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RESEARCH ON PROFESSIONAL COMPETENCES OF PHARMACY SPECIALISTS AND ANALYSIS OF THE POSSIBILITY OF THEIR DEVELOPMENT IN THE SYSTEM OF POSTGRADUATE EDUCATION OF PHARMACISTS

Actuality. In the conditions of the socio-economic crisis and martial law in Ukraine, reviewing the professional competencies of pharmacists is an important and relevant direction of research for the sustainable development of the pharmaceutical sector of the healthcare industry. The main place in this direction is occupied by professional development in the system of postgraduate education of pharmacists or lifelong learning. A modern pharmacist must meet professional competencies and take into account today's requirements for the acquisition of hard skills and soft skills for work in wartime and emergency situations, must be adaptable, flexible and able to adjust to rapidly changing population needs. This provides an opportunity to update the professional skills and practical knowledge of pharmacists regarding the use of modern technologies and the development of contemporary professional competencies, making them more in demand by employers in practical pharmacy. The updating of professional competences will allow pharmacists to respond more effectively to the needs of consumers, to improve the skills of managing stocks of drugs and medical preparations in modern conditions. Taking into account the specificity of the state of war in the educational programs for the professional development of pharmacists will help them adapt their practice to emergency situations and ensure effective pharmaceutical care for the population.

The purpose of the work. Research of professional competencies of pharmacy specialists with further analysis of the possibility of their development in the system of postgraduate education of pharmacists.

Materials and methods. The research employed general theoretical research methods including information search, analysis of literary sources, method of generalization, semantic analysis, analytical and graphical methods, as well as the sociological method of questionnaire survey (Mishra, P. et al, 2021). Google Forms (Google Inc., USA) was used for creating the questionnaire and collecting survey results.

Descriptive statistical methods and statistical inference were employed in the processing and analysis of survey data. Epitools (Ausvet Ltd., Australia) and the statistical package STATISTICA 13 (TIBCO Software Inc., USA) were used for calculations and data analysis. Additionally, auxiliary calculations and most of the graphs were created using MS Excel 2021 spreadsheet software (Microsoft Corporation, USA).

Research results. The questionnaire was aimed at researching 14 professional qualities of pharmacy specialists in three directions: the importance of qualities (characteristics) for distinguishing highly efficient performance from performance at a sufficient level; the possibility of developing a certain quality with the help of educational programs; the expediency of including a certain characteristic in the qualification requirements when recruiting personnel for the position of pharmacist.

The research demonstrates a high level of consistency among the three obtained rankings and identifies professional characteristics that were evaluated as the most significant across all research directions. These include: professional awareness, responsibility and the ability to improve qualifications. It was found that respondents tend to rate the possibility of developing the professional qualities and abilities of pharmacy workers with the help of educational programs lower than the importance of these qualities for the highly efficient performance of professional duties and the feasibility of their inclusion in the requirements for the position of a pharmacist.

Conclusion. According to the research findings, in terms of informativeness for the inclusion in the qualification requirements for the position of pharmacist, the most important professional qualities are responsibility, ability to improve qualifications, professional awareness, carefulness and accuracy, while the least important ones are purposefulness, ability to persuade and tolerance.

According to the results of the questionnaire, the ability to improve qualifications was put forward by the respondents in the first place among all professional characteristics that can be developed with the help of educational programs in the system of postgraduate education of pharmacists. The need for monitoring and updating educational programs in the system of professional development of pharmacists and other measures of continuous professional development, based on the requests of practical pharmacy, has been established.

The results of the study can be useful for developing and implementing new educational programs and professionally-oriented CPD activities in the system of continuous professional training for pharmacists. They can also be used for managing human resources in pharmaceutical organizations, enhancing personnel selection, developing effective employee development strategies and ultimately improving the level of pharmaceutical services and customer satisfaction.

Key words: continuous professional development, educational programs, hard skills, lifelong learning, pharmacist, pharmacy, pharmacy professionals, postgraduate education, professional competencies, qualification enhancement, soft skills.

