



CONCEPTUALLY-THEORETICAL JUSTIFICATION AND UPDATING OF THE PREVENTIVE APPROACH IN THE IMPLEMENTATION OF A PHARMACIST'S INFORMATION CONSULTANCY SERVICES IN THE PUBLIC HEALTH SYSTEM

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Public health protection is the most important law of the development of a civilized society. As participants in the health care system, pharmaceutical specialists must take upon themselves certain preventive tasks aimed at strengthening and maintaining the health of the population.

The aim of the work was to substantiate and develop a methodology for implementing the professional role of pharmaceutical specialists in public health protection.

Materials and methods. The search for information was carried out using the methods of address, thematic and factual search in the Scopus, The Cochrane Library, Pubmed, eLibrary databases. The analyzed body of information included systematic reviews, retrospective and randomized studies, and other applied developments on the topic of publication. The depth of the bibliographic search for scientific publications is about 20 years (2000-2019). The following keywords were used for the search: "a pharmacist in health protection", "prevention of adverse drug reactions", "functions of a pharmacist", "pharmaceutical care", "sanitary competence", "a pharmacist's role in the prevention of diseases", "pharmacy services", "patient compliance", "collaboration in health care", etc.

Results. On the basis of the analysis, the demand for pharmacists in the health protection activities has been substantiated, the scientific and applied methodology of using pharmaceutical knowledge in the protection of public health has been updated and the necessary professional competencies (PC) of a pharmacist have been proposed for their implementation. The relevance of the preventive approach in the implementation of information and consultancy activities of a pharmacist has been substantiated, the essence of which is to prevent undesirable events associated with the use of medicinal preparations (MPs) and preventive health care in the society. The proposed methodology is based on the concept of "a pharmaceutical vigilance", the practical implementation of which is proposed in the publication. The need for pharmacists to perform certain professional functions aimed at preserving and strengthening the health of the population has been updated, the functions have been proposed and the list of possible pharmaceutical services for the practical implementation of the proposed functions in the health care system has been provided.

Conclusion. The following pharmaceutical services have been identified as relevant: pharmaceutical enlightenment of the population, patient-oriented pharmaceutical counseling and patronage of patients, pharmaceutical informing of medical specialists about drugs and social prevention of the problems affecting the public health. The definitions of pharmaceutical services have been specified, the methodology for providing the services has been substantiated, the efficiency of their provision has been updated and the professional competencies of pharmacists for their implementation in practical healthcare have been formed.

Keywords: review, health care, pharmacist, pharmaceutical services, professional competence

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КОНЦЕПТУАЛЬНО-ТЕОРЕТИЧЕСКОЕ ОБОСНОВАНИЕ И АКТУАЛИЗАЦИЯ ПРЕВЕНТИВНОГО ПОДХОДА ПРИ ОСУЩЕСТВЛЕНИИ ИНФОРМАЦИОННО-КОНСУЛЬТАЦИОННОЙ ДЕЯТЕЛЬНОСТИ ПРОВИЗОРА В СИСТЕМЕ ОБЩЕСТВЕННОГО ЗДОРОВЬЯ

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Охрана здоровья населения – важнейший закон развития цивилизованного общества. Специалисты фармацевтического профиля, как участники системы здравоохранения, должны взять на себя определенные профилактические задачи, направленные на укрепление и сохранение здоровья населения.

Цель работы заключалась в обосновании и разработке методологии по реализации профессиональной роли фармацевтических специалистов в охране здоровья населения.

Материалы и методы. Поиск информации осуществлялся методами адресного, семантического и фактографического поиска по базам данных Scopus, The Cochrane Library, Pubmed, eLibrary. В анализируемый массив информации включались систематические обзоры, ретроспективные и рандомизированные исследования и другие прикладные разработки по теме публикации. Глубина библиографического поиска научных публикаций порядка 20 лет (2000–2019), в качестве ключевых слов для поиска использовались: «фармацевтический работник в охране здоровья», «предупреждение нежелательных лекарственных реакций», «функции фармацевтического работника», «фармацевтическая помощь», «санитарная грамотность», «роль фармацевта в предупреждении заболеваний», «услуги аптеки», «пациентский комплаенс», «коллаборация в здравоохранении» и др.

Результаты. На основе проведенного анализа аргументирована востребованность фармацевтических специалистов в здоровьесберегающей деятельности, актуализирована научно-прикладная методология использования фармацевтического знания в охране здоровья населения и предложены необходимые профессиональные компетенции (ПК) специалиста фармацевтического профиля для ее реализации. Обоснована актуальность превентивного подхода при осуществлении информационно-консультационной деятельности провизора, суть которого заключается в предупреждении нежелательных событий, связанных с использованием лекарственных препаратов (ЛП), и профилактике заболеваемости в обществе. Предлагаемая методология базируется на понятии «фармацевтическая бдительность», практическая реализация которой предложена в публикации. Актуализирована необходимость осуществления специалистами фармацевтического профиля определенных профессиональных функций, направленных на сохранение и укрепление здоровья населения, предложены функции и приведен перечень возможных фармацевтических услуг для практической реализации предлагаемых функций в системе здравоохранения.

