

## Research Journal of Pharmaceutical, Biological and Chemical Sciences

# Modern Professional Pharmaceutical Education Of Ukraine In The Context Of Social Responsibility.

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#### ABSTRACT

The purpose of the study was to analyze the condition of the university pharmaceutical education in Ukraine and determine the upcoming directions of its development in the context of social responsibility. Materials for the research were the fundamental and applied research publications of native and foreign scientists on the issues of university pharmaceutical education, social responsibility, activities of pharmaceutical organizations. Information search methods, systematization, analysis, synthesis, comparison and generalization were used in the work. Social responsibility of the institutions of pharmaceutical education and science (IPhES) has certain differences from the socially responsible behavior of business organizations. This is due to the difference in mission, purpose, ultimate outcome - educational services, the quality of which is difficult to determine even after the "consumption of goods". The quality of the professional educational process is the main manifestation of the socially responsible behavior of the IPhES. Conclusions The conducted analysis of the university pharmaceutical education in Ukraine in the context of social responsibility has allowed to determine the significant results and the negative aspects of its reform, to propose future directions of development and implementation of IPhES social responsibility practices. Such form of interaction of IPhES with all entities of the pharmaceutical industry will contribute to the formation of IPhES positive image, increase the loyalty of students and employees, strengthen business reputation, attract investments, improve the positions of Ukrainian IPhES in the international educational environment. Keywords: social responsibility, university pharmaceutical education, pharmaceutical specialist

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#### INTRODUCTION

The development of human capital (its own through education and training, industrial (specific), public); social investment; cooperation with vocational educational institutions and local community, etc is attributed to the social responsibility practices (SR) of the organization, including the pharmaceutical, in accordance with the international standard ISO 26000: 2010 "Guidance on Social Responsibility" [1]. Today, the introduction of such practices by the pharmaceutical organization (PhO) is impossible because of the low level of their socially responsible behavior and legislative issues [2].

The scientific writings analysis of V.O.Posilkinoy. Y.S.Bratisko, A.A.Kotvitska, V.M.Tolochko [3, 4, 5] and other researchers showed mainly examined existing forms of socially responsible activity of pharmaceutical enterprises. In spite of the considerable scientific contribution of the above-mentioned scientists, within the framework of the communitarian SR [6] the questions concerning the role of the personal SR of pharmaceutical specialists (PhS) in the socially responsible behavior PhO and the place of the institutions of education and science of the pharmaceutical direction in the process of formation of the socially responsible behavior of the PhS are actualized.

The sources of the formation and development of the SRB PhS are state, subjects of pharmaceutical business, pharmaceutical education and science, public organizations (PO) in pharmaceutical direction, PhS in particular, and this process continues throughout their professional life [7]. The main focus, which stands on the basic concepts of the professional component of the socially responsible behavior PhS, and then, with some periodicity adjusts and improves the acquired social skills, serves the institution of pharmaceutical education and science (IPhES) [8].

The purpose of the study was to analyze the University Pharmaceutical Education (UPhE) in Ukraine and determine the future directions of its development in the context of SR.

#### MATERIALS AND METHODS

The materials for research were publications of fundamental and applied researches publications of native and foreign scientists on UPhE, SR national and international normative acts regulating SR, activities of the PhO and obtaining UPhE. The methods of information search, systematization, analysis, synthesis, comparison and generalization were used in the work.

#### SUBSTANTIVE PROVISIONS

The basis of the SR IPhES is concept of the business social responsibility. However, this approach is not correct, as the missions, goals and final results of business PhO are different from IPhES.

IPhESs are responsible for the effective use of public resources in order to increase the efficiency of their work, implementation of the education and training unity, which is manifested in the activity of students and teachers in various social practices; own resources for the development and consolidation of society; interaction with business structures of practical pharmacy, with individual citizens, authorities, other stakeholders for the functioning of the IPhES as an open type social institution.

The high final results of activity are expected from socially responsible IPhES. The final results of the IPhES activity are reflected in three dimensions: 1) cognitive results are the level of knowledge, skills and abilities as the basis for the correct professional activity and orientation of students in the world; 2) economic results are the correspondence of the structure, knowledge and skills acquired in the training of skills in the job market (this refers to the capital of a student (future employee) in a confined sense, equal to his capitalized income or the amount of money, the income of which is equal to the salary, which one receives); 3) the social ultimate outcome is acquired funds in the IPhES that is the various connections of the individual with other individuals, groups and PhO, which he can use to realize his own interests. The wider and varied such connections are, the easier it to realize, and probable the solution to a conflict in society [9].

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Today, the main requirement of all stakeholders (within the framework of the SR - expectation concept) to the IPhES is to provide the current quality of the UPhEs taking into attention the global trends in the pharmaceutical market.