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ДОСЛІДЖЕННЯ ПРОФЕСІЙНИХ КОМПЕТЕНТНОСТЕЙ ФАХІВЦІВ ФАРМАЦІЇ ТА АНАЛІЗ МОЖЛИВОСТІ ЇХ РОЗВИТКУ В СИСТЕМІ ПІСЛЯДИПЛОМНОЇ ОСВІТИ ФАРМАЦЕВТІВ

Актуальність. В умовах соціально-економічної кризи та воєнного стану в Україні перегляд професійних компетенцій фармацевтів є важливим й актуальним напрямом досліджень для сталого розвитку фармацевтичного сектору галузі охорони здоров'я. Головне місце в цьому напрямі посідає підвищення кваліфікації в системі післядипломної освіти фармацевтів або навчання впродовж життя. Сучасний фармацевт має відповідати професійним компетенціям та враховувати вимоги сьогодення щодо набуття *hard skills* і *soft skills* для роботи в умовах воєнного стану та надзвичайних ситуацій, повинен бути адаптивним, гнучким та адаптуватися до потреб населення, що швидко змінюються. Це дає змогу оновити професійні навички та практичні знання фармацевтів щодо використання новітніх технологій і розвитку сучасних професійних компетенцій та бути більш затребуваними серед роботодавців у практичній фармації. Актуалізація професійних компетенцій дасть змогу фармацевтам ефективніше реагувати на потреби споживачів, покращити вміння управляти запасами ліків та медичних препаратів у сучасних умовах. Врахування специфіки воєнного стану в освітніх програмах підвищення кваліфікації фармацевтів допоможе фармацевтам адаптувати свою практику до умов надзвичайної ситуації та забезпечити ефективну фармацевтичну опіку для населення.

Мета дослідження – дослідити професійні компетентності фахівців фармації з подальшим аналізом можливості їх розвитку в системі післядипломної освіти фармацевтів.

Матеріали та методи. У роботі використано загальнотеоретичні методи дослідження: інформаційний пошук, аналіз літературних джерел, метод узагальнення, семантичний, аналітичний, графічний методи та соціологічний метод – анкетного опитування. Для створення опитувальника й збору результатів анкетування використано засоби сервісу Google Forms (Google Inc., USA).

При обробці та аналізі даних анкетування застосовувалися методи описової статистики та статистичного висновку. Для обчислень й аналізу даних користувалися засобами сервісу EpiTools (Ausvet Ltd., Australia), статистичного пакету STATISTICA 13 (TIBCO Software Inc., USA), частину допоміжних обчислень і більшість графіків здійснено засобами табличного процесора MS Excel 2021 (Microsoft Corporation, USA).

Результати дослідження. Анкетування спрямоване на дослідження 14 професійних якостей фахівців фармації у трьох напрямках: важливість якостей (характеристик) для розрізнення вискоефективного виконання роботи від виконання на достатньому рівні; можливість розвитку певної якості за допомогою освітніх програм професійних якостей та здібностей працівників фармації респонденти схильні оцінювати нижче, ніж важливість цих якостей для вискоефективного виконання професійних обов'язків і доцільність їх внесення до вимог на посаду фармацевта.

Показано високу узгодженість трьох отриманих ранжувань та виокремлено професійні характеристики, які оцінювалися як найвагоміші за всіма напрямками дослідження. До них належать: професійна обізнаність, відповідальність і здатність до вдосконалення кваліфікації. Виявлено, що можливість розвитку за допомогою освітніх програм професійних якостей та здібностей працівників фармації респонденти схильні оцінювати нижче, ніж важливість цих якостей для вискоефективного виконання професійних обов'язків і доцільність їх внесення до вимог на посаду фармацевта.

Висновки. За результатами дослідження встановлено, що з погляду інформативності для доцільності внесення до кваліфікаційних вимог на посаду фармацевта найважливішими є такі професійні якості, як відповідальність, здатність до вдосконалення кваліфікації, професійна обізнаність, уважність та акуратність, найменш важливими виявились цілеспрямованість, вміння переконувати, толерантність.

За результатами анкетування здатність до вдосконалення кваліфікації висунуто респондентами на перше місце серед усіх професійних характеристик, які можуть бути розвинені за допомогою освітніх програм у системі післядипломної освіти

фармацевтів. Установлено необхідність у моніторингу та оновленні освітніх програм у системі підвищення кваліфікації фармацевтів та інших заходів безперервного професійного розвитку, базуючись на запитах практичної фармації.

Результати дослідження можуть бути корисними для розробки і впровадження в систему безперервного професійного навчання фармацевтів нових освітніх програм і професійно орієнтованих заходів БПР та використанні для управління кадровими ресурсами фармацевтичних організацій, сприяючи вдосконаленню добору персоналу, розробці ефективних стратегій розвитку працівників, що сприятиме підвищенню рівня надання фармацевтичних послуг і задоволеності клієнтів.

