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INITIAL ANALYSIS OF THE IMPLEMENTATION OF THE CREDIT-MODULE SYSTEM OF EDUCATIONAL PROCESS ORGANIZATION AND ATTITUDE OF MEDICAL COLLEGE STUDENTS TO IT

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Abstract. The training of a mid-level healthcare professional involves studying a significant number of different subjects and assimilating a large amount of information in a short period of time. The credit-modular system of educational process organization according to the standards of the European Credit Transfer System (ECTS) of education provides good prospects for the implementation of this task, ensuring the acquisition of relevant knowledge and competencies, which is necessary in the context of competition on the global labour market and innovative development of society.

The purpose of the study was to find out and analyse the opinions of students, academic and teaching staff of Physiology department, their attitude and suggestions regarding the implementation of ECTS at the Professional Medical College of IFNMMU, where this system started working since 2021.

Materials and methods. An anonymous survey was carried to achieve the set objectives. Separate questionnaires were drawn up for students and teachers, which included questions about their attitude to teaching disciplines (including Physiology) in accordance with the ECTS principles, its positive and negative aspects, wishes and suggestions for improving the educational process organization and other items. In total, the questionnaires contained eight questions for teachers and sixteen for students.

Results. The analysis of the survey results gives grounds to assert that not all students of the Medical College are fully ready to the study based on ECTS at the moment, transition from passive to active forms of it, where individual and creative work is preferred. Actually, in our opinion one of the key problematic issues of the credit transfer system of education is that students are not entirely focused on the priority of independent learning of the curriculum material and a significant part of extracurricular learning in it. Also most students consider that the amount of material assigned for independent study is too much. On the other hand, our teaching experience shows that they do not always work through the topics properly, although there are consultation hours during extracurricular time, where students can discuss unclear questions with the teacher. The attitude to test control as an integral part of the educational process and one of the methods of students' knowledge evaluation is ambiguous. Among the positive aspects of ECTS education the most often are noted the following: constant and versatile preparation for classes, a better evaluation system, the possibility of retaking unsatisfactory marks, which is an important additional motivation to improve the level of knowledge from the subject and improve academic performance.

Conclusions. As a result, the following conclusions can be drawn: a) as of today, the perception of the IFNMMU Medical College students the credit-modular system of education, their readiness and attitude to it are quite ambiguous with the corresponding positive and negative aspects; b) there is an evidently need for further work to improve the training of both students and teachers, optimisation of their collaboration and creation a closer relationship between them; c) it is necessary, in our opinion, on the one hand, to preserve maximally the positive achievements of the national education system, on the other hand – to use effectively the experience of European countries. This will create the basis for training a qualified, mobile, creative specialist of mid-level healthcare.

Keywords: implementation, credit-module system, educational process, questionnaire, physiology, teachers, students, medical college.

Introduction. Research rationale. Since 2005, the organization of the educational process in the higher education institutions of Ukraine (including IFNMMU) is carried out on the basis of the European Credit Transfer System (ECTS) of education, which is based on the ideas formulated by the Bologna Declaration, signed by 29 ministries of European countries [1, 2]. This decision, as it is known, was one of the conditions for Ukraine's entry into the single European educational space and formed unified requirements, criteria and standards for national higher education systems. Such system of the educational process organization is based on a combination of modular

technologies with the use of conditional credit units (credits) and provides the possibility of a personalized approach to each student through the development of individual curricula [2]. It is needed to generalize the system of educational and qualification degrees, to achieve the relevant European standards, to make Ukrainian education competitive on the European labour market, to encourage both teachers and students to improve the objectivity of knowledge quality assessment, and to ensure transparency in the mid-level medical education system [1, 3, 4].

In modern conditions, a mid-level healthcare worker is not only a "simple assistant" but, in fact, a

partner of a doctor who performs many independent functions. The training of such specialist involves studying a significant number of subjects and assimilating a large amount of information in a short period of time. The credit-module system according to ECTS standards provides good prerequisites for the implementation of this task, ensuring the acquisition of relevant knowledge and competencies, which is necessary in the conditions of competition on the global labour market and innovative development of society [3, 5]. For this reason, the credit-modular system of education was introduced and for bachelor's degree of education. It started to work at the Professional Medical College of the IFNMU from 2021.

