

RESEARCH ARTICLE

Testing the Methodology for assessing the Socially responsible behavior of Pharmaceutical specialists at the level of a Pharmacy Institution

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ABSTRACT:

The purpose of the work is to test the developed methodology for assessing the socially responsible behavior of pharmaceutical specialists (PhS) at the level of a pharmacy institution, followed by integration into the pharmaceutical space to increase the level of social responsibility (SR) of pharmaceutical organizations. Materials for research include publications of fundamental and applied researches of domestic and foreign scientists on SR issues and methods of its assessment at the organization and personal levels; national and international laws governing SR, pharmacy activities and the work of pharmaceutical specialists. Methods of information retrieval, analysis, synthesis, generalization, modeling and formalization were used in the study. Testing was carried out on the basis of two pharmaceutical organizations, which is typical for the Ukrainian retail segment of the pharmaceutical market (the team of one of the pharmacies of pharmaceutical organizations was evaluated). The experimental version of the methodology contained 38 items, which are grouped into three blocks of assessment parameters: knowledge (a specialist has the necessary professional knowledge) - 11 parameters, skills (a specialist knows how to carry out the work or has professional competencies) - 11 parameters, qualities (a specialist has professional and personal competencies) - 16 parameters. Each PhS was evaluated by the Supervisor of the pharmacy, two colleagues who work with him on a shift, and PhS had to evaluate himself on a scale: "5" - high level, "4" - sufficient level, "3" - satisfactory level, "2" - low level, "1" - unsatisfactory level. The final result is the average value of the assessment and the total score for each of the blocks and in general. According to studies of PhS, pharmacy No. 1 showed a satisfactory and low level of SR, in contrast to PhS of pharmacy No. 2, where a sufficient level prevailed. Thus, on the basis of the developed methodology for assessing the level of socially responsible behavior of PhS, its testing was carried out, which allows further integration of the technique into the pharmaceutical plane to increase the level of SR of pharmaceutical organizations. For the pharmacy in which PhS showed a low level of socially responsible behavior, a set of measures is proposed aimed at increasing the level of social responsibility. Moreover, the proposed set of measures will help to improve the motivational system of personnel of the pharmaceutical organization and the quality of pharmaceutical assistance.

KEYWORDS: social responsibility, pharmaceutical specialist, assessment, testing.

INTRODUCTION:

Modern pharmacy is characterized by a change in the vectors of pharmaceutical care from customer-oriented care to patient-oriented one and duality. The latter involves the maximum provision of well-being in combination with an economic factor (commercial function) to the patient. The abovementioned actualizes research on social responsibility (SR) in pharmacy at all levels: macroeconomic - the pharmaceutical community of the industry, microeconomic - the personnel of the

pharmaceutical organization, nanoscale (personal) - the pharmaceutical specialist (PhS), as well as the development of universal approaches and methods for assessing the SR of specialists from the pharmaceutical organization.

SR is an obligatory component of the activity of all entities of the pharmaceutical industry, a component of the professional competencies of the PhS and an unconditional component in their relations with society (the state, regulatory authorities, the public and other stakeholders)^{1,2,3}. This is confirmed by the emergence of international SR standards and their active use in practice in various fields of economic activity over the past decade^{4,5}.

Despite the increased interest of the international and Ukrainian scientific communities in SR issues in various industries (including pharmacy)^{6,7,8,9,10}, methodological aspects of assessing socially responsible behavior (SRB) of the PhS and tools for diagnosing SR remain insufficiently developed.

We were the first to started solving this problem by developing a method for assessing SR using the example of a pharmacy specialist considering that SRB is a reflection of his professionalism, level of moral, psychological, civil status^{11,12}. It means that a socially responsible PhS has its own internal determinants - behavioral regulators that direct him into the regulatory framework proposed by the society and the pharmaceutical community. It is the socially responsible behavior of the PhS that forms the image, increases the competitiveness and human capital of the pharmaceutical organization.

The purpose of the work is to test the developed methodology for assessing the socially responsible behavior of pharmaceutical specialists at the level of a pharmacy institution, followed by integration into the pharmaceutical space to increase the level of social responsibility of pharmaceutical organizations.

MATERIAL AND METHODS:

Materials for research were publications of fundamental and applied research of domestic and foreign scientists on SR issues and methods of its assessment at the organization level and personal level; national and international acts regulating SR, pharmacy activities and the work of pharmaceutical professionals.