Ключові слова: аптечний заклад, безперервний професійний розвиток, навчання впродовж життя, освітні програми, підвищення кваліфікації, післядипломна освіта, професійні компетентності, фармацевт, фахівці фармації, hard skills, soft skills.

Introduction. Actuality. Over the past decades, there have been global reforms in healthcare professional education aimed at implementing competency-based education and training (CBET). This approach enhances the workforce potential in the pharmaceutical sector (Arakawa N. et al, 2020; Udoh A. et al, 2021; Bates I. et al, 2023). Competency-based education emphasizes students' progress in line with contemporary societal demands (Bajis D. et al, 2020; Chen A.M.H. et al, 2024). Continuous professional development, including lifelong learning, is crucial for maintaining pharmacists' professional competence and improving the quality of pharmaceutical care provided to the population (Ballaram, S. et al, 2024). This requires pharmacists to possess a diverse range of skills and knowledge to remain competitive and respond to labor market challenges.

Analyzing the literature, we found that the concept of competency was introduced in the 1960s (Ross S. et al, 2018; Arakawa N. et al, 2020). The importance and usefulness of competencies in the pharmacy profession are determined by the International Pharmaceutical Federation (FIP), including the development of the Global Competency Framework (GbCF) in 2012 (Pharmacy Education Taskforce. A global competency framework: version 1, FIP, 2012) and the publication of the Pharmaceutical Workforce Development Goals (FIP, 2016).

Competency is defined as “a core characteristic of an individual that is related to effective performance”. Competencies encompass knowledge, skills, attitudes and behaviors required for a pharmacy professional to maintain effective performance (A global competency framework: version 1, FIP, 2012). The Competency Framework (CF) represents a comprehensive set of required competencies and related behavioral descriptions, identified as key to successful performance in a specific field or practice (FIP Global Competency Framework (GbCFv2) handbook, FIP, 2023). Understanding the skills and competencies necessary for healthcare professionals is crucial to ensure that educational experiences and programs are structured to prepare future pharmacy professionals for contemporary healthcare challenges. Additionally, identifying the desired skills in specific healthcare disciplines will facilitate efforts to optimize the roles and responsibilities

of professionals within the healthcare system (Batt A.M. et al, 2019; Mills J.A. et al, 2020).

One of the three key objectives of the WHO Global Strategy is “to optimize the performance, quality, and impact of the health workforce through evidence-informed policies on human resources for health”. In alignment with the United Nations Sustainable Development Goals (SDGs) for 2030, pharmacists must be adaptive, flexible and capable of advancing their practice (Global strategy on human resources for health: workforce 2030, World Health Organization, 2016).

Analysis of the literature indicates that significant attention is given to the competency-based approach in pharmaceutical education in Ukraine. Researchers such as Kotvitska A. and Volkova A. note that the implementation of national strategies to improve population well-being is a key approach to reforming public policy in various countries. They emphasize that socio-economic factors determine living conditions and people's health (Kotvitska A. et al, 2021). The essence and structure of the professional competence of future pharmacy specialists have been studied by Kovalchuk I. (Kovalchuk I.S. et al, 2021). Researchers such as Tolochko V., Zarichkova M., Artyukh T., and Adonkina V. have studied the professional activities of pharmacy specialists in modern conditions and the development of educational program components (Zarichkova M.V. et al, 2024). The scientific and applied foundations for the implementation of innovative educational technologies in the training of pharmacy specialists have been examined by Goryacha L. (Goryacha L.O., 2021). Additionally, researchers like Kozyreva O., Posilkina O., and Bratishko Y. have conducted studies dedicated to the development of principles for managing the socially responsible activities of pharmaceutical companies, which is a crucial condition for improving the quality, efficiency, and accessibility of pharmaceutical services for the population (Kozyreva O. et al, 2021).

Updating professional competencies will enable pharmacists to respond more effectively to consumer needs and improve skills in managing drug and medical supply inventories under current conditions. Considering the specifics of martial law in continuing education programs for pharmacists will help them adapt their practice to emergency situations and provide

effective pharmaceutical care to the population, making our research particularly relevant in today's context.

The purpose of the work. Research of professional competencies of pharmacy specialists with further analysis of the possibility of their development in the system of postgraduate education of pharmacists.

Materials and methods. The research employed general theoretical research methods including information search, analysis of literary sources, method of generalization, semantic analysis, analytical and graphical methods, as well as the sociological method of questionnaire survey (Mishra, P. et al, 2021). Google Forms (Google Inc., USA) was used for creating the questionnaire and collecting survey results.

