biology of the I. Horbachevsky Ternopil National Medical University in the development and implementation of the elective discipline "Modern Aspects of Medical Parasitology" in the educational programme "Nursing" of the first (bachelor's) level of higher education in the branch of knowledge 22 Healthcare, specialty 223 Nursing. The study analysed the theoretical and methodological foundations of conducting classes in the elective discipline "Modern Aspects of Medical Parasitology". It was found that the educational and methodological complex, which corresponds to the curriculum and is developed based on the regulatory documents of the educational programme "Nursing", enables students to master, expand, and improve the level of mastery of the initial material, develop an individual approach to solving the tasks according to the goals and programme results. The paper points out the importance of forming a holistic understanding of parasitism as a form of relationship between organisms in nature. The study covered the teaching methods employed for the elective course "Modern Aspects of Medical Parasitology" in a higher education institution. It analysed how using teaching aids, including museum exhibits in the educational process and the role of the Department of Medical Biology, enhances the effectiveness of students' learning activities in studying the fundamentals of medical parasitology. The incorporation of highly visible means, information and communication technologies, well-designed educational and methodological support, and impeccably organised classroom activities will enhance the quality, content, and principles of educational services offered in the educational programme "Nursing", speciality 223 Nursing

Keywords: educational process; medical biology; medical parasitology; speciality 223 Nursing; nursing

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INTRODUCTION

Modern nursing education requires improvement of the quality, content, and principles of educational services, which determine the complex of professionalism, modern technical means of education, pedagogical teaching technologies and educational standards. The best strategy for achieving a conceptually new level of quality of training of future specialists based on the training of nurses according to generally accepted international educational standards is the introduction of elective disciplines that provide a new approach to teaching.

I. Dobroskok *et al.* [1] believe that the reform of higher education in Ukraine requires a unified methodological approach to different disciplines, such as medicine, technology, and pedagogy. S. Gordiychuk [2] notes that education underlies Ukraine's competitiveness, and its political and economic independence reflects an important trend in the modern world. It is education that enables the continuous development of abilities and shapes the life aspirations of the population. The higher the level of education a person has, the more opportunities they have to create better living and working conditions.

Parasitic illnesses are still prevalent worldwide, particularly in less developed nations. Helminth infections constitute 89% of all parasitic infections, posing significant public health threats [3]. According to the World Health Organization (WHO), one in four people is infected with parasitic worms [4]. N.V. Dovganych & N.I. Frych [5] note that over 300 species of helminths and 18 species of protozoa cause diseases in most tropical countries and rank fourth among other diseases in all parts of the world, behind only coronary heart disease, tuberculosis, and diabetes mellitus. They affect billions of people, killing millions every year and causing debilitating injuries. Parasitic diseases can manifest themselves with various clinical symptoms, depending on the tissue affected. Therefore, as the occurrence of parasitic diseases in the field of nursing, both therapeutic and surgical, increases, it is vital to elevate the standard of education and preparedness within the educational system for their professional duties [6].

In 2008, Ukraine implemented a nursing education system that aligns with the educational structure of numerous countries worldwide, including Canada, England, and the United States of America. The system features training at international standards levels. The USA has implemented novel training and development initiatives. These include certifying nurse managers, licensing nursing practices, providing fundamental and advanced nursing education, conferring the academic rank of professor, devising nursing master's programmes and doctoral studies in the same field. In 1973, the American Nurses Association established the National Academy of Nursing Sciences, which has taken a leadership position in the organisation of nursing. Nursing education in the United States is considered one of the best in terms of quality and effectiveness. The training is based on a phased system leading to the licensing exam. Graduates of nursing colleges have a wide range of career opportunities, including independent practice and working with patients. Having analysed, for example, the English and American models of nursing education separately, it can be noted that they are fundamentally different, but equally important for the formation of nursing in the national system of many countries [7]. Nursing education in European countries is provided in nursing schools and colleges in the UK, Hungary, Sweden, and higher education in nursing – in institutes, universities, and academies in Denmark, Greece, Ireland, Spain, Estonia, and Poland [7, 8]. Nursing students in Ukraine are trained at Bukovinian State Medical University, Kharkiv National Medical University, and Zhytomyr Institute of Nursing [9].