Among the common global trends that affect the formation of the PhS, one can name the personification of medicine, the development of translational medicine, pharmacogenomics, nanotechnology, gene and cell therapy, general aging of the population, accelerating scientific and technological progress, and the most important is man-centeredness in the internal and external environment of the activity of all subjects of the pharmaceutical industry, strengthening of social component of professional development of PhS. However despite of the active development of the pharmaceutical industry, according to the report of the International Federation of Pharmaceutical Associations, there is a steady tendency to increase the shortage of the pharmaceutical pharmacy segment in the context of the PhS deficit for hospital and industrial pharmacy [10]. Ukraine is not an exception.

The modern training of the PhS for the pharmaceutical industry of Ukraine is carried out in accordance with the Laws of Ukraine "On Education" and "On Higher Education" taking into account the trends of international and native pharmaceutical practice. Every year the pharmaceutical industry employs about 10 thousand specialists in the fields of Pharmacy, Technology of Perfumery and Cosmetics, Clinical Pharmacy, and Industrial Pharmacy. Future PhSs receive UPhEs in full-time and part-time forms of education, but among the numerous problems of the pharmaceutical industry there is still a significant shortage of competent PhSs and improving the quality of education [11]. The Pharmaceutical Community of Ukraine tries to solve these problems by increasing the SR of all subjects of pharmacy and reforming the system of professional education.

The key points of reforming UPhE today are:

- 1. The introduction of a new philosophy of pharmaceutical education, based on a competent approach, which forms the basis of today's pharmaceutical education on a person-centered learning with an emphasis on developing educational technologies [12].
- 2. The introduction of a continuous professional training system (Continuing Professional Development-CPD) IFP defines as personal responsibility PhS systematically maintain, develop and extend their knowledge and skills to provide constant support of professional qualification for all professional activities [13].
- 3. The European Credit Transfer and Accumulation System (ECTS) is used to provide, recognize, confirm qualifications and educational components, and perceive the academic mobility of higher education graduates.
- 4. Two-level system of preparation of the PhS for preparation of masters of pharmacy (second educational level) through the educational program.
- 5. Conducting the independent evaluation of the level of professional competence of students (interns) EPhES, which carry out preparation of specialists in the field of knowledge of 226 « Pharmacy, Industrial Pharmacy» regardless of subordination and forms of ownership.
- 6. Informatization of educational process, the introduction of innovative technologies, distance education, which provided the humanizing and individualization of an educational process taking into account the trends shaping the European educational space and the features of the national system of vocational education.

However, the problems of reforming the UPhE and raising to the level of SR IPhES are much more complicated.

First, to date, there is still no unity and consolidation of the pharmaceutical academic community regarding the specialties, educational levels and degrees, the content of training and forms of training for UPhE applicants. As a result, the specialty 226 "Pharmacy, Industrial Pharmacy", two educational levels and correspondence forms of education (which is absent in the educational system of specialists for the "health care" sector in other countries) is not clear to the international labor market [14]. Experts of practical pharmacy have attributed this last position to the factors of negative impact on the quality of professional education along with corruption in the education system, inadequate level of teachers professionalism, not understanding and misunderstanding by specialists of the possible consequences for their actions (decisions) from the position of SR [15].

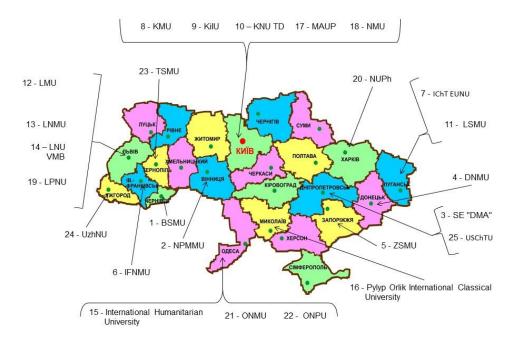


Secondly, the paradoxical phenomenon of the present is the preparation of masters of pharmacy according to the project of the higher pharmaceutical standard of education. In the proposed draft standard clearly outlines the problem of inadequacy to the needs of pharmaceutical practices, educational programs, professional competence have differences with Global Competency Framework as a consequence of the presence of the time interval between switching the requirements of the employers to the competence level of the PhS.

This creates the preconditions for the asocial (irresponsible) behavior of the institutions of higher education (IHE) in educational relations, primarily in terms of providing quality education. The fact that the IHE sells its services on the market of goods, the quality of which can not be estimated directly, it is difficult to determine even after consumption of goods: the benefits are characterized either by the inability to obtain the necessary information about the quality of education, or rather high costs of measuring the quality of the buyer (consumer) of goods. In addition, the characteristic feature of the educational market is the asymmetry of information between its main contractors is the IHE and the students, and the associated with it, the risk of unfair conduct.

Thirdly, the annually expanding list of IHE set of students who are majoring in 226 "Pharmacy" (picture 1).

As a result, inappropriate material and technical support of the educational process, inadequate professional level of a numerous lecturers and post-graduate UPhE (in many IHE professional pharmaceutical disciplines are taught by professionals who do not have a diploma of pharmacist (doctors, chemists, biologists) and those in which the degree is absent at all or not by professional disciplines); an absence of responsibility of IHE for end-point of educational activity (existing in IHE going near the estimation of the level of educational activity are mainly formal; low level of remuneration of labor and efficiency of mechanisms of encouragement of scientifically-pedagogical workers; increase in the volume of admission of job seekers-contractors of higher education, among which quite often there are people without any desire and ability to learn, and obtaining a document on training is the main). The preparation of the PhS is carried out by 25 IHE, of which 14 are the Ministry of Public Health of Ukraine, 7 departments of the Ministry of Health of Ukraine, and 4 private defense institutions.



