
CREATION OF A MODEL OF A UNIVERSITY CLINIC IN UKRAINE TAKING INTO ACCOUNT EUROPEAN EXPERIENCE: DOCTORS, PEDAGOGICAL AND SCIENTIFIC PERSONNEL

Fedoryshyn O. M., Krychkovska A. M., Yaremkevych O. S.
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INTRODUCTION

The choice of the optimal model of interaction between a higher education institution (HEI) and a clinical base for training and simultaneous service of the student community and teachers of HEIs is today an urgent issue in the reform of the health care and education sectors. Such a reform envisages the compliance of modern clinical health care facilities (HCI) and health care facilities with international standards. European and world experience proves that proper practical training of medical and pharmaceutical personnel takes place precisely on the basis of a university clinic (UC) or a university hospital.

Scientific and pedagogical workers of medical (pharmaceutical) higher educational institutions faced a number of problems. Among them: the impossibility of conducting practical (laboratory) classes in various clinical disciplines with students, interns and trainees on the basis of higher educational institutions; issues of premises belonging to the departments, however, they cannot be converted as quickly with new equipment as the existing practice offices of the clinics; as well as the issue of rent payment, etc.

To solve these problems optimally, it was possible to make changes to the legislation of Ukraine, which will be able to encourage the creation and development of a network of medical centers, hospitals with a clear definition of the mechanism of their financing, by attracting various sources in the conditions of reforming the secondary link of health care.

In order to optimally implement such a model, the legal framework needed improvement: Laws of Ukraine "Basics of the Legislation of Ukraine on Health Care"¹, "On State Financial Guarantees of Medical Services of the

¹ Закон України «Основи Законодавства України про охорону здоров'я» / *Відомості Верховної Ради України (ВВР)*. 2023. № 80. Ст. 293. URL: <https://zakon.rada.gov.ua/laws/show/2801-12#Text> (дата звернення: 29.05.24)

Population"², "On Higher Education"³, "On local self-government"⁴, "On the lease of state and communal property"⁵, the Budget Code of Ukraine⁶, Resolution of the Cabinet of Ministers of Ukraine "Some issues of the electronic health care system"⁷.

The majority of higher education institutions in Ukraine have already created various capacities of UC, but their number is still insufficient at the moment. One of the important positive results of the wide implementation of such a model UC of medical care can be the preservation and further development of medical and preventive facilities (TPF) at the regional level and the improvement of their financing, strengthening of personnel potential and material and technical base.

It will also contribute to the development of scientific cooperation at the regional, national and international levels.

The issue of the creation of the UC is resolved by transferring municipal or departmental hospitals to medical universities on the basis of the Law of Ukraine "On Amendments to Certain Legislative Acts of Ukraine, Regarding the Improvement of the Management System in the Health Care Sector and Provision of Medical Services to the Population" dated December 15, 2021⁸.

The purpose of the work was to study the results and establish the levels of readiness for the introduction of medical (pharmaceutical) clusters created in the higher education institutions of the Ukrainian Academy of Sciences in different regions of Ukraine. For some reason, despite the invasion of the Russian Federation on the territory of our state and the conduct of full-scale aggressive actions by the aggressor, the reform mentioned above continues to be implemented.

² Закон України «Про державні фінансові гарантії медичного обслуговування населення» / *Відомості Верховної Ради (ВВР)*. 2021. № 6. Ст. 52. URL: <https://zakon.rada.gov.ua/laws/show/2168-19#Text> (дата звернення: 29.05.24)

³ Закон України «Про вищу освіту» / *Відомості Верховної Ради (ВВР)*. 2022. № 3. Ст. 10. URL: <https://zakon.rada.gov.ua/laws/show/1556-18#Text> (дата звернення: 29.05.24)

⁴ Закон України «Про місцеве самоврядування» / *Відомості Верховної Ради (ВВР)*. 2023. № 77. Ст. 269. URL: <https://zakon.rada.gov.ua/laws/show/280/97-%D0%B2%D1%80#Text> (дата звернення: 29.05.24)

