FORMATION OF THE SYSTEM OF INDICATORS AND THE INFORMATION CONTENT OF THE SOCIAL PASSPORT OF PHARMACY INSTITUTIONS

Aim. To substantiate the system of indicators and the information content of the social passport of pharmacy institutions.

Materials and Methods. The formal and logical method, the method of expert assessments, system analysis, analogy and comparison methods, analysis of documents and results of sociological studies were used.

Results. The article presents the relevance and the study results of development of methodological approaches to formation of a set of indicators, which reflect the social and economic situation and dynamics of a pharmacy institution using the social passport. The necessity of structuring the indicators characterizing the social and economic development of a pharmacy institution and determining relations between them have been substantiated. The directions for forming the system of the social passport of a pharmacy institution, its implementation and use of the information contained in the social passport regarding the employees of the pharmacy institution in practice are presented. It has been proposed to create an information card of an employee of a pharmacy institution for the information content of “Section II” of the social passport of the pharmacy institution in order to provide monitoring of human resources capacity and social and economic opportunities of the pharmacy institution. This is a relevant and pressing issue.

Conclusions. It has been proven that development of the system of generalized social indicators and their reflection in the social passport of a pharmacy institution allow to assess reasonably, compare and analyze the level of social protection of pharmacy professionals, as well as to identify their main social needs.

Key words: pharmacy institution; social protection of pharmacy professionals; social passport of a pharmacy institution; indicators.
М. В. Заричковая

Формування системи показальників і інформаційного наповнення соціального паспорту аптечних закладів

Ціль: існування інформації інформаційного наповнення соціального паспорту аптечних закладів.

Методи. Формально-логічний метод, метод экспертних оцінок, системного аналізу, аналогії і рівневий метод, аналіз документів і результатів соціологічних досліджень.

Результати дослідження. В статті представлені актуальність і результати дослідження по розробці методічних підходів до формуванню комплекса показальників, працюючих соціально-економічним станом аптеки, а також ініціативи показальників, характеризуючих соціально-економічне розвиток аптечного закладу, і установлення контексту між ними.

Висновки. Встановлено, що розвиток системи об'єднуючих показальників соціальної сфери і их відображення в соціальному паспорти аптечного закладу може об'єктивно оцінювати, стосуючись та аналізуючи рівень соціальної захисту, який включає основні соціальні особи.

Ключові слова: аптечне заклад; соціальна захиста; соціальний паспорт аптечних закладів; показальники.

Statement of the problem. Analysis of the legal and regulatory framework in the social sphere of Ukraine has shown that currently there is a number of reforms regarding social protection for the period up to 2020. Special focus is on the initiative of the Ministry of Social Policy concerning implementation of the state control while providing the social support, which will be provided by social inspection, monitoring of the efficiency of the social support programs and analysis of legislation violations on social support provision.

The draft law “On provision of the state control when providing the social support” recently developed is aimed at the abovementioned information. When providing the social support the subject of the state control is social inspection, which in particular should exchange information between social welfare bodies and the State Fiscal Service concerning the personal income and the needs. This requires an appropriate instrument of control and monitoring, e.g. a social passport [1-4].

Based on the abovementioned studies the conclusion can be made that one of the priorities of improving the social protection system for pharmacy professionals (SPPPhP) is a social passportization of pharmacy institutions.

Today there is a great number of indicators characterizing the social and economic development of both the pharmaceutical sector of the health industry in general and particular pharmacy institutions. This, in turn, does not allow assessing the status of the social sphere and the level of the social and economic development quickly and clearly. Therefore, it is required to develop a system of generalized indicators of the social sphere of the pharmaceutical sector of health industry. The indicators reflected in the social passport of a pharmacy institution will allow to assess reasonably, compare and analyze the level of SPPPhP, as well as to identify trends and regularities regarding the social needs of pharmacy professionals (PhP), to mark clearly the most acute problems of SPPPhP. This makes social passportization of pharmacy institutions relevant and pressing.

The social passport is the basis for a pharmacy institution to create the concepts and programs regarding SPPPhP that will be more specific and targeted for PhP, in particular it is concerns social services. The passport is aimed to develop qualitatively a new strategy of social services provision and to solve the emerging social problems, including introduction of common standards of social services.