Picture 1: Distribution of IHE, which carry out the recruitment of students in the specialty 226 "Pharmacy" (own development of the source [16]

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where:

1 - Bukovinian State Medical University; 2 - National Pirogov Memorial Medical University; 3 - **State Establishment "Dnipropetrovsk Medical Academy of Health Ministry of Ukraine";** 4 - Donetsk National Medical University; 5 - Zaporizhzhya State Medical University; 6 - Ivano-Frankivsk National Medical University; 7 - Institute of Chemical Technology of the Volodymyr Dahl East Ukrainian National University; 8 Kyiv Medical University; 9 - Kyiv International University; 10 - Kiev National University of Technology and Design; 11 - Lugansk State Medical University; 12 - Lviv National Medical University; 13 - Danylo Halytsky Lviv National Medical University; 14 - Lviv National University of Veterinary Medicine and Biotechnologies; 15 -International Humanitarian University; 16 - Pylyp Orlik International Classical University; 17 - Interregional Academy of Personnel Managemen (MAUP); 18 - Bogomolets National Medical University; 19 - Lviv Polytechnic National University; 20 - National Pharmaceutical University; 21 - Odessa National Medical University; 22 - Odessa National Polytechnic University; 23 – I. Horbachevsky Ternopil State Medical University; 24 - Uzhhorod National University; 25 – Ukrainian State Chemical-technology University.

Fourthly, in the modern educational system of professional training of the PhS there are differences and there is no inheritance in the pre- and postgraduate educational periods of the CPD (full-time internship is not for ECTS, internship curriculum largely duplicates pre-graduate training of pharmacists).

Fifthly, the autonomy of universities in making decisions on the development of academic freedoms, the organization of the educational process, scientific research, internal management, economic and other activities, independent selection and placement of personnel remains only on paper, and the state continues to work under the bureaucratic control system.

Sixth, due to the lack of effective interaction between the educational services and the labor market, the problem of employment of PhS graduates on the basis of internship and legal responsibility of the PhO, which are the bases of specialization. Most of the pharmacy establishments are not interested in cooperating with the IPhES and do not want to assume the responsibility for the human capital of the pharmaceutical industry of Ukraine.

All of the above stipulates the need for urgent action to optimize the reform of the system of professional pharmaceutical education in Ukraine. After all, the consequence of this situation is the turmoil in the thoughts and actions of the practical and future FhS, the reduction of demand among employers in the highly skilled FhS, the large turnover of staff in the wholesale and retail segments of the pharmaceutical market, reducing the responsibility of IPhES for the final results of educational activities.

Collegial work requires the revision of the standard of higher pharmaceutical education and its approval at the state level. The corresponding revision requires Sample curriculum training second (master's) level of higher education in the field of knowledge 22 "HEALTH CARE" in higher educational institutions of Ukraine, specializing in 226 "Pharmacy" education the qualification of "Master of pharmacy» taking into attention and adapting to the realities of practical Pharmacy and Global Competency Framework. Further reform needs a post diploma education period in the CPD.

In parallel, it is necessary to develop independent forms and mechanisms for the participation of employers and professional societies in solving educational policy issues, in particular, the need to change the paradigm of relations between employers and IPhES.

IPhES will strive for SR, if society provides some forms of public control by all participants in the educational process - the state, student self-government, PhO, professional societies and other stakeholders. For this socially responsible IHE is obliged to report to the society about their actions and actions, the implementation of the mission and goals of the achieved results. In Ukraine, the social reporting IHE just beginning to develop.

The formation of SR IHE is a prerequisite for the further development of UPhE. However, the responsibility to society must be understood by other subjects of the educational sphere, especially the state. Thus, the state should be responsible for creating effective norms of educational laws and mechanisms for



their implementation, guaranteeing social security in the educational sphere: formation of the strategy and policy of the development of higher education taking into attention the current global changes in the educational sphere; developing standards for the quality of higher education and monitoring their compliance; the production of educational services as a social value in the IHE; financing of public education programs, providing financial support to students the IHE (scholarships, grants, preferential loans, educational, etc.); fighting against corruption and bribery in the educational system; social protection of the employees of the educational sphere.

#### CONCLUSION

Analysis of UPhEs in Ukraine in the context of SR identified the negative points of its reforming and offered a future direction of development.

SR IPhES today in Ukraine has passed the stage of birth and begins to develop. This form of interaction of IPhES with all the subjects of pharmaceutical industry will facilitate the formation of a positive image of the IHE, the growth of student and employee loyalty, the strengthening of business reputation, investment attraction, and the improvement of the positions of the IPhES in the international educational environment.

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