⁵ Закон України «Про оренду державного та комунального майна» / *Відомості Верховної Ради (ВВР)*. 2022. № 4. Ст. 25. URL: <https://zakon.rada.gov.ua/laws/show/157-20#Text> (дата звернення: 29.05.24)

⁶ Бюджетний кодекс України / *Відомості Верховної Ради України (ВВР)*. 2021. № 52. Ст. 430. URL: <https://zakon.rada.gov.ua/laws/show/2456-17#Text> (дата звернення: 29.05.24)

⁷ Постанова Кабінету Міністрів України «Деякі питання електронної системи охорони здоров'я» / № 315 від 22.03.2024. URL: <https://zakon.rada.gov.ua/laws/show/315-2024-%D0%BF#Text> (дата звернення: 29.05.24)

⁸ Закон України «Про внесення змін до деяких законодавчих актів України, щодо вдосконалення системи управління сферою охорони здоров'я та забезпечення медичного обслуговування населення» / *Відомості Верховної Ради (ВВР)*. 2023. № 2. Ст. 6. URL: <https://zakon.rada.gov.ua/laws/show/1962-20#Text> (дата звернення: 29.05.24)

The research methods were a meta-analysis of publications in the open press, an analysis of the levels of introduction of the reform in various higher education institutions in the territorial regions of the country, and an analysis of the state of the reform at the Lviv Polytechnic National University.

1. Origin and prerequisites for the creation of university clinics

One of the tasks of the work was a historical retrospective of the idea of introducing the UC and creating a regional cluster form of training for medical (pharmaceutical) students. It should be noted that the experience of such training has been widely developed in France (Montpellier), on the territory of which there are a number of clinics, medical centers, and other healthcare facilities, where students of medical (pharmaceutical) education not only from France, but also from other countries of the world.

Regarding the retrospective of this issue in our country, on the basis of the cooperation agreement and in accordance with the Order of the Ministry of Health (MoH) of Ukraine No. 174 of 09/06/1997 "On the approval of the Regulation on the clinical health care institution"⁹ the interaction of HEI with medical institutions in Ukraine was based on the placement of clinical departments on the territory of hospitals and the conduct of medical, advisory and diagnostic work by employees. In connection with the adoption of the Laws of Ukraine "On Amendments to Certain Legislative Acts of Ukraine Regarding the Improvement of Legislation on the Activities of Health Care Institutions"¹⁰ and "On State Financial Guarantees of Medical Services of the Population"², the autonomy of many communal health care facilities took place with their further transformation into communal non-commercial enterprises.

According to legislative and regulatory acts, the Central Committee must not be a structural unit of the Higher Education Institution. According to the European experience, the university and the UC have different subordination, as well as different sources of funding, cooperation between them is regulated by cooperation or integration agreements, which is extremely important in the conditions of insurance medicine. Usually, universities are state-owned, and medical institutions, as a rule, are communal. Therefore, in order to create the HEI, a special legislative framework is needed, and this way, according to the authors, could simplify the existence of a mandatory health insurance system in Ukraine.

⁹ Наказ «Про затвердження Положення про клінічний заклад охорони здоров'я» / *Міністерство охорони здоров'я України*. 1997. № 174.

¹⁰ Закон України «Про внесення змін до деяких законодавчих актів України щодо удосконалення законодавства з питань діяльності закладів охорони здоров'я» / *Відомості Верховної Ради (ВВР)*. 2017. № 21. Ст. 245. URL: <https://zakon.rada.gov.ua/laws/show/2002-19#Text> (дата звернення: 29.05.24)

Until now, in Ukraine, the most widespread option for cooperation between health centers and medical institutions was the placement of clinical departments on the territory of the hospital and the conduct of medical, advisory and diagnostic work by employees on the basis of a cooperation agreement in accordance with the Order of the Ministry of Health of Ukraine No. 174 dated September 6, 1997 "On the approval of the Regulation about a clinical healthcare institution"⁹.

