Research of the professional opinion of pharmacy specialists on the development of pharmaceutical support for the population of Ukraine

Aim. To research some ways of further development of pharmaceutical support of the population by studying the professional opinion of pharmacy specialists.

Materials and methods. Specially designed questionnaires were used for the study; the data were analyzed using the formal-logical method, system analysis, the analogy and comparison method.

Results. The study involved 112 respondents; among them pharmacists aged 30–35 and the work experience of more than 5 years dominated. The studies showed that for further development of pharmaceutical support of the population pharmacy specialists specified the following areas: improving pharmacy network activities, restoring the production function in pharmacies, providing social protection for pharmacy specialists, and personnel issues.

Conclusions. The sociological survey has been conducted among pharmacy employees; the sociodemographic characteristics of the pharmacy staff and the attitude of employees to the social protection provision have been described. It has been determined that for the further development of pharmaceutical support of the population in Ukraine it is advisable to rely on the aspects studied by us in the following areas: improving pharmacy networks, restoring the production function in pharmacies, strengthening social protection of pharmacy specialists both on the part of the employer and public pharmaceutical organizations. It has been found that for further improvement of the pharmacy business in Ukraine, fruitful cooperation is necessary at all levels of pharmacy management and individual sections of public healthcare facilities and medical institutions with mandatory consideration of the professional opinion of healthcare providers and relying on it when forming priorities for further development of pharmaceutical support the population in Ukraine. It will allow to effectively maintain the prestige of pharmacy as a sector of the healthcare industry.

Key words: pharmacies; pharmacy specialists; social protection; pharmaceutical support; medicines.
Statement of the problem. Pharmaceutical support (PhS) is an important component of social protection of the population of Ukraine and consists in introducing effective forms and methods of activities of pharmacy institutions taking into account the experience of other countries of the world [1]. This concerns changes in the legislation of Ukraine regulating the activities of pharmacies and the sphere of drug circulation, in connection with the implementation of certain EU acts, in particular, the Convention of the Council of Europe on falsification of medicines and similar crimes that pose a threat to public health (Medicrime Convention).

Such transformations should take place constantly in accordance with the development of society, changes in the legislative support of pharmacy management at the state level and particularly in the pharmaceutical sector as part of the health sector.

Analysis of recent research and publications. To date, legal conditions have been created to continue the development of PhS taking into account the needs of today and the implementation of European legislation. Thus, the law of Ukraine “On Medicines” and the Code of Ethics of Pharmaceutical Workers have been revised. Changes have been made to the lists of healthcare institutions, medical and pharmaceutical positions. Legal requirements for the production, sale, registration, quality control, advertising and promotion of medicines have been revised [2].

The relevance of this study is determined by the fact that today the process of reforming pharmaceutical legislation is actively taking place, in particular the activities of pharmaceutical enterprises and the professional competencies of pharmacy specialists, and, therefore, the question of PhS of Ukrainian citizens is emerging with new force. According to the analysis of professional publications, it can be concluded that in Ukraine, scientists paid considerable attention in this area to the analysis of the formation of state programs related to the provision of medical and pharmaceutical care to the population and the determination of the main tasks regarding the availability of medical services and drugs [3-5], socially effective organization of PhS of the population and the implementation of national standards of good practices – GDP and GPP [6], the assessment of social aspects of the organization of drug provision of the population in accordance with international norms and standards [7]. Of particular importance are the studies of current trends in the management of social responsibility of pharmaceutical enterprises [8] and the implementation of the Code of Ethics of pharmaceutical workers of Ukraine in practical activities [9], as well as the studies of the social psychological climate in a pharmacy [10] and the attitude of specialists to the staff motivation system in the pharmacy [11]. Special attention was paid to the analysis of the efficiency of pharmacy institutions [12] and the organizational features of PhS of the population in certain regions of the country [13].

The given directions of research of domestic scientists confirm the relevance of our research taking into account the lack of studying the professional opinion of pharmacy specialists. This work is devoted to this aspect.