With the increasing prevalence of parasitic diseases in nursing, it is crucial to improve education and training in both therapeutic and surgical settings. Therefore, searching for standards in medical education is the best approach to attain a conceptually modernised level of training quality. This is based on training medical personnel in line with widely recognised global educational standards. The study of the discipline "Medical Parasitology" is based on the mastery of parasitological concepts, theories, and a review of scientific evidence and facts, which forms the basis for the training of highly qualified specialists and the formation of a scientific worldview. Therefore, the quality of diagnostics and the ability to conduct it substantially affects the tactics of sampling, research methods and principles of further treatment and care of patients [10].

The growing importance of parasitic diseases in the overall structure of morbidity in the population necessitates the improvement of the relevant training of health-care professionals. Therefore, the problem of forming professional competences of nursing specialists is a priority task of many academic disciplines, including the elective discipline "Modern Aspects of Medical Parasitology", which is designed to develop professional and communicative competences. The purpose of this study was to cover the specific features of acquiring professional skills and abilities of future nurses in studying the elective discipline "Modern Aspects of Medical Parasitology".

MATERIALS AND METHODS

The programme in the discipline "Modern Aspects of Medical Parasitology" is designed for higher education students at the I. Horbachevsky Ternopil National Medical University (TNMU) of the Ministry of Healthcare of Ukraine under the educational programme 223 Nursing, according to the working curriculum, which is annually discussed and approved at a meeting of the Academic Council of the University. The purpose of the elective is to help students understand the fundamental concepts of development and systematic knowledge of living organisms, their biotic relationships in nature, as well as the life cycles of parasites and parasitic diseases that affect humans.

"Modern Aspects of Medical Parasitology" is an educational subject that builds upon the fundamental knowledge acquired in elementary and high school's biological component of the educational field "Natural Science". It provides relevant knowledge, competencies, and program learning outcomes for further assimilation by students in higher education, specializing in theoretical and clinical disciplines such as microbiology with immunology basics, pharmacy hygiene, and ecology.

According to the curriculum of Ternopil National Medical University, the elective discipline "Modern Aspects

of Medical Parasitology", which is studied by students of speciality 223 Nursing in the first year of the Educational and Research Institute of Nursing at TNMU, includes 90 hours, of which 16 are lectures, 24 are practical classes, and 50 hours are for independent study. The subject "Medical

Parasitology" is studied in the 1st year, in the second semester. Completion implies a type of control: credit.

The programme of the elective discipline "Modern Aspects of Medical Parasitology" includes 6 topics that fully reflect the content of the discipline's sections (Table 1).

Table 1. Structure of the elective discipline "Modern Aspects of Medical Parasitology"

Topic titles	Lectures	Practical sessions	Independent work
1. The phenomenon of parasitism, its forms, distribution and role in nature.	2.0	0	10.0
2. Medical Protozoology. Kingdom <i>Protozoa</i> . Type <i>Sarcomastigophora</i> . Type <i>Ciliophora</i> . Class <i>(Zoomastigophora)</i> . Type <i>Apicomplexa</i> . Class <i>Sporozoea</i> .	2.0	6.0	5.0
3. Medical Helminthology. Type <i>Plathelminthes</i> . Class <i>Trematoda</i> . Class <i>Cestoidea</i> .	4.0	4.0	15.0
4. Medical Helminthology. Type <i>Nemathelminthes</i> . Class <i>Nematoda</i> .	2.0	6.0	0
5. Methods of laboratory diagnostics of helminthic diseases.	2.0	2.0	10.0
6. Medical Arachnoentomology. Type <i>Arthropoda</i> . Class <i>Arachnoidea</i> . Class <i>Insecta</i> .	4.0	6.0	10.0
TOTAL	16 hours	24 hours	50 hours

Source: [11]

The curriculum includes the main types of classes: lectures; practical classes; independent work of students and consultations. The work programme includes 12 practical sessions. The following teaching methods are used in the study of the discipline "Modern Aspects of Medical Parasitology": verbal (explanation, conversation, narration); practical (experiment, practical work); explanatory and illustrative (natural objects, educational literature, lectures, videos, etc.); reproductive; analytical; productive; problem-based presentation of material; research.

RESULTS

Since 2015, the I. Horbachevsky Ternopil National Medical University has started training higher education students in the speciality Nursing. Over 4000 people have received specialised education at the TNMU. Since 2022, several academic disciplines have been added to the curriculum, including an elective discipline at the Department of Medical Biology – "Medical Parasitology" [11]. The educational process for the implementation of this discipline is based on the following three main principles that ensure an optimal approach to teaching and learning: what needs to be learned; how to learn; why it needs to be learned.