Descriptive statistical methods and statistical inference were employed in the processing and analysis of survey data. Epitools (Ausvet Ltd., Australia) and the statistical package STATISTICA 13 (TIBCO Software Inc., USA) were used for calculations and data analysis. Additionally, auxiliary calculations and most of the graphs were created using MS Excel 2021 spreadsheet software (Microsoft Corporation, USA).

Research results and discussion. The questionnaire was aimed at researching 14 professional qualities of pharmacy specialists in three directions: the importance of qualities (characteristics) for distinguishing highly efficient performance from performance at a sufficient level; the possibility of developing a certain quality with the help of educational programs; the expediency of including a certain characteristic in the qualification requirements when recruiting personnel for the position of pharmacist.

The research design consisted of 5 stages:

1. Selection and coverage of respondents for the study.

2. Ranking the professional qualities of a pharmacist by importance for distinguishing highly efficient work performance from performance at a sufficient level.

3. Ranking of the professional qualities of a pharmacist according to the possibility of development within the framework of educational programs.

4. Ranking of professional characteristics according to the expediency of inclusion in the qualification requirements for the position of a pharmacist.

5. Comparison of rankings of professional qualities, characteristics and abilities of pharmacists in three areas of research.

To carry out the first stage of the research, we selected certain characteristics: carefulness and accuracy, communication skills, tolerance, physical and mental endurance, responsibility, organizedness, purposefulness, customer focus, the ability to persuade,

the ability to work in a team, industriousness, analytical thinking, professional awareness, as well as ability for professional improvement.

For each of the three directions, all investigated characteristics of the professional competence of a pharmacy specialist were evaluated by respondents on a scale from 1 to 5 points, where 5 points corresponded to the highest importance of a certain professional quality, 1 point to the lowest.

A total of 172 respondents, employees of pharmaceutical institutions from 17 regions, mainly from the eastern, northern, and central regions of Ukraine, participated in the study ($\chi^2=18.698$, $p=0.0009010381<0.05$). The majority of institutions where the respondents worked were located in large cities ($\chi^2=240.151$, $p<0.000001$) (fig. 1).

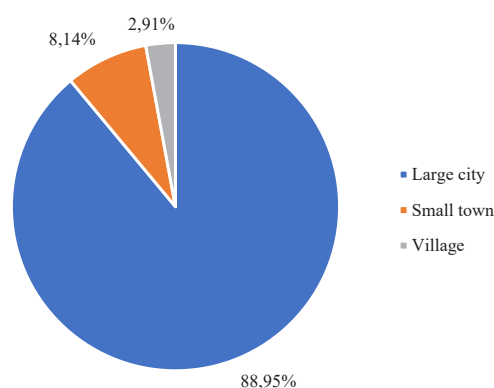


Fig. 1. Distribution of respondents based on the location of the organization where they work

Most of the respondents worked in pharmacies that were separate or part of chains (95.35% vs 4.65%: $Z=16.8$, $p<0.000001$). The vast majority of pharmaceutical institutions belonged to private ownership ($\chi^2=259.895$, $p<0.000001$) (fig. 2).

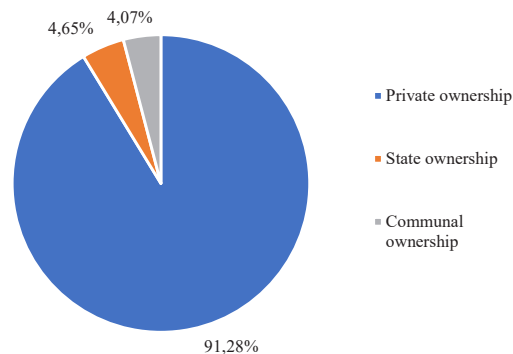


Fig. 2. Distribution of the number of respondents depending on the form of ownership of the organization where they work

Respondents aged 30 to 40 predominated in terms of age distribution ($\chi^2=137.884$, $p=6.861 \times 10^{-7}$); other age categories were evenly represented among the respondents ($\chi^2=4.606$, $p=0.09995549$). The study covered a wide range of positions in the field of pharmacy, from directors and heads to pharmacists and their assistants (table 1), maintaining an equal ratio between managerial staff and specialists (52.91% vs 47.09%: $Z=1.1$, $p=0.2809$).