As already mentioned by the authors above, in connection with the adoption of the Laws of Ukraine "On Amendments to Certain Legislative Acts of Ukraine Regarding the Improvement of Legislation on the Activities of Health Care Institutions"¹⁰ and "On State Financial Guarantees of Medical Services of the Population"² the autonomization of the majority of communal health care facilities and their transformation into communal non-commercial enterprises took place, which should become an achievement and a principle for the sustainable development of social guarantees for the country's population.

The creation of the Medical Center is a priority of the state, because the hospital can become not only a clinical base for the training of students, interns, and cadets, but also will provide highly specialized medical (pharmaceutical) assistance and will be able to receive additional funding by signing an agreement with the National Health Service of Ukraine.

The strategy of the development of the field of health care and state policy is the creation of such hospitals. The experience of other EU countries, in particular the Republic of Poland, shows that medical institutions are the most progressive medical institutions. Such medical institutions are designed not only to treat the patient, but also to provide an opportunity for all categories of medical education seekers to attend clinical departments. So, this is an extremely important step, since the UC will undoubtedly provide a better basis for training students, interns and trainees.

The possibility of implementing joint projects with foreign colleagues opens up greater opportunities for the UC, because it is not only about the education of students, but also a practical-scientific institution that gives the opportunity to teachers as scientific and pedagogical workers to conduct scientific research.

It should be noted that the HEI are dependent on the managers, and the communal HCL are dependent on the managers of the HEI, however, these partnerships are necessary for development.

In such conditions, scientific-pedagogical workers of HEI faced a number of problems: the impossibility of registration in the electronic health care system e-Health, which led to the impossibility of performing medical work; impossibility of conducting full practical classes in clinical disciplines with students, interns and trainees; the issue of renting premises occupied by departments and paying for communal services arose.

Therefore, it was and remains an urgent need to introduce changes to the legislation of Ukraine that would encourage the creation and development of a network of medical centers and hospitals, with a clear definition of the mechanism of their priority financing from various sources in the context of reforming the secondary health care sector. Such a mechanism would allow to optimally solve this problem.

The Ukrainian legal framework needs to be improved for the optimal implementation of this model of the HEI. Today, the main regulatory legal acts are the Laws of Ukraine "Basics of the Legislation of Ukraine on Health Care", "On State Financial Guarantees of Medical Services of the Population", "On Higher Education", "On Local Self-Government", "On Lease of State and Communal Property ", Budget Code of Ukraine, Resolution of the Cabinet of Ministers of Ukraine "Some issues of the electronic health care system"¹⁻⁷.

The majority of HEI in Ukraine, hospitals of various capacities have already been created, but their number of hospitals is currently insufficient and does not fully meet all the needs of higher medical (pharmaceutical) education.

One of the important positive results of the wider introduction of such a model of UC is the improvement of their financing and strengthening of personnel potential, as well as the material and technical base.

All of the above will contribute to the development of scientific cooperation at the national and international level.

2. University clinic as a unit of a medical university: academic traditions and innovative technologies

We collected from Internet sources information about the HEI, which were created in various domestic higher education institutions

According to the order of the Cabinet of Ministers, Danylo Halytsky Lviv National Medical University received its own UC, which initiated the legal procedure of the hospital's transfer from the Department of the Ministry of Infrastructure to the sphere of the Ministry of Health. For to start the reorganization process and to implement the Government's order, a liquidation commission was created in the Ministry of Infrastructure of Ukraine together with Ukrzaliznytsia, and the Ministry of Health worked out changes to the resolution on the provision of services and created a commission to accept the hospital's property, thereby giving the opportunity to the UC to contract under the medical guarantee program. For its part, Danylo Halytsky Lviv National Medical University, by decision of the Academic Council, created a separate structural unit "University Hospital" and carried out all procedures for its registration¹¹.

¹¹ Наказ «Про затвердження Статуту Львівського національного медичного університету імені Данила Галицького (нова редакція)» / *Міністерство охорони здоров'я*

According to the experience of foreign countries, it can be stated that the UC is the most progressive health care system, that is why it is a priority of the state. Such changes are due to the strategy of the development of the health care industry and state policy. Because the UC is designed not only to treat the patient, but also created so that all students of education have the opportunity to actually clinically pass the clinical departments. This will provide a better basis for training students, interns.