The relevance of introduction of the social passport of a pharmacy institution is also confirmed by government reforms, including the main provisions of the Order No.53 “On Bringing into Force of the Form "Social Passport of a Region, a City, a District" [5-7].
The results of our study are presented below. The study consists of selection and implementation of the indicators and the information content of the social passport of a pharmacy institution reflecting the social and economic situation and the dynamics of its development.

When determining the content and number of indicators to be included in the social passport of a pharmacy institution, at first, as a rule, the problem occurs how to choose them from a large number of statistical and other data. The amount and content of the data in the social passport of a pharmacy institution must be requested by users, i.e. the members of the labor process of PhP and management of the pharmacy institution. They should also be maintained up to date and require minimal instruments for updating and monitoring.

The indicators to be included to the content of the social passport of a pharmacy institution are selected using the expert analysis method by correlating their structured variety to the information needs of the pharmacy institution revealed as a result of decomposition of administrative tasks.

As a result of the review of the legal and regulatory social framework, literature, online resources, etc., the basic problems of forming the structure of the social passport of a pharmacy institution have been determined. They are the as follows:

- poor structuring in the field;
- methodologically unreasonable amount of data (a small amount or rather large amount of data is displayed);
- irrelevant values of the indicators [8].

Therefore, implementation of “Social passport of a pharmacy institution” in practice of pharmacy institutions will enable to contain the relevant information about the pharmacy institution and reduce labor costs for updating. The use of the social passport of a pharmacy institution is an inventive idea in domestic and foreign practice.

Analysis of recent research and publications. The study of the current legal and regulatory framework and the scientific literature sources concerning the social passport has shown the absence of such technology as social passportization in the practice of pharmacy institutions. Problems of social protection of pharmacy professionals were studied in the works by such scientists as Gromovyk B. P., Gudzenko O. P., Kabachna A. V., Kotvitska A. A., Mnushko Z. M., Nemchenko A. S., Parnovsky B. L., Ponomarenko M. S., Posylkina O. V., Slobodianiuk M. M., Tolochko V. M., Bratishko Yu. S., Kubariyea I. V. and others, but the issues of formation and implementation of the “social passport of a pharmacy institution” in their works were not considered. Therefore, the conclusion can be made that in Ukraine it is rather new area with a promising future. When implementing it into practice of pharmacy institutions and social services it will improve the social protection of the employees of the pharmaceutical sector of health industry.

Based on the abovementioned information the subject under study is relevant, and it needs an extension study.

Identification of aspects of the problem unsolved previously. It should be mentioned that according to the current legislation social passports should be introduced for all enterprises and organizations in the form of a statistical document, which contains information on the employment potential of the enterprise (organization) aimed to provide the efficient social and legal protection of its employees.

Objective statement of the article. The aim of the article is to substantiate the system of indicators and the information content of the social passport in order to assess the social and economic efficiency of pharmacy institutions.

The methodical basis of this study is general scientific and applied scientific research methods, including formal and logical one, the method of expert assessments, system analysis, analogy and comparison methods, analysis of documents and results of sociological studies.

Presentation of the main material of the research. Social and economic reforms during the last 20 years have led to rather significant changes in the area of social protection of the population, but, unfortunately, there are no significant reforms of SPPhP in the pharmaceutical sector of health industry.

Having analyzed the current state of SPPhP introduction of the social passport of a pharmacy institution has been proposed. We believe it is an efficient instrument of monitoring of the main indicators of SPPhP.
To determine the structure of the social passport of a pharmacy institution and its information base the experts competent in SPPhP with the experience in the social sphere were invited. During the study 170 experts were selected for advising in the issues of development of the structure of the social passport of a pharmacy institution and its main sections (blocks). While selecting the experts the basic information reflecting their specialization, competence in matters of SPPhP and skills regarding formation of the necessary strategies of its reforming and improving were taken into account (Fig. 1) [12, 13].

While determining the competence of the experts the ranking of the baseline data regarding the experts selected in terms of importance was carried out on the basis of calculation of the information criterion $\chi^2$ (chi-square).

As a result, the following five most informative indicators were identified: the expert’s qualification category, the expert’s position, the membership in non-governmental organizations, professional associations, governmental structures, the type of a pharmaceutical institution and its form of ownership (Fig. 2).