Table 1

Distribution of respondents working in pharmaceutical institutions by positions held

Position	Respondent count	
	Abs.	% (95%-CI)
Pharmacy manager	76	44.19 (36.97; 51.65)
Assistant pharmacy manager	5	2.91 (1.25; 6.62)
Pharmacy outpost manager	2	1.16 (0.32; 4.14)
Warehouse manager	3	1.74 (0.59; 5.00)
Assistant warehouse manager	2	1.16 (0.32; 4.14)
Director	3	1.74 (0.59; 5.00)
Managerial staff in general	91	52.91 (45.45; 60.37)
Pharmacist	65	37.79 (30.89; 45.23)
Pharmacy assistant	16	9.30 (5.81; 14.58)
Specialists in general	81	47.09 (39.63; 54.55)

Thus, the research sample covered an equal proportion of specialists and managers of predominantly privately owned pharmacies located in cities across various regions of Ukraine.

At the second stage of the research, we ranked the professional qualities of the pharmacist in order of importance for distinguishing highly efficient performance from performance at a sufficient level. The importance of the studied fourteen professional characteristics, qualities and abilities for the highly effective performance of duties by pharmacy employees was assessed based on the results of the respondents' answers to the question "Estimate in points (from 1 to 5) to what extent the specified characteristics will allow you to distinguish highly effective performance of a pharmacist's work from performance at a sufficient level?". Generalizing these responses allowed us to establish the presence of a statistically significant difference between the ratings of the fourteen professional qualities (Friedman $\chi^2=366.2087$, $p<0.000001$) and to identify, based on pairwise comparisons of the obtained scores, three groups of qualities by their degree of importance (table 2).

2. The table presents the results of comparing the rating of a certain characteristic with the rating of the characteristic that has the next higher average rank.

Thus, according to the interviewees, the most important characteristics that distinguish highly effective

Table 2

Point assessments of the importance of the professional qualities of a pharmacy specialist to distinguish highly effective performance of duties from performance of duties at a sufficient level

Characteristic	Rating		Statistical significance of differences between the scores of characteristics*			Importance level of the characteristic
	Scores (Me [LQ;UQ])	Average rank	Z	p	P _{adj}	
Responsibility	5.0 [5.0;5.0]	9.37	—	—	—	1
Professional awareness	5.0 [5.0;5.0]	9.02	1.344	0.17911	0.20631	
Ability to improve qualifications	5.0 [5.0;5.0]	9.00	0.536	0.59218	0.63398	
Industriousness	5.0 [4.0;5.0]	8.59	2.120	0.03404	0.04693	2
Carefulness and accuracy	5.0 [4.0;5.0]	8.21	1.261	0.20724	0.22999	
Organizedness	5.0 [4.0;5.0]	8.01	0.516	0.60563	0.64084	
Physical and mental endurance	5.0 [4.0;5.0]	7.32	1.734	0.08286	0.09921	
Communication skills	5.0 [4.0;5.0]	7.31	0.564	0.57249	0.62020	
Purposefulness	5.0 [4.0;5.0]	7.24	0.047	0.96263	0.96263	
Ability to work in a team	5.0 [3.0;5.0]	6.86	1.597	0.11020	0.12856	
Customer focus	4.0 [4.0;5.0]	6.66	0.283	0.77747	0.79494	
Analytical thinking	4.0 [4.0;5.0]	6.38	0.510	0.60987	0.63791	
Tolerance	4.0 [3.0;5.0]	5.90	1.937	0.05278	0.06861	
Ability to persuade	4.0 [3.0;5.0]	5.14	3.237	0.00121	0.00207	3

*Notes: 1. Paired Wilcoxon signed-rank test was used (Z – test statistic, p – "raw" level of statistical significance, padj – level of statistical significance adjusted with Benjamini-Hochberg correction for multiple comparisons).

performance of professional duties by a pharmacist from performance at a sufficient level are responsibility, professional awareness and the ability to improve qualifications and continuous professional development. According to the results of the questionnaire, these qualities were evaluated at the same highest points, which are statistically significantly higher than the point estimates of the rest of the pharmacist's professional qualities.

According to the results of the survey, ten professional characteristics had an average degree of importance for distinguishing the highly effective performance of a pharmacist's duties from the performance of duties at a sufficient level (Table 2). These include industriousness, carefulness and accuracy, organizedness, physical and mental endurance, communication skills, purposefulness, ability to work in a team, customer focus, analytical thinking and tolerance. In this group of characteristics, no statistically significant differences were found between the scores of each pair of two characteristics with close average ranks, so they were assigned the same degree of importance.