In accordance with the ECTS principles and standards, syllabuses, new work and study programmes for teaching disciplines in the relevant specialties were developed. All students were explained the structure of the modules, the organization and carrying of seminars and practical classes, as well as the evaluation criteria of knowledge (calculation of points for current performance, final module control).

Since the introduction of the new education system in the higher education institutions of Ukraine, the attitude of specialists of educational field, academic and teaching staff, and students to it is ambiguous. At the moment, obviously it is too early to draw any fundamental conclusions about the effectiveness of ECTS in medical college, but it seems reasonable to conduct an intermediate analysis and compare the positive and negative aspects.

The purpose of the study. To find out and analyse the opinions of students, academic and teaching staff of the department, their attitude and suggestions regarding the introduction of a credit-module system of the educational process organization at the Professional Medical College of IFNMU.

Materials and methods. To achieve the set objectives, we conducted an anonymous survey. Separate questionnaires were drawn up for students and teachers, which included questions about their attitude to teaching disciplines (including Physiology) in accordance with the ECTS principles, its positive and negative aspects, wishes and suggestions for improving the organization of the educational process, and other issues. In total, the questionnaires contained 8 questions for teachers and 16 for students. 86 second-year students of the Professional Medical College (EPP "Nursing" – discipline "Physiology" and EPP "Pharmacy" – discipline "Anatomy with the basics of Physiology") and 15 members of the academic and teaching staff of Physiology department of IFNMU took part in the survey. In some items, there was an opportunity to indicate several options of your vision of a particular item in the questionnaire.

Research results and discussion. The analysis of the survey results showed a significant diversity of students' attitude towards the new teaching system: 39.5 % gave a positive answer, 20.9 % – have a negative perception of this innovation, 30.2 % – indicated a neutral position. 9.3 % of students believe that ECTS needs to be improved. A positive attitude to the proposed rating evaluation system, which is determined by the level of success of each student on the course, was expressed by 51.2 % of the survey participants, 13.9 % – were against it. A significant part (34.9 %) could not decide a specific answer on this

question. Other authors also point to the ambiguity of this position of students [1, 3, 6].

According to the main provisions of ECTS, this system of education is largely focused on independent preparation of students. Therefore, and this question was included in the questionnaire. The prevailing majority of students (72.1 %) consider that the amount of material assigned for independent study is too much, about 14.0 % consider it sufficient, and also 14.0 % gave a 50/50 answer. Our teaching experience shows that the topics for which independent study is provided are not always properly studied by students. To improve the learning process, there are consultation hours- out-of classes, where students together with teacher can discuss unclear questions. However, it should be noted that not enough number of students attend these classes. At the same time, 73.3 % of students believe that enough time is allocated for explaining and discussing unclear questions during practical classes, and only 26.7 % said that this amount is too small. This situation can be explained as follows. A new system of educational process organization is focused on an active, motivated student who can independently master large amounts of information and solve specific tasks together with a teacher. In our opinion, a significant number of students are poorly adapted to the study in a higher school, don't have a sufficient internal motivation, and are not ready to independent learning of the material. Obviously, this is a consequence of the fact that the main approach to the educational process is laid down since from school, where more attention is paid not to independent preparation, but to the review and explanation (with "chewing" of the material) during classes. This implies the need to improve and qualitatively enhance auditorium and extracurricular work with students [1, 6, 7].

An important place among the methodological tools for determining and controlling the quality of preparation for practical classes is occupied by testing. Test tasks have certain advantages: standardization and unification, simultaneous coverage of all students and all the educational material of a particular topic, reduce a time spent by teachers for controlling the student's knowledge. However, standardization should be followed in the design of tests, taking into account the validity, accuracy and objectivity of the questions. 39.5 % of students positively evaluate tests, consider the answers on them to be clear, and the sources of basic literature are sufficient to solve them. At the same time, 60.5 % consider the amount of material in the recommended literature sources to be insufficient for correct answer such questions, and 67.4 % are inclined to think that there is a lack of time during testing (1 minute is allocated to answer one test). The statement that incorrect answers to test items are the result of insufficient student preparation is supported by 37.2 % of respondents, 39.5 % – disagree and 23.3 % answered "not always".