Identification of aspects of the problem unsolved previously. As the analysis of recent studies and publications has shown, scientists and practitioners pay constant attention to the development of PhS of the population in Ukraine. Thus, the issues of medical and pharmaceutical care to the population and the availability of medical services and drugs, the organization of public healthcare in accordance with international norms and standards, social psychological climate in a pharmacy were studied [14, 15], but taking into account modern realities the issue of studying the professional opinion of pharmacy specialists regarding the development of PhS did not sufficiently cover.
Objective statement of the article. The aim of the work was to research some ways of further development of PhS of the population by studying the professional opinion of pharmacy specialists in the modern conditions of their work in pharmacies.

Specially designed questionnaires were used for the study; the data were analyzed using the formal-logical method, system analysis, the analogy and comparison method.

Presentation of the main material of the research. Today, Ukraine is going through difficult times of military operations, which have brought changes in all spheres of the state’s life. In such difficult times, PhS of the population plays an important role as the life of our citizens may depend on the availability or absence of medicines. Since the first days of the war, the number of working pharmacies in the “hot” regions of Ukraine significantly decreased: some were destroyed, while others were closed due to a lack of goods and personnel. Before the start of the war, 20855 pharmacies and pharmacy centers operated on the territory of the state, and a month later there were already 16705 of them, and later this number only decreased [16]. Undoubtedly, this situation had a negative impact on the state of PhS of the population. In addition, in the first days of the war, there was a destruction of permanent logistics routes in the delivery of pharmacy products, which also led to the deterioration of PhS of the population. It should be noted that the state plays an important role in PhS of the population since it creates legislative conditions for the development of PhS of the population, as well as pharmacists and pharmacist’s assistants, who are a key link in PhS of the population [17].

Ukraine always steps forward and improves its legislation, which is not an exception in terms of the development of the PhS of the population. In recent years and months, significant changes have been made in the legislation concerning the activities of pharmacies and their employees. Thus, the Code of Ethics of a pharmaceutical worker was revised, changes were made to the lists of healthcare institutions, medical and pharmaceutical positions, legislative requirements for the production, sale, registration, quality control, advertising and promotion of drugs, etc. were revised [2, 9]. The Law of Ukraine “On Medicinal Products” also underwent significant changes [18].

The success of such measures at the state and branch levels largely depends on the support and direct activity of pharmacy specialists; being direct participants in the process of PhS of the population they carry out this activity in practice. And it is very important that they have the opportunity to take part in setting priorities in such transformations and actively support them. In other words, it is important to take into account the professional opinion of pharmacy specialists and rely on it when forming the priority tasks for the further development of the PhS of the population in Ukraine.

When drawing up an algorithm for conducting the research it was assumed that the success of measures for the further development of PhS of the population largely depended on the practical activity of pharmacy specialists and the existing problems in its implementation, in particular legislative (changes in the legislation without consistency with the existing legal norms and the current requirements, etc.), social (the lack of social protection on the part of the employer, job instability, irrational demands of management, etc.) and economic nature (insufficient wages, the lack of the staff economic motivation, etc.). This approach made it possible to assess risks more objectively and found out the priority measures for their timely elimination. This served as a basis for selecting research methods, among which the survey method was chosen [19]. For this purpose, a questionnaire was created; it contained a certain set of questions, formulated and related to each other according to the established rules within our goal, and it also provided an additional opportunity for respondents to supplement them.

The survey was conducted anonymously online using a specially created Google form. To ensure the representativeness, the questionnaires were based on the calculated sample and the interviewer’s experience.

The study involved pharmacy specialists who underwent postgraduate training in various professional development cycles at the Department of Management and Economics of Pharmacy of the Institute of Advanced Training of Pharmacy Specialists of the National University of Pharmacy during 2021 and who hold various positions in pharmacies.
The group of experts (respondents) included persons who had a cumulative opinion assessment index of at least 0.5 based on the assessment of their competence according to the scale from one to zero. The results of the questionnaire were determined by the indicators of the arithmetic weighted average (x), the degree of variation of the deviation of each value from the mean (MD), variance (δ²), standard deviation (S) [20, 21, 12].