According to the Resolution of the Cabinet of Ministers of Ukraine (CMU), which was published and entered into force under No. 1026 of September 12, 2023 "Some issues of the implementation of the Framework Agreement between the Government of Ukraine and the Government of the Republic of Austria on economic cooperation in the development of projects" National University of Health Care of Ukraine named after P.L. Shupyka is the customer of Ukraine's first new-type UC¹². According to the Resolution, the customer of the Project "Construction and equipment of a modern university clinic in Kyiv or Lviv" will be able to receive a UC. This resolution also approved the Procedure for the use of funds provided for in the state budget under the budget program "Construction and modernization of health care facilities". In accordance with clause 3, the authorized customers for the Projects specified in Annex 1 to the Framework Agreement are: National Children's Specialized Hospital "Okhmatdit" of the Ministry of Health – under the project "Construction (reconstruction) and equipment of the National Children's Specialized Hospital "Okhmatdit" in Kyiv; National University of Health Care of Ukraine named after P.L. Shupyka – under the project "Construction and equipment of a modern UC in Kyiv or Lviv"; Lviv National Medical University named after Danylo Halytskyi – under the project "National Rehabilitation Center of Ukraine in Lviv".

In Lviv National Medical University (LNMU) named after Danylo Halytskyi, under the project "National Rehabilitation Center of Ukraine in Lviv", it is planned to open a department of reconstructive, restorative surgery and rehabilitation and prosthetics, which is extremely necessary during the period of martial law in Ukraine. LNMU is also completing the licensing of new educational programs: therapy and rehabilitation, and considering the possibility of training specialists such as orthotists-prosthetists, active cooperation with international partners is taking place, which gives significant results (Ukrainian – Swiss project: second phase – August 2023). A memorandum on cooperation with the Vienna Medical University was also

України. 2015. № 803. URL: <https://zakon.rada.gov.ua/rada/show/v0803282-15#Text> (дата звернення: 29.05.24)

¹² Постанова Кабінету Міністрів України «Деякі питання реалізації Рамкової угоди між Урядом України та Урядом Республіки Австрія про економічне співробітництво у розвитку проєктів» / № 1026 від 12 вересня 2023 р. URL : <https://zakon.rada.gov.ua/laws/show/1026-2023-%D0%BF#Text> (дата звернення: 29.05.24)

signed, and the procedure for selecting the best students for internships and internships in the summer is being completed. LNMU is still cooperating with partners from the federal state of Saarland (People's Republic of France), who donated an operating table and a surgical lamp to the university. An internship agreement was signed with Warsaw University.

International cooperation at LNMU is actively developing to address the main strategic directions of the university's development: the creation and development of the UC, licensing of new educational programs, and international cooperation. The Medical Center at LNMU has an approved hospital staff according to the legal procedure. Decisions regarding the development strategy of the UC will be made and implemented together with representatives of rectors, deans, departments with the involvement of the hospital's medical staff.

The main administrator of budget funds and the responsible executor under the budget program "Construction and modernization of health care facilities" is the Ministry of Health. In general, the Ministry of Health of Ukraine supports the proposal to transfer the clinical hospital of the Lviv railway under the management of the Lviv National Medical University named after Danylo Halatskyi for the creation of a hospital on its basis.

In the city of Odesa, the idea of organizing the UC belongs to the rector of Odesa National Medical University (ONMedU), Academician V.M. Zaporizhia. In a relatively short period of time, the UC ONMedU turned into a modern, progressive higher education institution, which fully corresponds to the strategy of Ukraine's integration into the European space and the reform of higher medical (pharmaceutical) education. The UC model proposed by them made it possible to unite the best medical, pedagogical and scientific personnel under one roof. The Center for Reconstructive and Regenerative Medicine (UC ONMedU) was established on January 1, 2004, and, precisely for this purpose, in accordance with the order of the Cabinet of Ministers of Ukraine, the UC was created for the first time in the country as a division of Odesa State Medical University, and the very project of its creation became pilot for the whole country.