Oral examination remains one of the key methodological tools for controlling the level of knowledge. Only 26.7 % of students agree that precisely during the oral examination of a topic they learn to express their thoughts, analyse, think logically, communicate more, i.e. to be formed as a medical specialist. Negative attitude to this form of knowledge control is expressed by 29.1 % of survey participants, and 44.2 % had a neutral position. It should be noted here that the educational process would be more effective in smaller academic groups (opinion of

about 7.0 % of students), where it is possible to gain more knowledge, discuss key questions in more detail, and master practical skills better. 93.0 % agree with the current number of students in groups (13-15).

Comparing the credit-module system with the previous traditional school system, 59.3 % of students were in favour of returning to the previous, 25.6 % were against it, and 15.1 % were undecided on an answer.

Among the positive aspects of ECTS education mentioned in the questionnaires, the most frequently named are: constant and diverse preparation to classes (34.9 %), high level of professional training (5.8 %), structured discipline into modules and better assessment system (7.0 %), possibility of retaking unsatisfactory grades (11.6%). The last point is considered by 57.0 % of students as an important additional motivation in the credit-module system to improve the level of knowledge from a subject and academic performance (29.1 % share the opposite opinion, 14.0 % are undecided). 40.7 % of respondents do not see any positive aspects of learning in this innovation.

At the same time, the majority of students (53.5 %) named the large amount of material provided by the programme for learning as the main disadvantage of ECTS. Among other disadvantages, some survey participants pointed to the presence of modules (9.3 %) and certain issues of the programme material that are not sufficiently discussed during the practical classes (8.1 %). On the other hand, 22.1 % believe that the new learning system has no negative aspects at all, in contrast to some respondents who are inclined to think that it has only disadvantages (about 7.0 %).

In general, students have a positive (64.0 %) and satisfactory (24.4 %) attitude to the teaching of discipline "Physiology". Among the suggestions for improving the effectiveness of the educational process at our department, the most frequently mentioned in the questionnaires are the following: more explanations of the material of topics during practical classes, less independent study – 19.8 %, reduce the amount of material to be studied – 3.5 %, pay more attention to practical skills – 8.1 %, cancellation of modules – 9.3 %.

Taking into account the fact that under martial law conditions, the educational process often takes place online, we included in the questionnaire a question about the attitude of students, academic and teaching staff to distance form of study. As for practical classes, 38.4 % of respondents have a positive attitude, 48.8 % – negative attitude, and 12.8 % – neutral. The overwhelming majority of students (90.7 %) approve online lectures, while the rest have a 50/50 attitude.

The results of the survey of the academic and teaching staff were quite interesting. All teachers believe that the new system of education has more diverse forms of auditorium and independent work of medical college students compared to the traditional one and increases the motivation of students throughout the all training period (93.3 %). Also, all respondents say that the ECTS increases the objectivity of knowledge assessment, and there are better conditions for identifying and developing students' creative abilities and clinical thinking (86.7 %). 53.3 % of the teaching staff consider all of the above to be advantages of the credit-module system. Almost all respondents agree with the possibility of re-crediting

academic disciplines at the universities of the European space countries under the credit-module system.

Among the main disadvantages of ECTS, the teachers noted the following: insufficient readiness of medical college students to move from passive to active forms of learning – 86.7 %, high expenditure of study time on assessment of student's knowledge, which leads to an increase of the employment of teachers – 46.7 %, an increase the number of students working solely to obtain the required minimum score – 40.0 %, no actual possibility for students for free choosing of disciplines – 46.7 %, lack of a single unified base of test tasks – 26.7 %, too many students in groups – 80.0 %. The majority of the academic and teaching staff believes that insufficient funding and poor material and technical base of the departments do not allow to fully using the credit-module system of education. The data we obtained are consistent with analytical statements in the relevant literature sources [3, 6, 8, 9].

The attitude of teachers towards distance form of learning was actually unidirectional. In terms of online lectures, 80.0 % of respondents expressed a positive opinion, while 20.0 % were against it. With regard to practical classes, the attitude is quite opposite: only 20.0 % support the distance form of this part of the pedagogical process, while the rest do not approve it.

