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## TRANSFORMATION OF THE HIGHER MEDICAL EDUCATION SYSTEM IN UKRAINE: REGULATORY AND LEGAL FRAMEWORK AND STRATEGIC GUIDELINES

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The modern reform of the higher education system in Ukraine, in particular in the medical field, is carried out in the context of integration into the European educational space in accordance with the principles of the Bologna Process, WHO standards and regulatory legal acts of the Ministry of Health of Ukraine and the Ministry of Education and Science of Ukraine. [1,2,4]. At the same time, the educational process in higher medical education institutions is facing significant challenges due to the introduction of martial law in Ukraine, which creates additional obstacles to maintaining proper quality. Thus, with the beginning of the full-scale invasion, there was a need to introduce flexible forms of learning, in particular distance education and learning technologies. This is especially true for fundamental disciplines, which are the basis for the formation of professional competencies of future doctors.

Adaptation of the educational process in teaching disciplines of the Department of Medical Biochemistry and Molecular Biology in the context of reforming the education system and martial law requires improvement and updating of methodological support, introduction of digital learning technologies, improvement of the quality of distance education, and effective management of the educational process. This will contribute to maintaining a high-quality level of theoretical and practical training of medical specialists, as well as ensure the competitiveness of graduates of higher medical education institutions (HMEI) of Ukraine at the European and global levels. Over the past decades, the education system of Ukraine has undergone significant changes, caused by both internal modernization needs and external factors, in particular the European integration vector of the state's development.

The most important document in the field of educational policy was the Law of Ukraine "On Education" (2017), which had a framework nature and defined the key principles of the functioning of the entire education system in the country [1]. This Law clearly declares for the first time the principles of academic freedom, institutional autonomy, academic integrity, inclusiveness, and quality assurance of education. It defines levels of education, mechanisms for licensing and accreditation of educational programs, as well as the state's obligations to guarantee access to quality education. The concept of lifelong learning, which is enshrined in this document as one of the key vectors of educational development, deserves special attention.

The Law of Ukraine "On Higher Education" (2014) complements the framework law, which systematizes the legal, organizational and financial principles of the functioning of higher education [4]. This law introduced a number of innovations, including the autonomy of higher education institutions, transparency of accreditation and quality assessment procedures, mechanisms for external independent assessment of applicants' knowledge, etc. It also clearly outlined the rights and obligations of participants in the educational process – students, academic staff (ASP), and administrative staff – which contributes to increasing the efficiency of management of higher education institutions.

In addition, a key role in the implementation of specific reform instruments is played by orders of the Ministry of Education and Science of Ukraine (MES), which regulate admission procedures, the implementation of educational standards, staff certification, and indicators of the quality of educational activities [2]. It is thanks to these by-laws that the provisions of basic laws are implemented in the educational environment of educational institutions.

A significant catalyst for educational reforms in Ukraine was joining the Bologna Process in 2005. As part of this process, a two-cycle system of higher education (bachelor's degree - master's degree) has been introduced in Ukraine, which meets European criteria. There has also been harmonization of educational programs according to the national qualifications framework, which has become equivalent to the European Qualifications Framework. Ukrainian higher education institutions use the ECTS (European Credit Transfer System) system to standardize study load and facilitate academic mobility [3].

Special attention should be paid to the development of internal systems for ensuring the quality of education in higher education institutions, which includes regular evaluation of teachers, participation of applicants in feedback, and transparency of information about educational programs and their results. Additionally, the National Agency for Quality Assurance in Higher Education (NAQAHE) has been established, which plays a key role in the external evaluation of educational programs and accreditation procedures.

Analysis of regulatory documents [6-9] allowed us to summarize the structure of educational levels in Ukraine in comparison with the European model, in accordance with the European Qualifications Framework (EQF) and the National Qualifications Framework of Ukraine (NQF) (Table 1).