Methods of information researches, analysis, synthesis, generalization, modeling and formalization were used in the study.

Considering that SRB PhS is a complex phenomenon beyond the levels and vectors, which depends on many

factors (education, period (stage) of professional life, post, professional role in the pharmaceutical organization, subject of relations and reporting, sociocultural environment, personal moral and ethical values, legal field, psychological and emotional state, etc.), the methodology “Assessment of SRB of a young specialist” was previously proposed¹³. The experimental version of the methodology contained 57 items, which were grouped into three blocks of assessment parameters: knowledge (a specialist has the necessary professional knowledge) - 16 parameters, skills (a specialist knows how to carry out the work or has professional competencies) - 21 parameters, qualities (a specialist has professional and personal competencies) - 20 parameters.

Despite the fact that today the main indicator in the motivation of specialists in Ukrainian pharmacies is the volume of sales and the cost of the average check, and the pharmacy owners "ignore" the moral and ethical component of the professional competencies of their staff, several pharmaceutical organizations agreed to take part in the testing of this methodology for assessing SR. In the process of testing, the team of one of the network pharmacies was evaluated. The social portrait of the teams of two pharmacies in comparison are shown in the Table 1.

Table 1: Characteristics staff of pharmacy

Indicator	Pharmacy №1	Pharmacy №2
Size of pharmaceutical organization	Regional pharmacy network - 110 outlets	Local pharmacy network - 5 outlets
Location	Sleeping area of the city (capital)	Within the territory of the market (district center)
Staffing, number of persons	Total - 15. pharmaceutical specialists (Supervisor - 1, master - 2, bachelor - 4) - 7	Total - 7. pharmaceutical specialists (Supervisor - 1, master - 1, bachelor - 3) - 5
Average age / work experience	26 years / 6 years	40 years / 12 years
Qualification category of staff	no	no

These drugstores are typical for the territory of Ukraine (according to production facilities - a pharmacy of finished drugs; staffing - representatives with secondary pharmaceutical education prevail; do not participate in social government programs; actively use marketing events to stimulate consumers).

The accumulation, adjustment, systematization of the source information and visualization of the results were carried out in Microsoft Office Excel spreadsheets.

Statistical analysis was performed using the program STATISTICA.13, license IPZ8041382130ARCN10-J.

RESULTS AND DISCUSSION:

The Supervisors of the two pharmacies were asked to identify the number of evaluation items and group them into homogeneous blocks of parameters, as well as add parameters that characterize other qualities of the PhSs (we remind that the experimental version contained 57 items: knowledge – 16 items, skills – 21 items, qualities

- 20 items). As a result, in the “knowledge” block the Supervisors left 11 positions for evaluation from 16, in the “skill” block they left 11 positions from 21, and in the “quality” block they left 11 positions from 20, but 5 new ones were added (quality of professional duties, presence/absence of complaints, awards / reprimands, scientific activity, social activity). The general list of parameters-characteristics that were evaluated are presented in the Table 2.