The calculation was performed with a confidence level of 95.0 %. The survey results were processed using licensed Microsoft Office Excel software products.

For our further research, 112 respondents representing 20 regions of Ukraine (Vinnytsia, Dnipropetrovsk, Donetsk, Zhytomyr, Zaporizhia, Ivano-Frankivsk, Kirovohrad, Kyiv, Luhansk, Mykolaiv, Odessa, Poltava, Sumy, Ternopil, Kharkiv, Kherson, Chernihiv, Chernivtsi) were selected.

The general information about the respondents is given in Tables 1-3.

Information from Table 1 shows that the group of respondents included pharmacists (67.9 %) and heads of the pharmacy (30.4 %). Their age distribution showed that most of them belonged to the category of over 30 years of age (58.9 %) and had professional and total work experience of more than 5 years, 82.1 % and 75.0 %, respectively.

Pharmacy specialists selected as respondents had a qualification category – 41.1 % of cases, including higher category – 26.8 % and the first one – 14.3 %. By gender, the vast majority was women (92.9 %).

The studies showed that to develop PhS of the population further, pharmacy specialists saw certain areas which it was advisable to rely on when developing appropriate measures. Among them, there were the following areas: improving pharmacy network activities, restoring the production function in pharmacies, providing social protection for pharmacy specialists, as well as personnel issues.

First of all, the characteristic features of pharmacies where the respondents worked were clarified. It was found that the vast majority of pharmacies were non-state-owned (92.9 %). Among them, there were limited liability companies (LLC) (76.8 %), private enterprises (PE) (10.7 %), other non-governmental companies (12.5 %) (Fig. 1).

Most of them they were part of the pharmacy network – 87.5 %. Among them the pharmacy network “We wish health” (49.0 %), “911” (21.4 %), “Pharmacy of wholesale prices” (12.8 %) prevailed. Thus, when working out the directions of further development of PhS of the population it is advisable to focus measures not at the level of a individual pharmacy, as it was before, but on their integrated structures – pharmacy networks, which almost monopolize the entire domestic pharmaceutical market.
Respondents paid attention to this aspect as almost half of the respondents had cases of owners interfering in their professional activities (41.1%). Such intervention affects the management function and may affect the quality of PhS of the population. Some examples of interference of owners in the professional activities of pharmacy specialists are shown in Fig. 2.

Fig. 2 shows that socio-economic interventions predominate. They include video surveillance of the pharmacy specialists’ work, restricted movement during the working day, irregular working hours, lack of conditions for psycho-emotional relief, etc.

Our research showed that there were some difficulties in the development of PhS of the population associated with the lack of effective control over the location of pharmacies. Based on the survey, it was found that only 33.9% of cases were individual buildings, 5.4% of cases were as part of medical institutions, and 14.3% of cases were located in shopping malls or shops (Fig. 3).

Fig. 3 shows that a significant proportion of cases (46.4%) concerning the location of pharmacies consists of other options, such as transport stops, schools, administrative centers, etc. The locations given by the respondents indicate the need to provide requirements for the location of pharmacies among the list of areas of further development of PhS of the population.

The schedule of pharmacies and daily load on pharmacy specialists should be considered as an important condition of the available PhS of the population and medical institutions. It was found that all pharmacies worked without days off, but by different schedules determined not according to the requirements of labor legislation, but rather by commercial needs (Fig. 4).

Fig. 4 shows that in 50.0% of cases pharmacies work on a 12-hour schedule (30.4%) and an around the clock schedule (19.6%). A number of pharmacies also have other work schedules. Therefore, it is advisable to have developed recommendations on the temporary rationing of the work of pharmacy specialists in pharmacies and not to exceed the requirements established by law.

An important aspect of the further development of PhS of the population in the future...
is the need to restore the production function of pharmacies. Today, there are only 1.0 % of pharmacies with the production function in Ukraine [14]. According to the results of our research, among the pharmacies where our respondents work, the production function, i.e. extemporaneous production of prescription drugs, is present only in 1.8 % of cases. Thus, the possible risks that complicate the restoration of the production function in pharmacies under modern conditions were identified.

