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## PECULIARITIES OF BIOORGANIC CHEMISTRY TEACHING TO FOREIGN STUDENTS IN MEDICAL UNIVERSITY

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**Introductions** Bioorganic chemistry is one of the most important disciplines in the general theoretical training of physicians, is closely related to biochemistry, molecular biology, pharmacology, biophysics and other biomedical disciplines. The ultimate goal of studying the course of bioorganic chemistry is to form knowledge about the patterns of chemical behavior of the main classes of natural organic compounds in relation to their structure, to use this knowledge as a basis for studying the processes occurring in living organisms. Bioorganic chemistry is the basis for further study of biological chemistry and pathological physiology.

**Aim.** Identify the features of bioorganic chemistry teaching to foreign students in medical higher education institutions.

**Materials and methods.** Study of the behavior of foreign students during their studies in bioorganic chemistry.

**Results and discussion.** The discipline "Bioorganic chemistry" was studied at the Faculty of foreign citizens at the first semester, this a very difficult discipline in addition to the difficulties of mastering. Students also face the problem of adaptation. Peculiarities of foreign students adaptation are determined by a complex of psychophysiological, educational-cognitive, socio-cultural and everyday factors. The structure of relations of all components of the educational process plays an important role in adaptation.

The process of foreign students adaptation to the educational environment of a higher education institution must be organized, purposeful and comprehensive. Starting their studies at the university, international students face such problems as:

a) insufficient knowledge of the Ukrainian language. As a rule, only in the third year of study students acquire a vocabulary sufficient for active and free communication with teachers and students and for effective learning;

b) often poor training in specialized and special disciplines (biology, physics, chemistry, etc.). This circumstance significantly reduces the possibility of using Ukrainian-speaking foreign students of generally accepted textbooks, manuals used for teaching ukrainian students;

c) lack of skills of independent work. Some students cannot take notes of lectures, work with sources of information, analyze large amounts of information. They do not know how, and sometimes do not want to use the university library;

d) the immaturity of the algorithm for the use of theoretical material in practical classes, presented in lectures and developed independently;

e) a significant difference between the forms and methods of teaching in Ukrainian universities and the relevant elements of higher education in the student's homeland.

The fundamentality of ukrainian medical education makes Ukraine attractive to foreigners from all over the world. In this regard, it becomes important to study the problems of adaptation of foreign students to the educational process in Ukrainian universities. Teaching in groups of foreign students requires careful organization of the educational process. Teachers must take into account the cultural characteristics, religious beliefs and traditions of foreign students when conducting classes. This is especially important for first-year students, when they need to convey to students the material of the subject using examples that are not always clear to them and available terminology, trying to enrich their professional vocabulary. The study of bioorganic chemistry according to the university program is provided in the first year of medical higher educational institutions. Teaching is carried out in accordance with the standard program and curriculum, on the basis of which the work program is developed. The course consists of lecture hours, practical classes and hours for independent extracurricular work of students. The program in bioorganic chemistry for foreign Ukrainian-speaking and Ukrainian students is identical in the number of hours for practical classes, lectures and independent extracurricular work of students. However, the texts of lectures and guidelines for practical classes, which are based on the principle of the European Credit Transfer System (ECTS), were adapted by teachers of the department to the perception of English-speaking and Ukrainian-speaking foreign students. They do not contain complex language appeals, carry scientific information in a concise, concise form.

The practical lesson on bioorganic chemistry consists of two parts. At the beginning of the practical lesson the teacher highlights the relevance of the topic, motivates students to study it. At the second stage there is a practical work.

**The course of each lesson is described in detail in the guidelines developed by specialists of the department for foreign students. The main sections of which are:**

- ✓ the topic of the lesson,
- ✓ the educational purpose,
- ✓ the list of theoretical questions for independent preparation,
- ✓ the protocol of practical work.

The list of practical works is carried out in accordance with the work program so that the theoretical knowledge of foreign students is directly applied during the practical work, taking into account the geographical origin of students. This construction of practical work, first of all, motivates students to improve the initial

skills acquired in secondary education, helps to master modern methods of experimental research, make calculations, discuss results, formulate conclusions. From the first lessons the formation of the dictionary of special terms begins. This facilitates the memorization of basic definitions, helps to better understand the topic, forms the basis for mastering the material of the following sections, allows the use of acquired knowledge in further education and professional activities and contributes to this.

In practical classes on bioorganic chemistry we also use methods typical for language teaching, namely: writing terms and phrases on the board, reading them aloud.

For example, when studying the acidic and basic properties of compounds, students develop the habit of determining the solubility of substances, including drugs, choosing the optimal route of administration, reducing the toxic effects of the drug on the body. The ability to predict the ability of a substance to hydrolyze, acylation, oxidation suggests a path of biotransformation of drugs. When considering the properties of different classes of organic compounds, a chemical explanation of the mechanism of action of some drugs (sulfonamides, oxyquinoline derivatives, etc.), as well as the pharmacological incompatibility of some drugs is given.

In the process of overcoming the language barrier, it is important to have constant feedback between the teacher and the students, which provides the necessary pace of explanation. He is often slower than usual in class with Ukrainian students. The limited practical time requires the teacher to highlight the most important issues on the topic for oral discussion. The basis of the organization and conduct of practical classes with foreigners is the principle of individual approach to each student, which is provided by the use of tasks of different levels of complexity. The effectiveness of practical training largely depends on the level of preparation of students. Therefore, an important part of the educational and methodical work of the department is the organization of self-preparation of students for classes.

Work in small groups, ie groups of six or less students, is widely used to intensify cognitive activity in practical classes, as this form of organizing educational activities creates the best conditions for constant speech interaction of students with the teacher, which is especially important in studying bioorganic chemistry. learning objectives.

The classes use a comprehensive control of knowledge: traditional control through oral examination, assessment of practical work, as well as the ability to analyze research results and draw conclusions, and test control. Wide application of test control in practical and final classes is an important means of improving the efficiency of the educational process. This is due to both the requirement to increase the objectivity of knowledge assessment and the habit of foreign students to test forms of control. In order to standardize the assessment of students' knowledge, we use at the department test questions, compiled by the type of license exam "Step-1". Among other things, this is a guarantee of positive passing by students of the licensed examination test control "Step 1", introduced in the universities of Ukraine.

**Conclusions.** Constant work on improving professional skills, the use in the educational process of various time-tested and the latest forms and methods of

teaching allows to solve modern problems of training specialists from among foreign citizens.