When developing the model for determining the expert’s competence different methods of assessment of its parameters were used. The best values were obtained using the quasi-Newton method and the method of Hooke-Jeeves (Fig. 3).

When conducting this study the highly significant indexes, namely $c^2 (5) = 92.979$, $p = 0.00000 << 0.05$, were obtained.
The main indicator of the model adequacy to the real data is its accuracy. The "total accuracy" for the logistic regression equation developed is 87.06%, which is rather high index (Fig. 4).

According to our study accuracy of the class of the skilled experts is 88.52%. Therefore, it can be stated that the experts participating in the study have the high level of competence.

Based on the expert study it has been found that the issue of the structure of the social passport of a pharmacy institution that can provide efficient implementation of both SPPhP functions and management functions is of current interest.

It has been determined that the social passport of a pharmacy institution is oriented to achieve the effective development of the pharmacy institution and provides the purposeful impact on the quality of:

- the labor potential of pharmacy institutions;
- the PhP’s life and work;
- the external social environment;
- the pharmacy institution development.

Detailization of the indicators of general development of a pharmacy institution according to its characteristics allows providing the system substantiation of the needs of the current system of SPPhP by means of certain information, measures, etc.

<table>
<thead>
<tr>
<th>N=170</th>
<th>Model: Logistic regression (experts)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Const B0</td>
</tr>
<tr>
<td>Estimate</td>
<td>-11.8945</td>
</tr>
<tr>
<td>Odds ratio (unit ch)</td>
<td>0.0000</td>
</tr>
<tr>
<td>Odds ratio (unit range)</td>
<td>807.20</td>
</tr>
</tbody>
</table>

Fig. 2. The basic factors of the competence of experts participating in the study

Fig. 3. Parameters of the model of the expert competence determination
Therefore, the system of indicators for analysis and assessment of the social passport of a pharmacy institution should be based on the principles of the system approach. Three information indicators of the macroblocks must be the basis of the structural formation of the indicators mentioned above (Fig. 5) [9-11].

These indicators should be presented in three aspects:
• the actual values of indicators for the reporting period;
• the growth rate of the indicators in relation to the corresponding previous period;
• the value of the targeted indicators of the economic development.

Thus, a complete system of social and economic indicators for effective management of a pharmacy institution should include:
• the system of performance indicators of a pharmacy institution;
• the system of indicators of the human resources capacity of a pharmacy institution;
• the system of indicators of quality of life and work of the labor collective;
• the system of indicators of quality of the external social environment;
• the index of harmonious development of a pharmacy institution.

The relationship between these systems is shown in Fig. 6.

It would be reasonable to structure the social passport of a pharmacy institution into strategic blocks covering the main aspects of the pharmacy institution. They should consist of sub-blocks, their economic content should be disclosed on the basis of the elements of their systems and subsystems of indicators specifying the information sources and calculation formulas.

To provide the system approach to introduction of the SPPhP system the implementation of the technology of social passportization of a pharmacy institution has been substantiated. The structure of the social passport of a pharmacy institution proposed is universal, and it can be used in pharmacy institutions of different forms of ownership. This structure consists of six main blocks (Fig. 7) [12, 13].

Each block is filled in with the corresponding data in accordance with the main characteristics of the block and the controlled parameters of the social passport. Based on these data the critical points are determined. They will be monitored throughout the service life of the pharmacy institution. The main blocks and the structure of the social passport of a pharmacy institution.
institution were studied and described in the previous publications. This article deals with block II [12].

For example, it is necessary to fill in an appropriate information card for an employee of a pharmacy institution in order to provide the system of indicators for “Block II. Social and Demographic Structure of Labor Collective” and evaluate social protection of PhP. This card will be the basis for formation of a single data bank regarding the needs of PhP in the form of social services and other elements of social protection. It consists of the following main elements, which are listed in Tab. 1.

According to the study of the structure of the social passport of a pharmacy institution conducted one of the main information carriers for the analysis of the social and demographic structure of the labor collective of a pharmacy institution is “The Information Card of an Employee of a Pharmacy Institution”, which consists of 4 main sections:
1. Personal data.
2. Social services (provision of social services).
3. Health services.
4. Social and living conditions.