It was found that the attitude of pharmacy specialists to expanding the network of pharmacies with the production function was not the same. The majority had a positive attitude – 80.4 % but, at the same time, in 19.6 % of cases, they did not consider this aspect as important.

However, the production function of pharmacies is important in the PhS of the population and it is present in the activities of pharmacies in most countries [15]. Therefore, we studied the factors that might complicate this process. According to the respondents, there are several of them (Fig. 5).

Fig. 5 shows the predominant factor of medical origin. Thus, according to the respondents, this is the lack of doctors’ prescriptions for extemporaneous drug production (27.5 %). There are also factors of economic and financial origin, which include the costs of creating compliance with license conditions (maintenance of premises, purchase of necessary equipment, etc.). Among them, pharmacy specialists specify the lack of rooms (16.6 %), organizational and economic problems (16.6 %) and excessive financial costs (13.9 %).

Factors of subjective origin include the unwillingness of owners to have such pharmacies (16.8 %) and the lack of motivating measures for pharmacists to manufacture extemporaneous drugs (4.3 %).

The lack of motivation to perform the production function in pharmacies deserves special
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attention. Today, this vision somewhat contra-
dicts the current trends in the development PhS
of the population in the EU countries where
pharmacies should have the production func-
tion.

In general, it is clear that there are reserves
to reduce the risks of these factors, including
due to organizational actions, improving in-
formation work among doctors on prescrib-
ing extemporaneous drugs, explanatory work
among pharmacy specialists taking into account
the importance of the production function in
a set of measures to improve PhS of the pop-
ulation and medical institutions in general.
Undoubtedly, an important issue is to reduce
the financial and economic losses of these phar-
macies due to compensation from the state
(introduction of legislative initiatives regard-
ing the cancellation of rent, reduction of utility
payments and VAT on extemporaneous drugs
to 0-7 %, provision of interest-free loans for
creating such pharmacies, etc.).

Respondents paid special attention to the
direction of attracting people without phar-
maceutical education to the activities of phar-
macies. In their opinion, this issue should be
approached carefully in each case (Fig. 6).

Fig. 5. Factors that may interfere with the expansion of the pharmacy network with the production
function (based on the results of the survey conducted)

Fig. 6. The attitude of pharmacy specialists to the involvement of persons without
pharmaceutical education in the activities of pharmacies and their associations
(based on the results of the survey conducted)

![Diagram showing attitudes of pharmacy specialists](image-url)
proposed several aspects of its implementation. Compliance with regulatory requirements to encourage their professional growth is among them. This means a surcharge for having a qualification category. It has been determined that today this requirement is met only in 19.6 % of cases, respectively, and in 80.4 % of cases it is not met.

In the field of social protection pharmacy specialists would like to have the support of public pharmaceutical organizations of which there are more than 200 in Ukraine, but most of them are only formally registered [14]. It was found that only in 8.9 % of cases pharmacy specialists knew a particular public organization. At the same time, according to the respondents, only in 16.1 % of cases they were informed about the activities of these public organizations, and in 83.9 % of cases they did not feel any social support from them.

As noted, educational issues were an important area in clarifying aspects of further development of PhS of the population in Ukraine. Among them there is the extramural form of study for pharmacy specialists. The distribution of the respondents’ opinions is presented in Fig. 7.

Fig. 7 shows that almost half of the respondents have a positive attitude to the extramural form of study (44.6 %) as they consider it appropriate for certain categories of the population (with limited mobility) and professionals with secondary pharmaceutical education (40.0 %).

Conclusions and prospects of further research. It has been determined that according to respondents, in order to improve the PhS of the population in Ukraine, it is expedient to improve the activities of pharmacy networks, strengthen social protection of pharmacy specialists both on the part of the employer and public pharmaceutical organizations.