Thus, the analysis of the survey results allowed us to establish that in terms of informativeness for distinguishing high-performance work of a pharmacist

from performing duties at a sufficient level, the most important professional qualities are responsibility, professional awareness, and the ability to improve qualifications, while the least important is ability to persuade.

At the third stage, we ranked the professional qualities of the pharmacist according to the possibility of development within the framework of educational programs, which were evaluated by the respondents from the point of view of the possibility of their development with the help of educational programs (fig. 3).

Based on the results of the analysis, it was found that the most promising from the point of view of the possibility of development with the help of educational programs is the ability to improve qualifications and professional development. The second most promising characteristic in this sense is professional awareness and the rest of the qualities and abilities received significantly lower scores and were assigned to the third group.

On the fourth stage, we conducted ranking of professional characteristics based on their suitability for inclusion in the qualification requirements for the position of pharmacist. Respondents were asked to rate, on a scale of 1 to 5, the appropriateness of including specified characteristics, qualities, and abilities in the

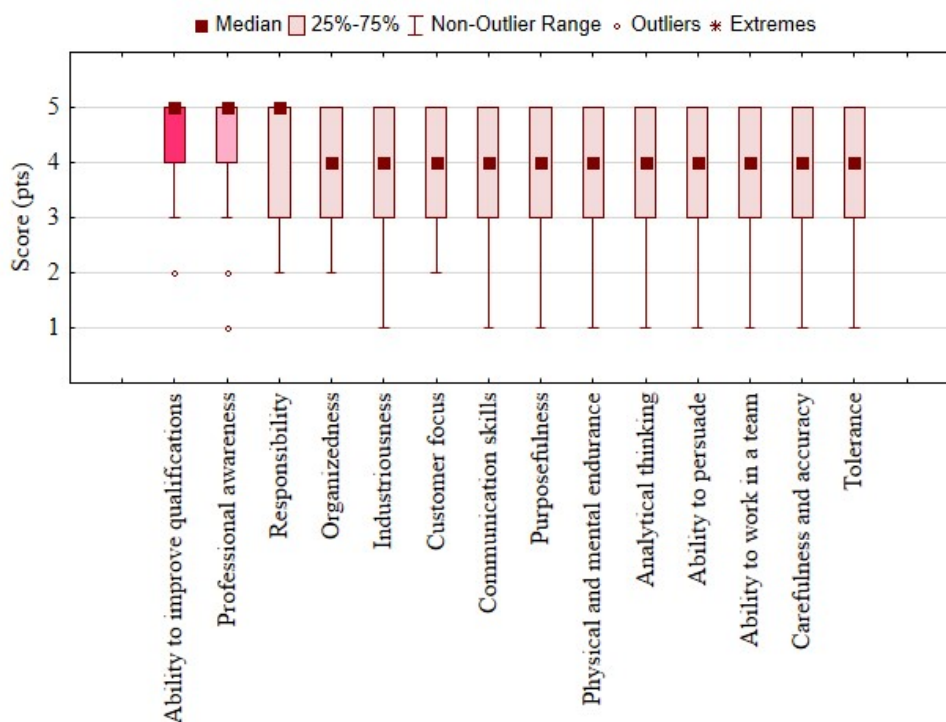


Fig. 3. Ranking of the professional characteristics, qualities and abilities of a pharmacy worker according to the degree of opportunity for development with the help of training programs (survey results)

requirements for applicants during the recruitment process for the position of pharmacist. Significant differences were found between the ratings of the investigated characteristics (Friedman $\chi^2=145.6675$, $p<0.000001$). However, further analysis revealed that these differences did not manifest for pairs of characteristics with similar average ranks, preventing us from distinguishing clear groups of professional qualities of the pharmacist with characteristics of equal suitability within each group that significantly differed from each other. Therefore, the investigated characteristics were ranked in descending order of the average rank of their suitability for inclusion in the job requirements (fig. 4).

Qualities such as responsibility, ability to improve qualifications, professional awareness, carefulness and accuracy were rated equally high compared to the rest of the professional qualities of pharmacists. Organizedness, ability to work in a team, customer focus, industriousness, communication skills, physical and mental endurance, and analytical thinking had a moderate level of importance for inclusion in the qualification requirements for applicants for the position of pharmacist. The analysis of the research results allowed us to establish that in terms of informativeness

for the suitability of inclusion in the qualification requirements for the position of pharmacist, the most important professional qualities are responsibility, ability to improve qualifications, professional awareness, carefulness and accuracy, while the least important are purposefulness, ability to persuade and tolerance.