The majority of leading scientists and practitioners in the field of health care of Ukraine support the medical reform of the system. An effective personnel policy in the field of health care is an important tool for reforming the medical sector, since the quality and availability of medical (pharmaceutical) assistance to the population of the country depend on the level of provision of health care institutions with medical workers and their professional level¹³.

¹³ Розпорядження Кабінету Міністрів України «Про утворення навчально-науково-лікувального комплексу – університетської клініки Одеського державного медичного університету» / від 12 березня 2003 року N 127-р (127-2003-р) URL : <https://zakon.rada.gov.ua/rada/show/v0433282-03#Text> (дата звернення: 29.05.24)

The role of medical higher education institutions in reforming the health care system of Ukraine is a combination of education, practical medicine (treatment work) and science (development of new methods and means of treatment). Special attention should be paid to the training of highly qualified general practitioners of family medicine.

The progress of the reform in the pilot regions highlighted an important problem that concerns medical universities – the development of the primary level of medical care and the training of family doctors. Universities prepare general practitioners, but after internship they receive a specific specialization – surgeon, therapist, psychiatrist, etc. The family doctor undergoes a four-month accelerated retraining course, and this does not solve the problem either quantitatively or qualitatively. Therefore, it is necessary to consider the question of specialization in an internship after the graduates have worked for two or three years as family doctors. Such a system is already proving its effectiveness.

A modern medical university, unlike a classical one, is an educational scientific and practical complex that not only has several faculties and institutes, but also relies on clinical bases. Only under this condition can he provide training and retraining of highly professional specialists in the field of medicine and pharmacy, capable of providing primary, secondary and highly specialized medical and preventive care.

The National Medical University named after O. Bogomolets is the basic higher education institution for coordination and implementation of the principles of the Bologna system in higher medical education of Ukraine. He is also the head of educational and methodical work among medical higher education institutions of III-IV levels of accreditation. The university prepares specialists for practical health care at the undergraduate stage in two areas and seven basic specialties and at the postgraduate stage in 35 specialties. The training is carried out taking into account the needs of all regions of Ukraine: students are enrolled from all regions, a large part of graduates are sent to work in rural areas. This is a concrete participation of the university in reforming the health care system.

Medical training for each region has its own specifics. Ternopil and Ivano-Frankivsk regions are dominated by rural residents, while Zaporizhzhia and Dnipro are large industrial centers, the population of which is subjected to a huge environmental burden. All higher education institutions are obliged to respond to the needs of our regions, taking into account acute shortages, for example of dentists. Such needs are constantly changing, the problem of the shortage of laboratory doctors is being solved by opening a master's degree for bachelors in laboratory diagnostics.

The creation of medical institutions and hospitals in Ukraine is an urgent requirement of time and standards of the World Federation of Medical Education for the training of doctors. These should be medical associations of

a new type on the basis of multidisciplinary regional clinical treatment and prevention institutions. Positive examples of such work are at O. Bogomolets National Medical University (Kyiv), Odesa National Medical University, Zaporizhzhia State Medical and Pharmaceutical University, Dnipro State Medical Academy.

Therefore, the future of medical (pharmaceutical) higher education institutions is closely related to the UC and will allow to combine the training and retraining of personnel, scientific research and the provision of highly qualified specialized medical (pharmaceutical) assistance to the population. It should be a basis for high-quality training of young specialists, primarily in the surgical field, for the introduction of modern technologies and new directions of medicine.

Unfortunately, higher education institutions cannot yet abandon the bases of medical institutions that house clinical departments. However, the equipment of health care facilities often does not meet modern requirements, so it is impossible to train the doctor (pharmacist) of tomorrow on such equipment and technologies of yesterday. The future of medical (pharmaceutical) education is based on powerful complexes that will unite under one roof highly qualified university professors and teaching staff, modern medical and diagnostic health care facilities – UC and the relevant research base.