Thus, the analysis of the results of the survey gives the grounds to assert that medical college students are not yet fully prepared to learning on the basis of the credit-module system, the transition from passive to its active forms, where independent and creative work is preferred. In our opinion, in fact, one of the key problematic issues of the credit transfer system of education is that students are not entirely focused on the priority of independent learning of the material of educational programmes and a significant part of extracurricular learning in it. The attitude to a test control as an integral part of the educational process and one of the methods of assessing students' knowledge is ambiguous. There are opinions that testing, to a certain degree, negatively affects the formation of clinical thinking and creative attention of future medical professionals [5, 6].

Conclusions. 1. At the moment, the perception of the credit-modular system of education by the students of the Medical College of IFNMU, their readiness and attitude to it are quite ambiguous with the corresponding positive and negative aspects.

2. Obviously there is a need for further work to improve the training of both students and teachers, optimisation of their cooperation and creation a closer relationship between them.

3. In our opinion, it is necessary, on the one hand, to preserve the positive achievements of the national education system as much as possible, and, on the other hand, to use the experience of European countries effectively. This will create the basis for training a qualified, mobile, creative specialist of the mid-level healthcare.

Prospects for further researches. We consider it appropriate to further study the results of ECTS implementation in the Professional Medical College of IFNMU (at different departments and disciplines). It should be analysed in details the attitude and opinions of students, academic and teaching staff to it. In our opinion, this will help to improve the efficiency of the educational process and,

ultimately, create a good basis for training a qualified mid-level healthcare specialist.

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ПОЧАТКОВИЙ АНАЛІЗ УПРОВАДЖЕННЯ КРЕДИТНО-МОДУЛЬНОЇ СИСТЕМИ ОРГАНІЗАЦІЇ НАВЧАЛЬНОГО ПРОЦЕСУ ТА СТАВЛЕННЯ ДО НЕЇ СТУДЕНТІВ МЕДИЧНОГО КОЛЕДЖУ

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Резюме. Метою дослідження було з'ясування та аналіз думок студентів і професорсько-викладацького складу кафедри фізіології, їхнє ставлення та пропозиції стосовно упровадження кредитно-модульної системи організації навчального процесу у фаховому медичному коледжі ІФНМУ. Для реалізації поставлених завдань проводилось анонімне анкетування. Аналіз отриманих результатів дає підґрунтя стверджувати, що на теперішній час не всі студенти медичного коледжу цілком готові до навчання на засадах Європейської кредитно-трансферної системи, до переходу від пасивних до активних його форм, де надається перевага самостійній та творчій роботі. Більшість студентів вважають занадто великим обсяг матеріалу, який виноситься на самостійне опрацювання. Проте, наш викладацький досвід свідчить про те, що зазначена тематика не завжди належно опрацьовується ними, незважаючи на те, що для цього відведено певні години консультацій в позаурочний час, де студенти разом із викладачем можуть розглянути незрозумілі питання. Також, слід відзначити, що відвідування таких занять є нечисельним. Велика кількість здобувачів освіти, на нашу думку, є недостатньо адаптованими до навчання у вищій школі, не мають достатньої внутрішньої мотивації, не готові до самостійного опрацювання матеріалу. Відповідно можна зробити наступні висновки: а) на сьогодні сприйняття студентами медичного коледжу ІФНМУ кредитно-модульної системи навчання, їх готовність та ставлення до неї є доволі неоднозначними із відповідними позитивними та негативними сторонами; б) очевидно є необхідність подальшої роботи над удосконаленням підготовки як студентів, так і викладачів, потрібна оптимізація їх співпраці та створенням більш тіснішого взаємозв'язку між ними; в) варто, на нашу думку, з одного боку, максимально зберегти позитивні надбання національної системи освіти, а, з іншого, – ефективно використати досвід європейських країн. Це створить основу для підготовки кваліфікованого, мобільного, творчого фахівця середньої медичної ланки.

Ключові слова: упровадження, кредитно-модульна система, навчальний процес, анкетування, фізіологія, викладачі, студенти, медичний коледж.

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