The principle "What needs to be learned" determines the scope and content of the discipline and its integration with other disciplines of biomedical and clinical orientation. For this, the department's teachers have developed a working curriculum and a syllabus for the discipline, which clearly structured thematic plans for lectures, practical classes, and topics for independent study of the discipline [11]. The curriculum includes the main types of classes: lectures; practical classes; independent work of students and consultations.

The lectures cover the key issues encountered in the discipline, focusing on the theoretical aspects of one or

multiple topics. Specifically, the lecturers provide a detailed account of the general principles pertaining to the organisation and biology of protozoa, helminths, and arthropods. They also analyse the morphophysiological characteristics, patterns of parasite life, ecological and ethological features, and life cycle. Additionally, the main methods adopted for the laboratory diagnosis of parasites are discussed. The training material is presented through multimedia presentations, which helps to improve the assimilation of information.

During practical classes, students, together with their teachers, study theoretical concepts in detail and develop skills and abilities to apply them through individually defined tasks and solving situational problems. Students study the biological basis of parasitism and the role of parasites in the emergence of vector-borne and naturally occurring diseases. They also examine the influence of environmental factors on the evolution of members of the Kingdom Protozoa, Types Flatworms and Roundworms, and Type Arthropoda. Additionally, students explore the pathological effects of parasites on the human body and acquire knowledge on the effectiveness of preventing parasitic diseases based on the route of infection. In the study of medical parasitology, the teachers pay special attention to the principles of laboratory diagnosis of human parasitic infections, the understanding of which is based on the students' knowledge of the structure of parasites of various systematic groups and their life cycles, the regularities of the components of the parasite-host system, as well as methods of preventing parasitic diseases.

Students' independent work involves studying certain topics of the educational material in the hours free from primary classes and includes preparation for all types of control tasks. Specifically, students study the biology of pathogens of human parasitic infections; the basics of

classification of parasites and hosts; ways, mechanisms of transmission of pathogens, and principles of their entry into the human body; biological features of vectors and pathogens of natural environment diseases; structural components of the natural environment; medical significance of representatives of the Arthropoda as carriers of pathogens of human infectious diseases; representatives of certain groups of poisonous plants, animals, and fungi. The material studied in the areas defined by the curriculum, which students master in independent work, is submitted for final control in the form of a test together with the material learned in classroom classes. Tutorials are conducted to assist students in comprehending and elucidating challenging topics, resolving intricate issues encountered while studying educational materials, in readiness for practical lessons or assessments.

The principle "How to learn" is based on certain principles of teaching and learning, using which teachers convey educational and cognitive information to students in the form of individual and collective constructive tasks and practical skills, considering the individual characteristics of students. The main forms of this principle consist of natural object visualisation, which demonstrates the structural organisation of parasites on macro preparations and their morphological features on micro preparations, and artificial visualisation, which involves displaying videos on the life cycles of helminths, existing models of helminth strobe structures, as well as diagrams, graphs, and tables.

However, the success of the lesson relies greatly on the students' preparation for it. In this regard, one of the key parts of the educational and methodological work is the organisation of students' self-preparation for classes, which is ensured by the availability of teaching materials, consultative assistance from the teacher, and the possibility of using technical learning tools. To create the most complete picture of the content of the wildlife around us and the interrelationships of individuals among themselves, the Department of Medical Biology has an exhibition "Medical and Biological Aspects of Parasitism", which was created in the I. Yaremenko Educational and Biological Museum. The museum exposition is based on the principle of interaction and biotic relations between parasite and host at the level of parasitic relationships between individuals. The exhibition materials demonstrate the natural occurrence of parasitic diseases and infestations, presenting a clear picture of the connection between an animal's lifestyle and the manifestation of parasitic infestation. The display cases of this exhibition contain educational information about 13 diseases caused, transmitted or hosted by animals, which are located in special containers on the walls of the educational museum. The exposition also illustrates the systematic position, structural features, developmental cycles of parasites, ways of infection and entry of the parasite into the human body, clinical picture, laboratory diagnostics and methods of prevention of 7 infectious and 6 invasive diseases.