The development of medical education and science can only be implemented in parallel with the functioning of modern medical institutions, which will create conditions for the diagnosis and treatment of complex diseases. They will become not only a clinical base for the training of students, interns, and cadets, but will also provide highly specialized (tertiary) care and will have regional status (for 3–5 regions). This requires priority funding from state authorities.

The network of medical (pharmaceutical) universities can fully provide the training of personnel necessary for the country's health care system. However, in order to overcome the shortage of personnel, the state must implement a number of measures: optimize the network of medical institutions, reduce financial barriers on the way to the necessary medical services, and give preferences to doctors working in rural areas.

The Management Board of the National University "Lviv Polytechnic" was created in accordance with the resolution of the City Council No. 3122 dated 03.22.2018 "On the termination of the Tenth City Hospital of Lviv by transformation into a communal non-commercial enterprise Tenth City Hospital of Lviv"¹⁴. Since 25.07.2018, the Tenth City Hospital of Lviv has

¹⁴ Ухвала Про припинення Десятої міської лікарні м. Львова шляхом перетворення у Комунальне некомерційне підприємство «Десята міська лікарня м. Львова» / № 3122 від 22.03.2018 р. URL : [https://www8.cityadm.lviv.ua/inteam/uhvaly.nsf/\(SearchForWeb\)/7EFDA97B4CF85B5C225825900450E84?OpenDocument](https://www8.cityadm.lviv.ua/inteam/uhvaly.nsf/(SearchForWeb)/7EFDA97B4CF85B5C225825900450E84?OpenDocument) (дата звернення: 29.05.24)

been operating as a Communal Non-Commercial Enterprise "The Tenth City Hospital of Lviv". The activity of HCL is directed at preventive and curative medical care for student youth and professors and teaching staff of Lviv Higher Education Institutions, namely: Lviv Polytechnic National University, Ivan Franko National University and University of Banking. As a medical institution, the hospital was founded in 1946. The hospital is located in one of the most picturesque corners of the city of Lviv, on the territory of the student town at 14 Boi – Zhelenskogo street. Nearby are the Park of Culture and Recreation named after B. Khmelnytskyi and Stryi Park. The hospital includes a polyclinic department and a day hospital. Until 2018, the hospital included two polyclinic departments, a 24-hour hospital and a day hospital.

The administration of the Tenth City Hospital of Lviv is constantly working on improving the institution, improving the sanitary and epidemic condition of the hospital premises. With the efforts of the hospital administration, led by the chief doctor, the offices and office premises of the hospital are being repaired, the furniture and medical equipment of the institution are being renewed. Students of all university faculties undergo periodic medical examinations, and emergency assistance is also provided to employees of the above-mentioned higher education institutions. According to the medical reform, which began in 2018, the population of the city of Lviv, who lives at a short distance from the institution or wishes to receive medical assistance in the Medical Center, concludes declarations with doctors – therapists and applies for medical help to the following doctors – specialists: a surgeon, a neurologist, otolaryngologist, ophthalmologist, dentist, obstetrician-gynecologist, procedure room, clinical-diagnostic laboratory, X-ray room.

Doctors of all specialties conduct explanatory work among student youth regarding the need for medical examinations; measures for propaganda and formation of the ideology of a healthy lifestyle are widely implemented. The hospital is equipped with modern medical equipment. At the service of patients there are offices for ultrasound diagnostics, X-ray and fluorography rooms, a clinical laboratory. In the ultrasound diagnostics (USD) room, patients have the opportunity to examine all organs of the abdominal cavity and thyroid gland using newly purchased modern equipment.

The presence of fluorography and X-ray rooms in the institution enables patients to undergo fluorography and X-ray examinations, which is extremely important for early detection and prevention of lung diseases.

In order to ensure access of HIV-infected persons to dispensary observation, provision of specialized medical care, prevention and fight against AIDS, the office "Trust" and the office "Clinic, friendly to youth" were created in the institution. These offices provide an opportunity to conduct counseling and testing of student youth who have applied for the services of voluntary counseling and testing for HIV infection. Blood sampling for the

HIV test is carried out directly in the health center after receiving the informed consent of the person being consulted.