The interviewed pharmacy specialists also specify the restoration of the production function in pharmacies as an important element in the development of the European level of PhS of the population in Ukraine. It can be done by reducing the financial burden on production pharmacies, introducing motivating measures for pharmacy specialists to produce extemporaneous drugs and improving cooperation with doctors regarding prescribing extemporaneous drugs.

Therefore, for further improvement of the pharmacy business in Ukraine, fruitful cooperation is necessary at all levels of pharmacy management and individual sections of PhS of the population and medical institutions with mandatory consideration of the professional opinion of healthcare providers and relying on it when forming priorities for the further development of pharmaceutical support the population in Ukraine. It will allow to effectively maintain the prestige of pharmacy as a sector of the healthcare industry.

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Information about authors:
Tolochko V. M., Doctor of Pharmacy (Dr. habil.), professor of the Department of Management and Economics of Pharmacy, Institute for Advanced Training of Pharmacy Specialists of the National University of Pharmacy of the Ministry of Health of Ukraine (https://orcid.org/0000-0001-8116-4063). E-mail: uef-ipksf@nuph.edu.ua

Zarichkova M. V., Doctor of Pharmacy (Dr. habil.), professor, head of the Department of Management and Economics of Pharmacy, Institute for Advanced Training of Pharmacy Specialists of the National University of Pharmacy of the Ministry of Health of Ukraine (https://orcid.org/0000-0001-7980-5669). E-mail: fauzetta@gmail.com

Oproshanska T. V., Candidate of Pharmacy (Ph.D.), associate professor of the Department of Management and Economics of Pharmacy, Institute for Advanced Training of Pharmacy Specialists of the National University of Pharmacy of the Ministry of Health of Ukraine (https://orcid.org/0000-0002-3992-7183). E-mail: arctium55@gmail.com

Surikov O. O., Candidate of Pharmacy (Ph.D.), associate professor, dean of the Faculty of Postgraduate Education, Institute for Advanced Training of Pharmacy Specialists of the National University of Pharmacy of the Ministry of Health of Ukraine (https://orcid.org/0000-0003-2134-1595). E-mail: oosurikov@gmail.com

Dolzhnikova O. M., Candidate of Pharmacy (Ph.D.), associate professor of the Department of Management and Economics of Pharmacy, of the Department of Management and Economics of Pharmacy, Institute for Advanced Training of Pharmacy Specialists of the National University of Pharmacy of the Ministry of Health of Ukraine (https://orcid.org/0000-0003-0961-0158). E-mail: dolgnikovaoelga@gmail.com

Відомості про авторів:
Толочко В. М., доктор фармацевтичних наук, професор кафедри управління та економіки фармації, Інститут підвищення кваліфікації спеціалістів фармації Національного фармацевтичного університету Міністерства охорони здоров'я України (https://orcid.org/0000-0001-8116-4063). E-mail: uef-ipksf@nuph.edu.ua

Зарічкова М. В., доктор фармацевтичних наук, професорка, завідувачка кафедри управління та економіки фармації, Інститут підвищення кваліфікації спеціалістів фармації Національного фармацевтичного університету Міністерства охорони здоров'я України (https://orcid.org/0000-0001-7980-5669). E-mail: fauzetta@gmail.com

Опрошанска Т. В., кандидат фармацевтичних наук, доцентка кафедри управління та економіки фармації, Інститут підвищення кваліфікації спеціалістів фармації Національного фармацевтичного університету Міністерства охорони здоров'я України (https://orcid.org/0000-0002-3992-7183). E-mail: arctium55@gmail.com

Суріков О. О., кандидат фармацевтичних наук, доцент, декан факультету післядипломної освіти, Інститут підвищення кваліфікації спеціалістів фармації Національного фармацевтичного університету Міністерства охорони здоров'я України (https://orcid.org/0000-0003-2134-1595). E-mail: oosurikov@gmail.com

Должнікова О. М., кандидат фармацевтичних наук, доцентка кафедри управління та економіки фармації Інституту підвищення кваліфікації спеціалістів фармації Національного фармацевтичного університету Міністерства охорони здоров'я України (https://orcid.org/0000-0003-0961-0158). E-mail: dolznikovaoelga@gmail.com

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