

I.M. Pelo,
T.D. Reva,
I.V. Nizenkovska,
N.D. Kozak,
L.V. Konovalova

TRENDS IN THE PROFESSIONAL TRAINING OF PHARMACY SPECIALISTS IN UKRAINE

*Bogomolets National medical university
T. Shevchenko boul., 13, Kyiv, 01601, Ukraine
Національний медичний університет імені О.О. Богомольця
бул. Т. Шевченка, 13, Київ, 01601, Україна
e-mail: i.pelo@ukr.net*

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Abstract. Trends in the professional training of pharmacy specialists in Ukraine. Pelo I.M., Reva T.D., Nizenkovska I.V., Kozak N.D., Konovalova L.V. The article identifies and characterizes the leading trends in the development of the pharmaceutical industry in Ukraine, namely: observance of ethical principles of work of the expert of pharmaceutical industry; a focus on European standards for the quality of pharmaceutical services; development of a national system for the production of medicines. Emphasis is placed on the fact that the teachers of the University have a goal to convey to students ideas that are important for forming the humanistic foundations of a pharmacist's work. The initial instruction, according to the authors, is to provide each participant of the educational process with the conditions for self-realization in learning and future professional activity. At the same time, in the formation of the content of pharmaceutical education a deep understanding of the value of a person's health is the highest personal and social value. It is noted that an integral characteristic of the modern development of pharmacy in Ukraine is its dependence on imported medicines. During the educational process at the Faculty of Pharmacy of O.O. Bogomolets National Medical University, students and teachers believe that in Ukraine there are a number of prerequisites for overcoming the dependence of the domestic pharmaceutical market on imported medicines, namely: Ukraine has joined the International System of Cooperation of Pharmaceutical Inspections; the country has created a system of registration of medicines and adopted an international format of registration dossier; the State Pharmacopoeia of Ukraine was developed and put into operation; mandatory requirements for compliance with the rules of Good Manufacturing Practice and Good Distribution Practice were introduced; to the licensing conditions for the production and sale of medicines in Ukraine European recommendations regulating the development and research of medicines have been adapted and updated.

Реферат. Тенденции профессиональной подготовки специалистов по фармации в Украине. Пельо И.М., Рева Т.Д., Ниженковская И.В., Козак Н.Д., Коновалова Л.Д. В статье определены и охарактеризованы ведущие тенденции развития фармацевтической отрасли Украины, а именно: соблюдение этических принципов работы специалиста фармацевтической отрасли; ориентированность на европейские стандарты качества предоставления фармацевтических услуг; развитие национальной системы производства лекарственных препаратов. Сделан акцент на том, что преподаватели университета ставят перед собой цель донести до студентов идеи, важные для формирования у них гуманистических принципов работы фармацевта. Исходящей установкой, по мнению авторов, является обеспечение каждому участнику образовательного процесса условий для самореализации в учебе и будущей профессиональной деятельности. При этом сквозным в формировании содержания фармацевтического образования является глубокое понимание ценности человека и его здоровья как наивысшего личного и общественного достояния. Отмечено, что неотъемлемой характеристикой современного развития фармации в Украине является ее зависимость от лекарственных средств импортного производства. Во время образовательного процесса на фармацевтическом факультете Национального медицинского университета имени А.А. Богомольца студенты и преподаватели размышляют над тем, что в Украине есть ряд предпосылок для преодоления зависимости

отечественного фармацевтического рынка от лекарственных средств импортного производства, а именно: Украина присоединилась к Международной системе сотрудничества фармацевтических инспекций; в стране создана система регистрации лекарственных средств и принят международный формат регистрационного досье; разработано и введено в действие Государственную Фармакопею Украины; в лицензионные условия для производства и реализации лекарственных средств в Украине было введено обязательные требования по соблюдению правил Надлежащей производственной практики (Good Manufacturing Practice) и Надлежащей дистрибьюторской практики (Good Distribution Practice), адаптированы и актуализированы европейские рекомендации, регламентирующие разработку и исследования лекарственных средств.

The rapidly evolving processes of civilization and changing aspects of the world, states, individuals and humanity in general highlight the need to solve a number of problems, among which the most pronounced is the protection and preservation of health in the personal, national and global dimensions. In this context, the key factor in its solution is to improve the quality of training of healthcare professionals, including the pharmaceutical industry.