At the Lviv Polytechnic National University twice a year (March – April, November – December) according to the order of the rector, the doctors of the health center hold lectures for students and teachers in the student auditoriums, which are aimed at preventing the incidence of Covid-19, tuberculosis, chronic lung diseases, prevention of HIV/AIDS, prevention of viral hepatitis, prevention of sexually transmitted diseases, prevention of diseases such as hypertension, ARVI, influenza, measles, etc. Therefore, based on the results of the work of the studied health care center, it is possible to conclude that the level of medical care and preventive work among students of the health care center is sufficiently high.

Taras Shevchenko University of Kyiv National University (KNU) is a health center and a medical-educational-scientific structural division of the University. UC KNU was established in 2017 in accordance with the resolution of the Academic Council of Taras Shevchenko Kyiv National University dated 16.01.2017 and the order of the Rector dated 08.12.2017 on the basis of the sanatorium-prophylactic of the University, located in a picturesque corner student town, where the vast majority of university students study and live in dormitories¹⁵. The tradition of UC in KNU has existed since the founding of the Faculty of Medicine in 1841. At the end of the 19th century, 4 faculty and 3 hospital clinics, 2 clinical departments at the city hospital operated at the University. Today, the Medical University of KNU carries out its activities in accordance with the license obtained by the University from the Ministry of Health of Ukraine for conducting medical practice in 22 specialties. It also serves as a clinical base for student training Educational and Scientific Center "Institute of Biology and Medicine" University, studying in the specialty 222 Medicine.

The modern course of Ukraine for European integration and the compliance of higher medical education with international standards determines the relevance of the question of the role of the UC in the development of higher medical education. A medical (pharmaceutical) university cannot develop if it does not have its own clinical base. Each higher education institution can choose its own model and follow the path it chooses.

UC provides almost a full range of high-quality medical services both to employees of higher education institutions and to the public.

Taras Shevchenko Kyiv National University has also joined the network of already established and operating UCs of other higher education institutions (medical and non-medical fields) and is actively developing the activities of UCs. The main purpose of its activity is to provide primary, secondary, and

¹⁵ Ухвала Вченої ради Київського національного університету імені Тараса Шевченка / Наказ Ректора від 08.12.2017 р. URL: <https://studmisto.knu.ua/> (дата звернення: 29.05.24)

later tertiary medical care to University employees and the population. The staff of the clinic includes 33 highly qualified specialists, the vast majority of whom have an academic degree and a higher medical category – a surgeon, a neurologist, a dentist, an ophthalmologist, a dermatologist, a gynecologist, an ultrasound diagnostician, and family medicine doctors.

In October 2019, a scientific research center (SRC) was established Department of Psychiatry of the Taras Shevchenko National University of Kyiv, which provides psychiatric and psychological assistance, promotes the development of the scientific activity of the university. The clinic's development strategy involves the introduction of medical insurance (corporate medical insurance), paid medical services, conducting scientific research, practical classes for students and future scientists of the university, developing innovative projects and implementing them in the medical field.

Private health care facilities are provided better than public health care facilities because they receive full funding¹⁶. However, if we restrict training under a contract, the material base of universities will finally be destroyed, the teaching staff will be reduced, and scientific schools and long-standing traditions will be destroyed. Each university has a licensed volume of students. The fact that the state can afford to quantitatively form state orders, accordingly, it finances. According to statistics, there is a shortage of almost 75,000 medical workers in Ukraine. To eliminate this deficit, more than eight years are needed, provided that all graduates arrive at their destination. Most of the graduates who are sent to the villages do not stay there due to lack of housing, underdeveloped infrastructure, etc. There is a proven model in the world, the so-called grant system. The recruiter concludes an agreement with the applicant, according to which, after completing the vocational training, the young specialist undertakes to work for a certain period of time at the HCL or return the funds to the state. State procurement should take into account the need for medical (pharmaceutical) personnel in general, as well as the prospects for the development of the industry.

