

## Ensuring cooperation in the system of the «higher pharmaceutical education - labor market» in Ukraine

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**Abstract:** The article examines the specifics of ensuring cooperation in the system of the «higher pharmaceutical education – labor market» in Ukraine; analyses the information sources, the view of scientists, educators and practitioners of a pharmaceutical sector of the healthcare system on issues of optimization cooperation in providing pharmaceutical services to the public, improving the efficiency of complex measures for healthcare, vocational training of the future pharmacists in the system of higher pharmaceutical education of Ukraine.

**Keywords:** *higher pharmaceutical education in Ukraine, tendencies in vocational training of pharmacists, the system of the «higher pharmaceutical education – labor market».*

**Introduction.** The promotion of priority of health being among the nationwide values, which determine the public policy of Ukraine in healthcare, occurs with the following groups of factors to have been taken into account: 1) legal; 2) social and economic; 3) juristic; 4) medical; 5) educational and upbringing-related; 6) culturological; 7) environmental [1, p. 233]. An important condition for taking a set of measures on healthcare of the public is to take into account the demands of society to the level of service provision in this area of disease prevention. Among these requests are the demands of the public for improving healthcare system, which is the direct projection on the organization of vocational training of future pharmacists in the system of HPE in Ukraine. The efficiency of development of the modern higher pharmaceutical education in Ukraine being a complex and heterogeneous social system of purposeful training and improvement of practitioners and scientific-pedagogic pharmaceutical staff depends on the effectiveness in ensuring cooperation in the system the «higher pharmaceutical education – labor market».

**Materials and Methods.** This article applied theoretical methods, in particular a systems-related one, object analysis, comparison and matching for conceptualizing of information sources in the field of vocational training of the higher pharmaceutical education; scientific interpretation for elucidating cause-effect relationships in ensuring cooperation in the system the «higher pharmaceutical education – labor market».

The materials of the VIII<sup>th</sup> Congress of the National Pharmacists of Ukraine (hereafter – the Congress) which took place on 13-16 September 2016 in Kharkov (Ukraine), 75<sup>th</sup> (28 September 2015, Germany) and 76<sup>th</sup> (28 August 2016, Argentina) Word Congress of Pharmacy and Pharmaceutical Sciences, International Pharmaceutical Federation (FIP) are of theoretical significance for our study. The author (T. Reva) investigates the problem of formation of professional competencies of pharmacists in the process of learning chemistry disciplines.

**Results.** The development of the pharmaceutical sector of healthcare system is an essential prerequisite for maintaining health of the Ukrainian people, and the key to prosperity and social welfare of the citizens. There are more than 400 thousand of experts working in the field of pharmaceutical education and science, in wholesale and retail sector, pharmaceutical production and quality control of medicines and in the specialized pharmaceutical publications [4]. Analysis of the information voiced by participants of the Congress, made it possible to specify the main achievements and challenges in ensuring coop-

eration in the system of the «higher pharmaceutical education – labor market» in Ukraine. The below ones were mentioned as successes:

1) Ukraine has got a highly capable pharmaceutical industry meeting the standards of self-sufficient manufacturing practice: according to the market research «PharmXplorer»/«PharmStandard» conducted by the company «Proxima Research» for the time being the share of sales of medicine packages produced in Ukraine compared to the total sales figure in bulk is about 80%, and the share expressed in money is about 40%, with the average weighted price of a package of a locally-produced medicine being almost five times lower than the one of foreign origin;

2) 112 enterprises in Ukraine have a state license to produce pharmaceutical drugs (PDs); at present, more than 12 thousand kinds of pharmaceutical drugs are produced in the country with regard to the pharmaceutical form, dosage and batch number;

3) almost 400 thousand people in Ukraine are involved in the pharmaceutical sector, and as of the beginning of the instructional year 2016-2017 there are about 30 thousand students being trained at the pharmaceutical faculties and whose knowledge is examined via the «KROK» testing system: the students take examinations in a test mode called «KROK-1», «KROK-2», «KROK-3» which ensures compliance the approach with European standards and objectivity of the examination [4].

Generalisation of the materials of the Congress [4] made it possible to specify the contemporary challenges requiring an adequate response from the state authorities, educational institutions, researchers, public health authorities, enterprises of pharmaceutical sector and those challenges seem to be uniting the efforts of the professional community to facilitate continuing education of pharmaceutical personnel to protect the legal, social, formative, economic and other interests, rights and freedoms of professionals and consumers of pharmaceutical products and services, in particular patients, development of professional self-governance in Ukraine.