EQF (European Qualifications Framework) is a system that helps harmonize qualifications from different countries of the European Higher Education Area. The NQF of Ukraine is built in accordance with the EQF and has 8 levels. After joining the Bologna Process, Ukraine brought its educational levels into line with European standards, particularly in the field of higher education. Therefore, the generalization and comparison of the above results demonstrates the general consistency of the Ukrainian education structure with European standards, which is an important condition for academic mobility, credit transfer and international recognition of diplomas [6].

Education level in Ukraine	Relevant EQF level	Name of educational level	Typical start/finish age	Qualification / Document
Preschool	-	Preschool	3-6 years	Certificate of completion of preschool education (not always)
Overall average education	EQF 3-4	Basic and complete general	6–17 years	Certificate of complete secondary education
Professional pre- higher education	EQF 4-5	Junior Bachelor	17–19 years	Junior Bachelor's or Professional Junior Specialist's Diploma
Bachelor's degree	EQF 6	Bachelor	17–21 years	Bachelor's degree
Magistracy	EQF 7	Master	21-23/24 years	Master's degree
Doctor of Philosophy (PhD)	EQF 8	Doctor of Philosophy	23+ years	Doctor of Philosophy degree (PhD)
Doctor of Science	EQF 8 (partially recognized)	Doctor	30+ years	Diploma of Doctor of Sciences

Table 1. Comparative table of education levels: Ukraine and Europe

The distribution of ECTS credits at each level of education in Ukraine, in accordance with the Bologna system, indicates the harmonization of the Ukrainian education system with European standards, which ensures transparency, compatibility and mutual recognition of qualifications within the European Higher Education Area (Table 2). ECTS credits allow for comparison of educational programs between countries, facilitate academic mobility of students, and are the basis for joint educational programs and the issuance of double degrees. The educational level of Doctor of Science in Ukraine is a unique post-Soviet level that is not part of the Bologna Process, but retains legitimacy in the scientific community. [10-12].

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Table 2. Distribution of ECTS credits in higher education in Ukraine				
Educational level	Duration of study (years)	Study load (ECTS credits)	Qualification document	Notes
Junior Bachelor	2	120	Junior Bachelor's Diploma	Often implemented in colleges/professional institutions
Bachelor	3-4	180–240	Bachelor's Diploma	Most common – 4 years / 240 credits
Master	1-1,5	90–120	Master's Diploma	Most common – 1.5 years / 90 credits
Doctor of Philosophy (PhD)	4	240	PhD Diploma	Includes an educational and scientific program and a scientific component
Doctor of Science	not strictly regulated	-	Diploma of Doctor of Sciences	Not included in the ECTS system; obtained after PhD

Analysis and generalization of the results prove the structured adaptation of the national higher education system to the requirements of the European educational and scientific environment.

At the same time, increasing the competitiveness of Ukrainian universities in the global academic space remains a strategic priority. This requires further adaptation of educational programs to international standards, strengthening academic mobility, expanding English-language courses, and developing the research competencies of higher education students and academic staff.

Thus, the Ukrainian education system is in a dynamic process of reform, based on a strong regulatory framework and focused on integration into the European educational space. The implementation of key provisions of the Laws "On Education" and "On Higher Education", the implementation of the Bologna Process instruments, and the activities of the Ministry of Education and Science as a regulator provide the basis for improving the quality, accessibility, and international attractiveness of Ukrainian education. At the same time, it is necessary to focus efforts on overcoming structural and systemic challenges to achieve sustainable educational development.

Despite the positive dynamics of reforms, the medical education system of Ukraine faces a number of challenges: insufficient funding for higher education institutions and clinical bases; outflow of personnel abroad due to external factors; problems of digitalization of the educational process, which have become more acute during distance learning; insufficient level of simulation training, which is an important component of modern training.

Considering global trends and domestic needs, modern medical education in Ukraine has a chance to become an important element of the European educational space. To this end, it is necessary to continue implementing reforms, particularly in terms of improving the quality of management processes, innovative educational methods, and ensuring equal access to resources in all institutions of higher medical education. Successfully overcoming challenges will create an educational environment that will meet today's requirements and ensure a high level of training for future healthcare professionals.

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