The aim is to identify and characterize the leading trends in the professional training of pharmacy specialists.

It should be noted that our initial research position is based on the concept that the trends in the training of pharmacy specialists in Ukraine are determined by the requirements for the training of competitive specialists for the labor market in this field.

The new challenges facing the modern system of professional training of future masters of pharmacy in the system of modern pharmaceutical education in Ukraine are associated with complex and ambiguous approaches to reforming this industry throughout the period of formation and development of independence of our state. A significant scientific contribution to the study of theoretical and applied aspects of public health and training of future professionals for the introduction of health protection technologies in the field of education was made by V. Bobrytska [4, 5]. Theoretically significant for our study are the scientific works on the elaboration of various aspects of the development of pharmaceutical education which were carried out by I. Bulakh, I. Zupanets, A. Kotvytska, Z. Mnushko, I. Nizhenkovska, T. Reva, V. Chernykh and others.

The analysis of the "Concept of development of the pharmaceutical sector of the healthcare of Ukraine" created a scientific basis for understanding the promising areas and objectives of the pharmaceutical industry of Ukraine defined in the document, namely: 1) development of regulatory framework governing pharmaceutical activities; 2) formation of national policy in the pharmaceutical sphere; 3) determination of social priorities in providing the population with medicines; 4) intro-

duction of effective and high-quality pharmacotherapy and prevention of diseases [3].

Generalization of information sources [1, 2], own long-term experience of training of future pharmacists made it possible to identify the leading trends in the development of the pharmaceutical industry of Ukraine, among which we highlight the following:

1. Adherence to the ethical principles of work of a specialist in the pharmaceutical industry.
2. Focus on European quality standards for pharmaceutical services.
3. Development of the national system of drug manufacturing.

Let us briefly describe certain trends.

1. Adherence to the ethical principles of the specialist as a modern trend in the development of the pharmaceutical industry.

The starting point for characterizing this trend is the conclusion that the requirements of society and the state to train competitive, mobile, competent pharmacists are caused by the fact that pharmacists, pharmacists-in-charge, clinical pharmacists are the link that should ensure positive societal changes in the assessment of the role and place of pharmacy in the national health care system and the national security of the state.

We share the opinion of G. Ubogov that in recent years there has been a deterioration in the situation regarding the observance of moral and ethical norms by health care workers [6]. The scientist believes that this is due to the general spiritual and socio-economic crisis in Ukrainian society, the insufficient level of formation of the system of professional self-government, and the lack of a mechanism to promote the implementation and observance of codes of ethics of health care workers that must have been spelled out in legislative and by-laws of Ukraine.

The Faculty of Pharmacy of O.O. Bogomolets National Medical University has a positive experience of training pharmacists and masters of pharmacy on ethical principles. Lecturers of the faculty systematically improve the educational and methodological support of the educational process of

specialist training in a modern medical university, search for pedagogical innovations. The initial guideline remains important and inviolable – to provide each participant of the educational process with conditions for self-realization in education and future professional activity. At the same time, a deep understanding of the value of a person and his/her health as the highest personal and social heritage is pervasive in the content of pharmaceutical education. Thus, in our opinion, the humanistic goal of training a graduate of a higher pharmaceutical educational institution is realized. Teachers of the Faculty of Pharmacy of Bogomolets National Medical University seek to convey to students the ideas that are important for the formation of humanistic principles of pharmacist's work:

1. Modern pharmacy, at first glance, allegedly closes the supply chain and is actually at the top of the pyramid called "Pharmacy".

2. For consumers of services, the pharmacist is the "face" of the institution, and it is he who is responsible for providing qualified pharmaceutical care to the population.

3. A person who visits a pharmacy needs qualified consultation from a pharmacist, and sometimes sympathetic conversation and ethical complicity to the health problems of his and his relatives.

2. Focus on European standards as a current trend in the training of pharmacists.

This is primarily associated with the quality of customer service, increasing social responsibility to society for the effectiveness of public health services, compliance with the ethics of the pharmacist in marketing and communication with people who need the advice of professionals pharmacists.