Continuous monitoring of this card and exchange of information with the relevant social...
### Table 1

**THE INFORMATION CARD OF AN EMPLOYEE OF A PHARMACY INSTITUTION FOR THE INFORMATION CONTENT OF “BLOCK II” OF THE SOCIAL PASSPORT OF A PHARMACY INSTITUTION**

<table>
<thead>
<tr>
<th>Line No.</th>
<th>The list of the information about an employee of a pharmacy institution</th>
<th>The information content (to be filled in using the information of databases and oral information provided by an employee of a pharmacy institution)</th>
<th>Needs of an employee of a pharmacy institution</th>
<th>Measures on implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>1.1</td>
<td>Full name</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>1.2</td>
<td>Date of birth</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>1.3</td>
<td>Contact telephone number</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>1.4</td>
<td>Name of higher educational establishment (HEE), specialty</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>1.5</td>
<td>Diploma series, date of issue</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>1.6</td>
<td>Work experience after graduating from HEE, the total number of years within the specialty</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Work experience at the last position</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>1.7</td>
<td>Academic degree, academic status</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>1.8</td>
<td>Internship: name of HEE and the term of training</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>1.9</td>
<td>Specialty and qualification improvement (the latest one): name of HEE and the term of training</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>1.10</td>
<td>Certified by occupation and qualification category</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>1.11</td>
<td>Position</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>1.12</td>
<td>Social status:</td>
<td>(specify as necessary)</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>– veteran;</td>
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<td></td>
<td>– age pensioner;</td>
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<td></td>
<td>– old age pensioner;</td>
<td></td>
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<tr>
<td></td>
<td>– labor veteran;</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>– participant of Chernobyl nuclear disaster elimination;</td>
<td></td>
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<tr>
<td></td>
<td>– person injured in Chernobyl nuclear disaster;</td>
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<tr>
<td></td>
<td>– family with many children;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>– disabled person of group I;</td>
<td></td>
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<tr>
<td></td>
<td>– disabled person of group II;</td>
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<td></td>
<td>– disabled person of group III;</td>
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<td></td>
<td>– disabled child;</td>
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<td></td>
<td>– single parent (mother);</td>
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<td></td>
<td>– mother-heroine;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>– other categories</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.13</td>
<td>Place of residence:</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>1.14</td>
<td>Living characteristics</td>
<td>living alone (a), living with a family (underline as applicable)</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>2</td>
<td>Social services (provision of social services)</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>2.1</td>
<td>Provision of services by the territorial centre of social services (provision of social services): specify the department providing social services; free of charge/ on a paying basis (underline as applicable)</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>
services will provide an opportunity to identify PhP’s basic needs in social protection at the workplace. This will be the first step in reforming of SPPhP in pharmacy institutions.

**Conclusions and prospects for further research**

In conclusion it can be noted that the social passport of a pharmacy institution is designed to improve the efficiency of the social sphere management and better interaction of the management of the pharmacy institution with relevant organizations and PhP.

It has been proven that development of the system of generalized social indicators of the pharmaceutical sector of health industry and their reflection in the social passport of a pharmacy institution allow to assess reasonably, compare and analyze the level of social protection of pharmacy professionals, as well as to identify the main trends and regularities regarding the PhP’s social needs, and to mark clearly the most pressing problems of SPPhP.

**Conflicts of Interests:** authors have no conflict of interests to declare.
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*Information about authors:
Zarichkova M. V., Candidate of Pharmacy (Ph.D.), associate professor of the Department of Management and Economics, Institute for Continuing Education of Pharmacy Professionals at the National University of Pharmacy (http://orcid.org/0000-0001-7980-5669). E-mail: itl760@online.kharkov.ua

*Відомості про авторів:
Зарічкова М. В., кандидат фармацевтичних наук, доцент кафедри управління та економіки фармації, Інститут підвищення кваліфікації спеціалістів фармації Національного фармацевтичного університету (http://orcid.org/0000-0001-7980-5669). E-mail: itl760@online.kharkov.ua

*Сведения об авторах:
Заричковая М. В., кандидат фармацевтических наук, доцент кафедры управления и экономики фармации, Институт повышения квалификации специалистов фармацевтики Национального фармацевтического университета (http://orcid.org/0000-0001-7980-5669). E-mail: itl760@online.kharkov.ua

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