Table 2: List of parameters-characteristics of PhSs of pharmacies

Parameters	Characteristics
1. knowledge (The specialist has the necessary professional knowledge)	1.1. current legislation in the pharmaceutical industry; 1.2. pharmaceutical service organization; 1.3. rights, obligations and responsibilities of the pharmacist; 1.4. accounting and financial reporting in a pharmacy institution; 1.5. rules for storage and dispensing of drugs; 1.6. pharmacotherapeutic properties of drugs; 1.7. drug marketing and pharmaceutical market research methods; 1.8. pricing methods, peculiarities of pricing for domestic and imported drugs; 1.9. documentation rules and paperwork principles; 1.10. modern literature in the specialty, methods of its analysis using modern technical tools; 1.11. ethics of business communication.
2. skills (The specialist is able to carry out the work or has professional competencies)	2.1. conducting commodity expertise of drugs and medicinal plant raw materials; 2.2. quantification of the pharmaceutical market and the need for drugs; 2.3. reception of prescriptions from the population and sale of manufactured dosage forms and finished medicines taking into account therapeutic, social, economic and legal aspects; 2.4. consulting on pharmacotherapy and rational drug administration; 2.5. adherence to sanitary standards; 2.6. conduction information work; 2.7. providing first premedical aid; 2.8. organization and control of cash transactions and cashless payments; 2.9. professional communication with doctors, patients and colleagues; 2.10. analysis of the legal situation taking into account legal procedures and predicting the legal consequences of the decisions taken; 2.11. critical attitude to social information and ability to use modern means of information and computer technologies in work with information and solving various tasks.
3. qualities (The specialist has professional and personal competencies)	3.1. patient orientation and interpersonal understanding; 3.2. ability to influence; continuous development of pharmaceutical expertise; 3.3. Self-control (the ability of a specialist to restrain personal emotions and negative actions in the case of a patient’s aggressive behavior or the emergence of a conflict situation); 3.4. care about order, quality and accuracy; 3.5. teamwork and collaboration; 3.6. willingness to perform overtime work or functions not specified in the job description; 3.7. initiative; 3.8. willingness to bear responsibility for their actions and decisions; 3.9. ability to adapt to stressful situations; 3.10. the ability to motivate yourself and others to professional activities; 3.11. possession of a holistic scientific worldview; 3.12. high-quality fulfillment of the duties of a professional (social) role: - a specialist who provides assistance (helps to improve health, prevent diseases and achieve a healthy lifestyle; dispensing and using medicines; consults the population on self-medication); - a specialist authorized to make decisions (promoting patients’ safety by adjusting the dose of drugs during pharmacotherapy, monitoring interaction and duplication of drugs, drug allergies, prior authorization for drugs prescription); - contact person (distribution of drugs through offline and online pharmacies); - manager and administrator or manager (negotiations with manufacturers on the purchase of medicines, in particular price discounts on medicines, etc.); - lifelong student; - teacher; - leader; - researcher; - businessman; 3.13. the presence or absence of complaints: 0 – no complaints; 1 - up to 2 complaints; -2 - up to 5 complaints; -3 - up to 7 complaints; -4 - up to 10 complaints; -5 - more than 10 complaints per year; 3.14. honors / reprimands 5 - the presence of an award with a record employment book, the presence of 5 or more diplomas, a photo on the honor board, regular bonuses; 4 - availability of a record of the honor, the presence of 4 diplomas, quarterly bonuses; 3 - 2 bonuses from the Supervisor, the presence of up to 3 diploma; 2 - 1 bonus from the Supervisor or 2 diplomas; 1 - the presence of oral praise from the Supervisor or 1 diploma; 0 - lack of honors and reprimands; -1 - the presence of verbal warnings; -2 - quarterly fines; -3 - monthly fines; -4 - monthly fines and a written reprimand; -5 - monthly fines, the presence of 2 written reprimands and the threat of dismissal; 3.15. scientific activity (conducting research, publishing articles in scientific journals, lecture at conferences (international, all-Ukrainian, regional)): 5 - publishing 2 or more articles in scientific journals, 3 or more reports at conferences of various levels; 4 - publication of an article in a scientific publication, 1-2 reports at conferences of various levels; 3 -1 report at the conference, publication of 5 or more abstracts; 2 - publication of 3-4 abstracts; 1 - publication of 1-2 abstracts; 3.16. social activity: volunteer movement, charity, enlightenment, promotion of a healthy lifestyle, participation in activities to preserve the ecosystem: 5 - participation in all 5 activities; 4 - participation in 4 types of activities; 3 - participation in 3 types of activities; 2 - participation in 2 types of activities; 1 - participation in one of 5 types of activities.

Each PhS was evaluated by the Supervisor of the pharmacy, two colleagues who work with him on a shift, and PhS himself on the scale where “5” is high level, “4” is sufficient level, “3” is satisfactory level, “2” is low level, “1” is unsatisfactory level. The final result of the assessment is the average value of the assessment and the total score for each of the blocks and in general.

To evaluate new positions, a note was given for calculating indicators for the year (evaluation indicators are used in the motivational system of the financial indicators that took part in the study). The overall results of the evaluation of PhS for each pharmacy are presented in Tables 3 and 4.