At the fifth stage of our research, we compared the rankings of the pharmacist's professional qualities, characteristics and abilities according to three areas of research on the professional qualities of a pharmacy worker (on the importance for distinguishing highly effective performance of duties from mediocre, on the possibility of development with the help of educational programs and on the expediency of including to the qualification requirements for the position of pharmacist). After mathematical processing of the data of stages 1–4, we found similarities between them, namely such characteristics as: professional awareness, responsibility and the ability to improve qualifications.

On the basis of the conducted research, it can be stated that professional skills, which are understood as the generalized hard skills of a pharmaceutical industry worker, are important in all three directions. Therefore, professional competence should be key in

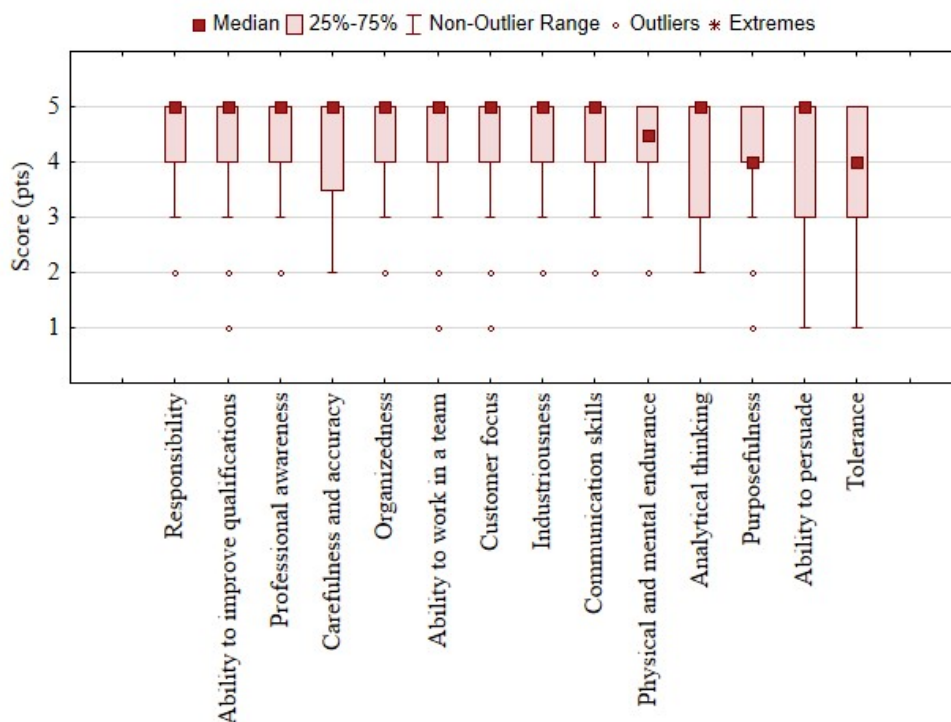


Fig. 4. Ranking of the professional characteristics, qualities and abilities of a pharmacy worker according to the degree of expediency of inclusion in the qualification requirements put forward to applicants for the position of a pharmacist (survey results)

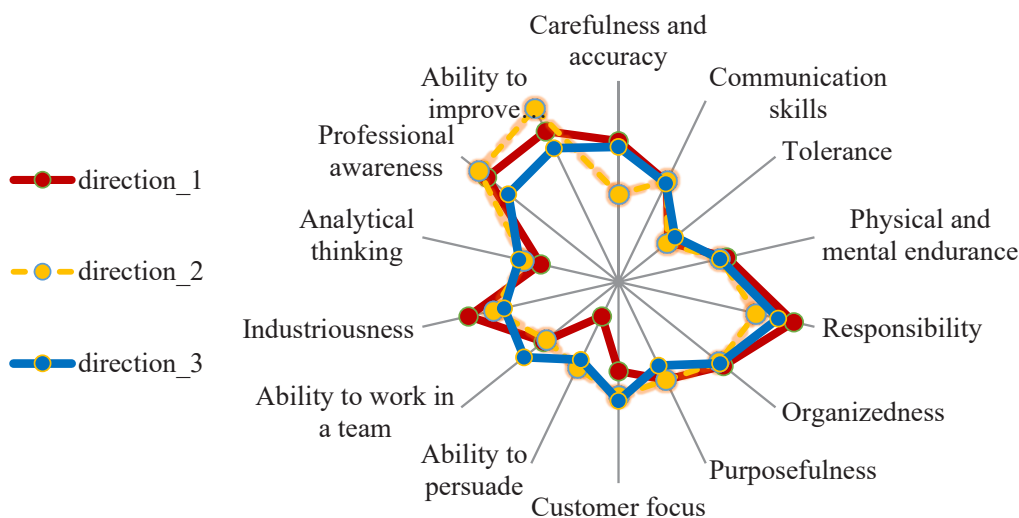


Fig. 5. Average ranks of professional characteristics, qualities, and abilities across three research directions*