At the Congress, there were defined the strategic goals that, we believe, may become the basis for effective cooperation in the system the «higher pharmaceutical education – labor market» in Ukraine, namely:

1) formulating of a National Policy on– a document which is to summarize, specify and detail plans for the development of the pharmaceutical sector including such basic elements as the availability of medicines, funding the PDs provision and delivery system, monitoring quali-

ty and quality assurance and promotion in the market of services;

2) developing a National List of Essential PDs with regard to the WHO guidelines, which is to present the PDs merely with proven efficacy and the PDs which are included in treatment protocols for the developed countries;

3) introducing reference prices for PDs to be included in the National List;

4) introducing reimbursement (refunding the cost of PDs by the state) for PDs included to the National List, along with the use of the reference price scheme.

An important step to have been taken in solving the pressing problems of ensuring the cooperation in the system «higher pharmaceutical education – labor market» in Ukraine has appeared to be the fact that on 28 September 2015 at the meeting of FIP board members in the course of the 75<sup>th</sup> World Congress of Pharmacy and Pharmaceutical Sciences Non-governmental Organisation «Ukrainian Pharmaceutical Chamber» (hereinafter – NGO «UPC») was granted the status of institutional member. Thus, NGO «UPC» acquired authority to conduct explanatory work and be the voice of the International Pharmaceutical Community in Ukraine [6].

We are consent to the view of O. Klimov, Chairman of the Board for NGO «UPC» who considers the pharmacy network to be the «weak piece of chain» in ensuring cooperation in the system «higher pharmaceutical education – labor market» because the mentioned network is likely to suffer from the lack of a sufficient legal regulation of approvals of the feasibility criteria for setting up pharmacies and properly trained specialists for the pharmaceutical sector which affects public confidence in the quality of services provided by both a pharmacy chain and its employees. Training process of a pharmaceutical specialist has to be conducted in compliance with contemporary international standards, and as extramural form of study of higher pharmaceutical education is concerned, this should only be allowed to be gained by the persons who has acquired secondary pharmaceutical education. The process of adequate training of a pharmaceutical specialist should stipulate the changes in the evolution of thinking: from the perspective of the Educator – who do we train and how do we train them?; from the perspective of the Pharmacist – understanding the extent of their responsibility for providing a pharmaceutical care to patients: when an error, caused by lack of training occurred can lead to a fatal end for the patient; from the perspective of the Employer – what task they set to themselves: have a pharmacy being a healthcare institution or the institution whose purpose is a successful business [5].

For pharmacy of Ukraine, it is important to listen to the opinions of members of FIP: improving the state of global health is impossible without professionally trained and educated staff for the health system, without the appropriate academic infrastructure as well as quality and competence of education. This became the very reason in 2012 for FIP Education Initiative to grow into a global scale platform for exchange, mentoring and training of all professional leaders [2]. According to the Concept of Development of the Pharmaceutical Sector of the Healthcare System of Ukraine for 2011-2020 (the Decree of Ministry of Health of Ukraine of 27.03.2013 p. №242) [3] and the findings of the participants of the Congress FIP-2016 [2] the absolute priority has been given to solving problems of ensuring cooperation in the system the «higher pharmaceutical education – labor market» by means of:

1) continuation of the Eurointegration orientation of higher medical and pharmaceutical education;

2) application of the experience of the implementation of the European Credit Transfer and Accumulation System (ECTS) to introduce a Common European system of quality assurance of education.

We are of the opinion that the performance of those tasks in realities of Ukraine requires professionally educated employees for the pharmaceutical sector of the health care system; the appropriate academic and university infrastructure for training future professionals in the higher pharmaceutical education system; providing high quality higher pharmaceutical education being based on a competency approach and implementation of international experience of pharmacy development.

Having considered the above, we are to specify the trends and priority program objectives in ensuring quality of higher pharmaceutical education in Ukraine (in compliance with the priorities of FIP Education Initiative):

1. A stepwise introduction of a degree-based system of training of pharmaceutical personnel, evaluation, assessment and monitoring system, which involves consecutive obtaining of academic degrees of «Bachelor» and «Master» followed by obtaining scientific degrees.