Table 3: Evaluation results of the PhS of Pharmacy N 1

specialist	instance of assessment	knowledge	skill	qualities	total	Sten score / level
1	2	3	4	5	6	7
Employee 1	supervisor	38	36	47	121	5 / satisfactory
	self-esteem	45	42	54	141	
	colleague 1	45	36	54	135	
	colleague 2	48	48	57	153	
	average	4,0	3,68	3,31	3,63	
	total	176	162	212	550	
Employee 2	supervisor	27	31	45	103	6 / satisfactory
	self-esteem	51	43	59	153	
	colleague 1	47	45	59	151	
	colleague 2	52	49	64	165	
	average	4,02	3,82	3,55	3,77	
	total	177	168	227	572	
Employee 3	supervisor	26	31	44	101	4 / low
	self-esteem	47	44	56	147	
	colleague 1	48	38	59	145	
	colleague 2	38	36	55	129	
	average	3,61	3,37	3,34	3,44	
	total	159	149	214	522	
Employee 4	supervisor	31	28	40	99	5 / satisfactory
	self-esteem	51	52	58	161	
	colleague 1	43	43	56	142	
	colleague 2	52	43	59	154	
	average	4,02	3,77	3,33	3,67	
	total	177	166	213	556	
Employee 5	supervisor	36	34	43	113	3 / low
	self-esteem	40	40	52	132	
	colleague 1	40	41	52	133	
	colleague 2	40	42	52	134	
	average	3,55	3,57	3,11	3,38	
	total	156	157	199	512	
Employee 6	supervisor	25	28	38	91	2 / unsatisfactory
	self-esteem	41	47	60	148	
	colleague 1	41	47	59	147	
	colleague 2	30	28	42	100	
	average	3,11	3,41	3,11	3,20	
	total	137	150	199	486	

Table 4 Evaluation results of the PhS of Pharmacy N 2

specialist	instance of assessment	knowledge	skill	qualities	Total (8 parameters considered)	Sten score / level
1	2	3	4	5	6	7
Employee 1	supervisor	45	46	62	153	7 / sufficient
	self-esteem	46	46	69	161	
	colleague 1	27	41	61	129	
	colleague 2	49	50	66	165	
	average	3,80	4,16	4,03	4,0	
	total	167	183	258	608	
Employee 2	supervisor	50	53	70	173	8 / sufficient
	self-esteem	43	44	58	145	
	colleague 1	45	49	71	165	
	colleague 2	44	41	61	146	
	average	4,14	4,25	4,06	4,15	
	total	182	187	260	629	
Employee 3	supervisor	39	48	64	151	6 / satisfactory
	self-esteem	38	37	57	132	

	colleague 1	44	46	55	145	
	colleague 2	45	46	64	155	
	average	3,77	4,02	3,75	3,84	
	total	166	177	240	583	
Employee 4	supervisor	50	49	61	160	8 / sufficient
	self-esteem	40	48	65	153	
	colleague 1	49	43	63	155	
	colleague 2	47	46	60	153	
	average	4,23	4,23	3,89	4,09	
	total	186	186	249	621	

In the course of statistical processing of the obtained results, sten scores were calculated, presented in a 10-point scale for each block of indicators for assessing the SRB of PhS. The transfer of raw points to the sten scores was carried out according to the standard procedure. The results of the actual assessment are transferred into the standard system of units: according to the total points - a high level (10 and 9 stens), sufficient (8 and 7 stens), satisfactory (6 and 5 stens), low (4 and 3 stens), unsatisfactory (2 and 1 stens). Thus, the level of SRB of each PhS is determined – see column 7 of the Tables 3 and 4.

According to studies of PhS, the pharmacy No. 1 showed a satisfactory and low level of SR, in contrast to PhS of the pharmacy No. 2, where a sufficient level prevailed. Considering the young age of the team of the pharmacy No. 1 and the evaluation results obtained, the management of this federal district was given recommendations on the correct selection of staff and the formation of a team based on corporate culture standards of pharmaceutical organization. In addition, it was recommended that the HR manager revise the motivation system and develop measures to enhance the professionalism and responsibility of PhS.

CONCLUSION:

On the basis of the developed methodology for assessing the level of socially responsible behavior of PhS, its testing was carried out, which allows further integration of the technique into the pharmaceutical plane to increase the level of SR of pharmaceutical organizations. For a pharmacy in which PhS showed a low level of socially responsible behavior, a set of measures is proposed aimed at increasing the level of social responsibility. In addition, the specified set of measures will help to improve the motivational system of personnel of a pharmaceutical organization and will enhance its competitiveness, image, confidence of stakeholders and the quality of pharmaceutical assistance.

CONFLICT OF INTEREST:

The authors declare no conflict of interest.

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