Every year, the department's educators analyse the impact of the visual material in the department's educational museum on the quality of students' learning. They also determine how audience-teacher interactions can contribute to excellent learning and better assimilation of theoretical material. The expositions of the Educational and Biological Museum play a significant role in the study of the structural

organisation of the human body, the structure of multicellular individuals, and the specific features of their vital activity. The students take part in thematic excursions, which aim to provide a comprehensive and in-depth understanding of the materials in the natural history exhibition. The presentations and videos about intracellular parasites and their harmful impact on human health merit a favourable evaluation. The museum's exhibits are of great importance in practical classes in medical parasitology. They elucidate the principles of parasite-host interaction, furnishing a foundation for comprehending the fundamental tenets of parasite prevention in the examination of venomous creatures. Additionally, it sheds light on the anthropogenic impact on natural ecosystems. Students positively evaluate schemes that contain information about clinical symptoms and syndromes of parasitic diseases, as well as methods of laboratory diagnosis of infections. This aids in the comprehension of parasite life cycles, their means of transmission, and preventive measures for students. As a result, students develop a more profound understanding of these diseases. Furthermore, thanks to the museum exhibits, students gained a better insight into micro- and macroevolutionary processes.

The principle "Why it need to be learned" is based on motivation: when mastering each topic or part of the section, not only the purpose of certain biological facts in the system of science is indicated, but also their place in the life and activities of the student as a future doctor is revealed.

To implement the above principles of teaching, the team of teachers prepared a textbook "Medical Parasitology: Laboratory Giude", which reflects the latest achievements in the study of certain issues in medical protozoology, helminthology and arachnoentomology [11]. The laboratory guide comprises 12 practical classes with a logical progression of materials. Students are given the chance to illustrate the physical characteristics and internal structure of human parasitic pathogens, draw developmental cycle diagrams for various classes of parasites, complete tables outlining pathogen morphology and functional characteristics, pathogenic effects and infection methods. The manual also contains didactic material for self-study, a list of theoretical questions for knowledge control, test tasks for self-checking, a dictionary of fundamental concepts and terms, which ensures the activation of students' learning activities during practical classes. The use of protocols is a methodological technique that activates the student's attention and develops their observation skills.

For better learning of the educational material, using pedagogical and methodological techniques that improve the level of learning, the teachers of the department use a system of visual analysis of micropreparations. This system transmits the image of a specimen from a light microscope through a video camera to a TV screen, where, according to the set magnification of the microscope, the structures in the field of view can be studied. This system enables comprehensive and simultaneous analysis of images in the presence of a large audience of students. It facilitates detailed study without subjective evaluations. The use of the visual analysis system is widely used by teachers when students perform practical work. With this system, teachers also conduct oral and written tests to determine students' knowledge of the structural organisation of parasites. The use of interactive technologies for collective group learning (case-method, brainstorming, general circle); technologies for processing discussion issues (defining a position, defending it, changing a position, debating); elements of distance learning (MS Teams, Google Meet, etc.) also contributes to more effective learning.

Mastering practical skills is compulsory for students majoring in 223 Nursing during the academic year. Matriculation of practical skills, which students complete upon finishing the study of the discipline, includes the acquisition of practical skills, some of which are incorporated into the curriculum of the respective program. Compilation of skills, in addition to practical implementation, requires the student to possess thorough knowledge and understanding of their theoretical aspects at a suitable level of mastery. At the Department of Medical Biology, students of the Educational and Research Institute of Nursing learn three practical skills when studying medical parasitology: how to use a light microscope; microscopic analysis of permanent micro preparations of protozoa with the determination of the type of parasite and its medical significance; identification of arthropods using a magnifying glass or light microscope and indicating their medical significance.

According to the working curriculum for the elective discipline "Modern Aspects of Medical Parasitology", students can receive additional points for their individual work at the Department of Medical Biology. This work involves the development of students' abilities in an individually directed way and realises their creative potential through research and creative activity. Students can get additional points for completing biological crosswords in the section of medical parasitology, selecting video and audio materials, and selecting exhibits for the I. Yaremenko Educational and Biological Museum.

The Department of Medical Biology of TNMU annually involves students at the Institute of Nursing in the work of scientific forums held at the Department of Medical Biology and the University [12]. Scientific and practical conferences highlight the main results of the student's own research under the guidance of a supervisor, thereby developing the ability to solve creative and innovative problems.

Thus, developing reputation, raising the rating and competitiveness are key tasks necessary to maintain professional competence. The motivation of teachers and the effectiveness of pedagogical work reflects the attitude of students to education and the intensity of the educational process. The formation of professionalism is an important quality of the educational process, especially when it comes to higher medical and nursing education. The Department of Medical Biology has developed a methodological complex to enhance the standard of training in the speciality 223 Nursing. However, the level of organisation of the educational process relies on several factors like students' interest, cognitive abilities, skill formation, and practical expertise.