Education support for students with special educational needs exists in all developed countries of the world. In accordance with international norms and standards, higher education institutions of Ukraine strive to ensure equal access to education for all students with disabilities, which is part of the mission of the Ukrainian Academy of Sciences.

¹⁶ Комар А.В., Кричковська А.М., Заярнюк Н.Л., Хоменко А.І. Методологія оплати праці в державних закладах охорони здоров'я. *Фармацевтичний часопис : науково-практичний журнал*. 2016. № 4(40). С. 38–43. URL: <http://www.tdmu.edu.te.ua/farmchas/sndex.php>. (дата звернення: 29.05.24)

CONCLUSIONS

The choice of the optimal model of interaction of higher educational institutions and the clinical base for training and simultaneous service of students and employees of higher education institutions, the population living in the administrative territory is currently an urgent issue in the reform of the health care and education sectors.

The development of higher medical (pharmaceutical) education in modern conditions is based on solving the problem of interaction of higher education institutions with clinical bases, in particular, the creation of medical centers and hospitals, which will contribute to the further improvement of the quality of medical care for students, employees of higher education institutions and the population.

In many medical (pharmaceutical) higher education institutions of Ukraine, active work is being carried out to reorganize existing student health centers in UC by attracting ideas and funds received within the framework of international projects and grants, as well as with the support of the health care system reform by the country's government.

The adoption of European experience in the creation and functioning of the Medical College is a future development strategy for higher medical (pharmaceutical) education in the war and post-war periods of our country.

In accordance with international norms and standards, with the creation of the UC, support for the education of students with disabilities in higher education institutions is also implemented, which will ensure equal access to education for all students with special educational needs.

SUMMARY

In the first chapter of the monograph article "Emergence and prerequisites for the creation of university clinics" retrospectively elaborated normative legal acts, according to which health centers were created, serving the contingent of students of several or one higher education institution. It has been established that the majority of higher education institutions in Ukraine have already created UCs of various capacities, but their number is currently insufficient and does not fully meet all the needs of higher medical (pharmaceutical) education.

In the second chapter of the monograph article "The University Clinic as a unit of the Medical University: academic traditions and innovative technologies" a meta-analysis of Internet sources was carried out regarding the prospects for the creation of UC in various higher education institutions of

Ukraine and the opinions of leading scientists-experts in the medical (pharmaceutical) field on the issue of UC were processed.

It has been established that the process of creating university clinics and hospitals in Ukraine is irreversible and has state and political support. A large and multidisciplinary hospital must create all the opportunities for training and research in a powerful UC, and today the issue of their creation can be solved by transferring communal or departmental hospitals to medical (pharmaceutical) universities.

The adoption of European experience in the creation and functioning of the Medical College is a future development strategy for higher medical (pharmaceutical) education in the war and post-war periods of our country. Successful development of a network of Ukrainian universities and training of competitive specialists in the absence of an own clinical base for training is impossible. The transfer of clinical hospitals under the management of HEI will contribute to optimizing the training of medical (pharmaceutical) personnel and will serve as a clinical base for student training.

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Information about the authors:

Fedoryshyn Olha Mykolayivna,

<https://orcid.org/0009-0002-3113-8243>

Candidate of Technical Sciences,

Assistant at the Department of Technology of Biologically

Active Compounds, Pharmacy and Biotechnology,

Lviv Polytechnic National University

12, Stepana Bandery str., Lviv, 79013, Ukraine

Krychkovska Aelita Myronivna,

<https://orcid.org/0009-0006-0783-7059>

Candidate of Pharmaceutical Sciences,

Associate Professor at the Department of Technology of Biologically

Active Compounds, Pharmacy and Biotechnology,

Lviv Polytechnic National University

12, Stepana Bandery str., Lviv, 79013, Ukraine

Yaremkevych Olena Svyatoslavivna,

<https://orcid.org/0000-0001-7621-2200>

Candidate of Biological Sciences,

Associate Professor at the Department of Technology of Biologically

Active Compounds, Pharmacy and Biotechnology,

Lviv Polytechnic National University

12, Stepana Bandery str., Lviv, 79013, Ukraine