2. Introduction of the education process organization with keeping records of the manpower input of the training work of students on the basis of ECTS, expansion of academic mobility for the mutual enrichment with the European experience.

3. Creation of conditions for implementation of the thesis: «lifelong learning» and preservation of a postgraduate education system.

4. Expanding the research to identify the needs for specialists of certain professions and licensing the new specialties to meet the needs of the pharmaceutical sector.

5. Study the effectiveness and quality of training of the specialists (the extramural form of study, postgraduate education).

6. Upon the introduction of health insurance, ensuring the development of a clinical direction in the system of training of general pharmacists to improve the quality of medical therapy and providing a pharmaceutical care with regard to the GPP become very active.

We believe that higher pharmaceutical education in Ukraine in compliance with the international standards is supposed to meet the priorities of the XXI century: to form in the society respect for the profession. Increasing the importance of the pharmaceutical industry through the quality of training of qualified personnel, continuous improvement of the educational content, introducing new technologies and modes of education, adaptation to European standards and participation in developing the foundations of European integration of higher pharmaceutical education of Ukraine. At present in the pharmacy sphere in the EU there remain in force the regulations that define standards of GMP manufacturing practices, the procedure for registration of medicinal products, medicines classification by category, as well as regulation of medicines circulation (especially those belonging to special categories – innovative, immunological, homeopathic, and drugs to treat rare diseases), the pricing process and so on. The European specialist in the field of pharmacy is guided by the registration scheme being in the EU centralized and decentralized (mutual recognition) [7].

As FIP Education Initiative aims at refining of a policy and stimulating innovations, which are supposed to promote pharmacy and pharmaceutical education at the in-

ternational and national levels, therefore, the development of science and practice, improvement of a pharmaceutical care, promotion of education were defined by the FIP Education Initiative as the key vectors.

It should be mentioned that at the 76<sup>th</sup> Congress of FIP (28.08.2016) there has been approved the initiative of FIP Education Initiative to conduct, in November 2016 in Nanjing in China, the First World Conference on Pharmacy and Pharmaceutical Education, where practitioners, scientists, educators, representatives of regulatory bodies, professional self-governments are to develop a common vision, concept of development and provisions for the development of pharmacy education and pharmaceutical human resources [2].

We are convinced that for Ukraine this event will be an important step in the development of strategies and tactics to ensure cooperation in the system «higher pharmaceutical education – labor market» with regard to the current challenges facing the pharmaceutical sector of the healthcare system of Ukraine.

**Discussion.** In addressing pressing problems arising in ensuring cooperation in the system «higher pharmaceutical education – labor market» in Ukraine, there can be identified the determinants which are as follows:

1) the social one which is supposed to support the promotion of healthy lifestyles, provision the public with the qualified information about PDs;

2) the system one which is supposed to include theoretical, practical measures in the work with personnel and will ensure improvement of the quality of services;

3) the patient-centeredness whose purpose will be to provide the advisory assistance to patients, appropriate and reasonable subscription of medicines and their combinations;

4) a practical applicability which will focus on the formation and development of communication competencies, professional and ethical practices of pharmaceutical sector experts-to-be of the healthcare system of Ukraine.

Analysis of a pharmaceutical internship, materials and instructional experience at the Pharmaceutical Department of the National Medical University named after O. O. Bogomolets (Kyiv) makes it possible to state that among the issues to have arisen in ensuring cooperation in the system the higher pharmaceutical education – labor market" in Ukraine is the establishment of a partnership between the constituencies of the pharmaceutical industry – education, science, industry, pharmacy chain, institutions exercising control of the quality of pharmaceutical service provided to the public.

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#### Обеспечение взаимодействия в системе «высшее фармацевтическое образование – рынок труда» в Украине

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**Аннотация.** В статье рассматриваются особенности обеспечения взаимодействия в системе «высшее фармацевтическое образование – рынок труда» в Украине; осуществляется анализ информационных источников, а также умозаключений ученых, преподавателей высших учебных заведений, практиков фармацевтического сектора сферы охраны здоровья по вопросам оказания качественных фармацевтических услуг населению, повышения эффективности комплексных мероприятий в направлении сбережении здоровья населения, оптимизации сотрудничества работодателей и высших учебных заведений, которые занимаются профессиональной подготовкой будущих провизоров в Украине.

**Ключевые слова:** высшее фармацевтическое образование в Украине, тенденции в развитии фармации, система «высшее фармацевтическое образование – рынок труда».