DISCUSSION

The emergence of the Coordination Council and working groups on curriculum development, including WHO experts, has led to significant changes in the content and new conditions of nursing education in Ukraine and Europe. This has resulted in revised requirements, the development of applied research in nursing education, and improvement of curricula and programmes [13].

Nursing education in European countries is carried out pursuant to regulations and with the innovative processes taking place in the healthcare system. In most European countries, namely in Spain, Greece, Sweden, and Estonia, the period of study to obtain a professional level of a registered nurse is 3 years, in Belgium, Austria, Denmark, the UK, and the Netherlands - 3.5 years [9]. Unlike European countries, the American model of nursing education is comprehensive and differs substantially in its structure from the one adopted in Ukraine and Europe. Given the legislative requirements, there are several educational degrees in the field of nursing education in the United States: Licensed Practical Nurse (LPN), Associate Specialist Nurse (ASN), Bachelor of Nursing (RN to BSN), Master of Nursing (MSN), Doctor of Nursing (DNS) [8]. In Ukraine, there is a graduated nursing education: junior specialist (accreditation level I) and bachelor's degree – nurse (accreditation level II) [14].

The examination of research conducted by V.P. Pishak & Y.I. Bazhora [15], S.K. Sharma *et al.* [16] suggests that elements which contribute to the standard of education comprise of not solely the professional preparation and personal traits of teachers, but also the educational and methodological support during the teaching process. The inclusion of optional subjects in higher education curricula is due to contemporary teaching methods and the aim of students gaining competent knowledge and skills. This position is supported by S. Gordiychuk [2] and O.S. Isaieva & I.R. Khmiliar [17].

The Department of Medical Biology employs diverse methodological tools and training complexes to facilitate the development of both general and specialised competencies in students. These competencies encompass knowledge, practical skills, and the ability to effectively utilise information, communication, and modern educational technologies. The study of elective disciplines by students, their involvement in the educational process and research activities contributes to the training of qualified medical specialists. The analysis of sources by O.M. Khrystenko *et al.* [18] and J.H. Xu [19] complement the results on improving the forms and methods of training qualified specialists and improving the educational process in higher education institutions.

The implementation and research data correspond to the findings of C.H. Rushton *et al.* [20] concerning the development of higher education students' capacity to work accurately with diverse information sources and adhere to scientific ethical norms. This is of utmost importance for teachers in shaping a high-quality education. It is important to promote true moral and ethical values, including academic integrity, among the student community, especially first-year students [21, 22].

To improve the perception of educational and methodological material, educational museums are being created in higher education institutions to help students understand the laws of science by demonstrating natural objects and preserving their appearance in everyday life. Museums, as an educational system, reveal the role and functions of science in a new way, emphasise its importance in the modern world, and shape the worldview of visitors and understanding of society as a whole [23].

According to L.Y. Fedoniuk *et al.* [24], among the various visualisations, the first place should be taken by natural objects that create an idea of the content of the

surrounding wildlife. The museum's exhibits also reflect the relationship between organisms and the environment, flora and fauna, form an idea of the structure of multicellular organisms, and also form a body of knowledge about the laws of nature. Thus, they provide the basis for learning the basics of human parasites and parasitic infections, while developing students' ability to think abstractly.

To deliver superior healthcare and attain expertise in the field, higher education students must possess the ability to evaluate parasitic diseases, demonstrate the natural focal and transmissible categorization of human illnesses, and recognize pathogens and vectors through macroand micropreparations for diagnosing parasitic diseases. Students must be competent in identifying the different stages of the life cycle of human parasites, substantiating the key laboratory diagnostic methods, utilizing laboratory techniques for diagnosing infestations, elucidating the morpho-functional characteristics of parasites and their developmental cycles, ascertaining modes of infection by parasites, methods of laboratory diagnosis of parasitic diseases, and preventive measures. The acquired knowledge lays the foundation for attaining a proficient level of job readiness within the chosen field [25]. According to O.P. Kravchenko [26], the introduction of auxiliary nurse training in Ukraine will improve the quality of medical services for patients in need of skilled care in hospices, nursing homes and at home, which will be cost-effective.