It should be noted that the professional training of pharmacists (pharmacists-in-charge) in the countries of the European Union (EU) takes into account the peculiarities of the European pharmaceutical legal framework. The main forms of legal regulation in our country are decrees of the President of Ukraine, resolutions of the Cabinet of Ministers, acts of central government and local government, orders, as well as international standards of pharmaceutical activity (Good practices recommended by WHO and EU and actively implemented in Ukraine).

Trends in the development of the pharmaceutical industry of Ukraine in the late XXth – XXIst century were determined, first of all, by the fact that during the formation and progress of the country as an independent state, significant adjustments were made to the model of development of the phar-

maceutical industry: there was a significant reduction in the range and volume of pharmaceutical production [2]. One of the reasons for the decrease in production at chemical and pharmaceutical enterprises was the lack of raw materials in Ukraine, as only a small part of the total range of drugs included in the list of important and vital medicines was produced by the domestic enterprises. In Ukraine, there was no production of drugs in the form of gels, adhesive plasters, capsules, suppositories, transdermal therapeutic systems.

3. Development of the national system of drug manufacturing as a trend in the training of future pharmacists.

The leading trend in the development of the pharmaceutical industry in the first decade of the XXI century, which is manifested now and is projected in the future, is the increase in the number of imported drugs in the domestic pharmaceutical market. Therefore, an integral feature of the modern development of pharmacy in Ukraine is its dependence on imported drugs. According to experts, significant reserves for the replacement of imported drugs are in cardiology (63%), anesthesiology and resuscitation (61%), rheumatology (60%), hematology (32%), urology and andrology (31%), ophthalmology (30%), obstetrics and gynecology (26%). The vast majority of names of antimicrobial, antiviral and antifungal drugs can be produced at domestic pharmaceutical companies [3].

During the educational process at the Faculty of Pharmacy of Bogomolets National Medical University, students and teachers are thinking over the fact that in Ukraine there are a number of prerequisites for overcoming the dependence of the domestic pharmaceutical market on imported drugs:

- first, Ukraine was the first among the CIS countries to join the International System of Cooperation of Pharmaceutical Inspections (PIC/S), joining in this process the 37 leading countries of the world;

- second, the country has created a system of registration of medicines and adopted an international format of registration dossier;

- third, the State Pharmacopoeia of Ukraine (SPU) which is harmonized with the European Pharmacopoeia was developed and put into operation;

- fourth, mandatory requirements for compliance with the rules of Good Manufacturing Practice (GMP) and Good Distribution Practice (GDP) were introduced into the licensing conditions for the production and sale of medicines in Ukraine;

- fifth, in our country the European recommendations regulating the development and research of medicines have been adapted and updated. It is important to note that the introduction through licensing and accreditation of enterprises and organizations of the pharmaceutical sector according to international standards of quality assurance of products and services, known worldwide as Good Practices (GMP, GCP, GLP, GDP, GPP, GPhVP and others), is an integral element of legal regulation of the industry [3]. There is no doubt that the "State Formulary of Medicines" (2017) should be included in the training programs for future pharmacists at the pharmaceutical faculties of Ukraine in order to analyze, study and apply it.

CONCLUSIONS

Summarizing the above, we note that the most significant trends in the modern pharmaceutical industry of Ukraine, which are reflected in the modeling of the educational process of professional training of pharmacists and masters of pharmacy in domestic higher pharmaceutical schools, are the following:

1. Approval of ethical principles of training specialists for the pharmaceutical industry of

Ukraine, the basis of which is compliance with the ethics of a pharmacist in professional activities, communicative interaction with people in need of advice from pharmacists.

2. Focus on European standards of pharmacy, the basis of which is high-quality service to visitors of pharmaceutical institutions.

3. Development of domestic pharmaceutical production of medicines and medical equipment in order to overcome the import dependence of the domestic pharmaceutical market.

4. Given the main trends that we have identified in the training of future pharmacists in the domestic system of pharmaceutical education, it is important to consider that the pharmaceutical industry is a complex set of interrelated elements, the effectiveness of which will depend on an effective training system; investments in domestic research projects to create new drugs; organization of an effective system of sales of medicines and effective marketing activities.

Conflict of interest. The authors declare no conflict of interest.

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