*Notes:

Direction 1 – the importance of the characteristic for distinguishing highly effective performance of professional duties from performance at a sufficient level.

Direction 2 – possibility of developing the professional characteristic through educational programs.

Direction 3 – appropriateness of including the characteristic in the requirements for applicants during the selection process for the pharmacist position.

the requirements for the corresponding position, and educational programs, first of all, should be aimed at the development of professional competences, which determines the effectiveness of the performance of professional duties.

It should be noted that the most rated qualities, such soft skills as responsibility and the ability to improve qualifications are also important. Responsibility is identified as one of the most necessary qualities in job requirements and as one of the most important for distinguishing highly effective performance of duties from performance at a sufficient level, however, the possibility of developing this skill with the help of training programs was rated somewhat lower by respondents.

There are also some discrepancies in the ranks of the “carefulness and accuracy” and “ability to persuade” characteristics (Figure 5). Thus, the possibility of developing carefulness and accuracy through educational programs was considered by the respondents to be relatively lower than the expediency of including this characteristic in the list of professional requirements for the position of a pharmacist and its importance for distinguishing highly effective performance of professional duties from performance at a sufficient level. At the same time, the importance of the ability to persuade to distinguish highly effective performance

of professional duties from performance at a sufficient level was rated relatively lower than the expediency of including this skill in the requirements for applicants when recruiting staff for the position of pharmacist, and the possibility of its development with the help of educational programs.

Taking the above into account, it can be concluded that the rankings of professional characteristics obtained through the three research directions appear to be consistent, as confirmed by the high value of the Kendall’s concordance coefficient ($W=0.82418$, $p=0.0029$).

Conclusions

Based on the results of the questionnaire analysis, the ranking of the professional characteristics, qualities and abilities of the pharmacy worker was carried out in three areas: the importance of qualities (characteristics) for distinguishing highly efficient performance from performance at a sufficient level; the possibility of developing a certain quality with the help of educational programs; the expediency of including a certain characteristic in the qualification requirements when recruiting personnel for the position of pharmacist.

The high consistency of the three obtained rankings is shown and the professional characteristics that were evaluated as the most important in all areas of

research are highlighted. These include: professional awareness, responsibility and the ability to improve qualifications. This allows us to conclude that these three qualities, according to the interviewed pharmacy specialists, are the most necessary in the qualification requirements for the position of a pharmacist and the most important for ensuring the highly efficient performance of their professional duties, and can also be developed in the best way with the help of educational programs. According to the research results, it was found that in terms of informativeness for the appropriateness of inclusion in the qualification requirements for the position of a pharmacist, the most important professional qualities are responsibility, ability to improve qualifications, professional awareness, carefulness and accuracy, while the least important are purposefulness, ability to persuade and tolerance. Responsibility is defined as one of the most necessary qualities in job requirements and as one of the most important for distinguishing highly effective performance of duties from performance at a sufficient level, however, the possibility of developing this skill with the help of educational programs was rated somewhat lower by respondents. This can be explained by the perspective

of pharmacy practitioners who see the necessity of practical work experience in the field alongside professional development through continuous professional development (CPD) activities.

According to the results of the questionnaire, the ability to improve qualifications was put forward by the respondents in the first place among all professional characteristics that can be developed with the help of educational programs in the system of postgraduate education of pharmacists. The necessity for monitoring and updating educational programs within the system of pharmacist qualification improvement and other continuous professional development (CPD) activities has been established, based on the demands of practical pharmacy.

The results of the study can be useful for developing and implementing new educational programs and professionally-oriented CPD activities in the system of continuous professional training for pharmacists. They can also be used for managing human resources in pharmaceutical organizations, enhancing personnel selection, developing effective employee development strategies and ultimately improving the level of pharmaceutical services and customer satisfaction.

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Mishyna I. – collection and analysis of literature, annotations, conclusions, summaries, participation in writing the article.

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