Thus, the study found that the use of methodological materials of the Department of Medical Biology allows not only to improve the cognitive activity of students in solving educational tasks, but also to improve the quality of professional orientation and independence in combination with an individual approach to learning.

CONCLUSIONS

The implementation of the elective course "Modern Aspects of Medical Parasitology" in the "Nursing" programme for students pursuing a Bachelor's degree in the branch 22 Healthcare (speciality 223 Nursing) at the I. Horbachevsky Ternopil National Medical University, and the subsequent analysis of the curriculum revealed that independent cognitive activity is the primary mode of education and plays a crucial role in fostering students'

motivation, sense of responsibility, and their ability to apply theoretical knowledge in practical settings. Therefore, the training of future nurses in higher education medical institutions should contribute to the reform and modernisation of the higher nursing education system, since the quality of education is determined by educational standards and includes a set of modern technical means of teaching, pedagogical technologies and quality of learning.

The incorporation of contemporary pedagogical approaches, combined with a cohesive integration of theoretical and practical aspects within the curriculum, is particularly beneficial in the field of medical parasitology. Such measures optimise the learning process, resulting in enhanced comprehension and retention of the subject matter, thereby facilitating its practical application in future practice. The I. Yaremenko Educational and Biological Museum plays a significant role in the educational process of the I. Horbachevsky Ternopil National Medical University of the Ministry of Healthcare of Ukraine. The museum's expositions exhibit the principles of interaction between parasites and hosts, which creates a positive influence on the professional training of nurses by enabling students to understand the basic methods of preventing parasitic diseases.

Prospects for further research are to implement the elective discipline "Modern Aspects of Medical Parasitology" in the educational process at the Department of Medical Biology of the I. Horbachevsky Ternopil National Medical University for applicants for the second (master's) level of higher education in the branch 22 Healthcare, speciality 223 Nursing. Also promising is the advancement of global collaboration in nursing, including the creation of workable curricula and the adjustment of educational material to meet international standards. Such a process will be essential for enhancing the training of competent nurses and effectively integrating the Ukrainian higher nursing school into the wider European community.

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CONFLICT OF INTEREST

The authors declare no conflict of interest.

INTRODUCTION

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Організаційні та методичні засади викладання вибіркової дисципліни «Сучасні аспекти медичної паразитології» для студентів навчально-наукового інституту медсестринства

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Анотація. Базуючись на підготовці медичних сестер, відповідно до загальноприйнятих міжнародних освітніх стандартів, найкращою стратегією для досягнення якості підготовки майбутніх спеціалістів на новому рівні є запровадження факультативів, які пропонують новий підхід до навчання. Метою роботи було представити досвід кафедри медичної біології Тернопільського національного медичного університету імені І. Я. Горбачевського щодо розробки та впровадження у навчальний процес вибіркової дисципліни «Сучасні аспекти медичної паразитології» за освітньою програмою «Сестринська справа» першого (бакалаврського) рівня вищої освіти галузі знань 22 Охорона здоров'я, спеціальності 223 Медсестринство. В статті проаналізовано теоретико-методологічні засади проведення занять з вибіркової дисципліни «Сучасні аспекти медичної паразитології». Встановлено, що навчально-методичний комплекс, який відповідає навчальному плану та розроблений на основі нормативних документів освітньої програми «Сестринська справа», дає можливість здобувачам опанувати, поглибити а також вдосконалити рівень засвоєння начального матеріалу, розвинути індивідуальний підхід до вирішення поставлених завдань відповідно до цілей та програмних результатів. У роботі вказано на важливість формування у здобувачів цілісної уяви про паразитизм, як форму взаємовідносин між організмами в природі. Разом із тим, розкрито роль форм навчання, які застосовуються під час викладання вибіркової дисципліни «Сучасні аспекти медичної паразитології» у закладі вищої освіти, а також аналізується ефективність використання засобів навчання для організації навчальної діяльності студентів під час вивчення основ медичної паразитології, зокрема ролі музейних експонатів у освітньому процесі і кафедри медичної біології. Використання засобів із високим ступенем наочності, інформаційно-комунікаційних технологій, добре продумане навчально-методичне забезпечення, правильно організована аудиторна діяльність студентів дозволить удосконалити якість, зміст і принципи надання освітніх послуг за освітньою програмою «Сестринська справа» спеціальності 223 Медсестринство

Ключові слова: освітній процес; медична біологія; медична паразитологія; спеціальність 223 Медсестринство; сестринська справа