Заключение. В качестве релевантных фармацевтических услуг определены: фармацевтическое просвещение населения, пациентоориентированное фармацевтическое консультирование и патронаж пациентов, фармацевтическое информирование медицинских специалистов о лекарственных препаратах и социальная профилактика проблем, влияющих на здоровье населения. Конкретизированы определения фармацевтических услуг, обоснована методология предоставления услуг, актуализирована эффективность их предоставления и сформированы профессиональные компетенции специалистов фармацевтического профиля для их реализации в практическом здравоохранении.

Ключевые слова: обзор, охрана здоровья, провизор, фармацевтические услуги, профессиональные компетенции

INTRODUCTION

Throughout the development of the human society, the main task of medicine has been human health maintenance. As an integral part of the institute of health, pharmaceutical science is a key link in providing health care, because according to statistics, 95% of medical prescriptions account for pharmacotherapy¹ [1]. "If we

consider drugs in the broad sense of the word – as any substances that effect on living organisms – only a few of these substances will be outside the competence of pharmacology".² In the conditions of the rapidly developing market of medicinal preparations (MPs), modern demands of the national policy in the field of health care, the following norms are required from a pharmaceutical specialist for the organization of pharmacy practice: adequate specialized training, professional mobility and quick adaptation in the context of constant updating of knowledge in the professional field.

THE AIM of the work was to substantiate the role

¹ Order of the Ministry of Education and Science of the Russian Federation No. 219 dated 27.03.2018 "On approval of the state educational standard of higher education-specialist's program with a specialization in 33.05.01 "Pharmacy". URL: <http://www.consultant.ru/cons/cgi/online.cgi?req=doc&ts=1049196536041681072637900574&cacheid=9C443E5F58B8734C3DFEF56B2244D60D&mode=splus&base=LAW&n=296116&rnd=DE4CA02918499814E30E01A8BEABE09D#9p93zns8tu/> (accessed 14.06.2019).

² A. Goodman, L. Gilman, 1941

of pharmaceutical knowledge in health promotion of the population and to determine the professional competencies of pharmaceutical specialists aimed at the implementation of information and consultancy services from the standpoint of public health care maintaining.

MATERIALS AND METHODS

For the information search, the following methods were used: address, semantic and factographic ones. The information was looked up in Scopus, The Cochrane, Pubmed, eLibrary databases. The analyzed array of information included systematic reviews, retrospective and randoamized studies, and other applied developments on the publication topic. The depth of the bibliographic search of scientific publications was about 20 years (2000–2019); the keywords for the search were: “pharmaceutical specialist in health care”, “prevention of adverse drug reactions”, “functions of a pharmaceutical specialist”, “pharmaceutical care”, “health literacy”, “a pharmacist’s role in the prevention of diseases”, “pharmacy services”, “patient compliance”, “collaboration in health care”, etc.

RESULTS AND DISCUSSION

The list of pharmacists’ professional competencies (PCs) is not determined in the requirements of the Federal State Educational Standard for Higher Education in the specialist’s program with a specialization in 33.05.01 “Pharmacy”. When forming mandatory and recommended PCs, the standard prescribes to be guided by the established professional standards that correspond to the professional activities of graduates, and by the demand for specialists in the labor market.³ In this regard, it becomes necessary to work out a list pharmacists’ professional competencies, based on the employment functions of pharmacy specialists, prescribed in professional standards.

At the same time, it is advisable to take into account the results of the analysis of homeland and foreign practices of pharmaceutical specialists’ professional implementation in the healthcare system. The analysis of the standardized requirements to the professional skills of a specialist with a higher pharmaceutical education showed that the employment functions of a pharmacist include, among others, providing information consultancy services in choosing over-the-counter drugs, drugs compatibility and their interaction. The professional “Pharmacist” standard prescribes the necessity for pharmacists to have professional knowledge in the range of drugs and their characteristics, the basics of responsible self-medication, the principles of pharmacotherapy,

taking into account pharmacokinetics and pharmacodynamics of drugs, the basics of clinical pharmacology and the rules of drugs rational use. The standard requires the necessity for a pharmacist to have communicative skills dealing with patients.⁴

The relevance of the formation and implementation of professional information consultancy competencies of a pharmacy specialist from the standpoint of personal responsibility, has also been highlighted by a number of homeland researchers [2–5].

The main thesis of these scientific publications is that a drug should be considered as a drug plus information about it, because the informing procedure is just as important and obligatory as the drug itself in pharmacotherapy [6]. The analysis of foreign publications confirms that qualified advice from a pharmaceutical specialist can reduce risks and increase the effectiveness of pharmacotherapy. Thus, scientific publications of Ukrainian colleagues have substantiated the expediency of interaction between pharmaceutical and medical specialists in organizing rational pharmacotherapy [7, 8]. Scientists from Australia have confirmed the importance of pharmaceutical consulting in self-medication [9]. The scientific materials of the colleagues from the Italian University of Catanzaro have proved the need for special knowledge about drugs when choosing their trade names. Certain pharmaceutical aspects of generics (reproduced drugs) in relation to the original drugs by the example of specific clinical cases have been illustrated, and arguments for the relativity of their use in therapeutic practice have been provided [10]. Colleagues from Turkey [11] and Japan [12] prove the need for pharmaceutical knowledge in the prevention of problems of pharmacotherapy in geriatrics. American colleagues substantiate the importance of pharmaceutical information in child health care and the choice of safe pharmacotherapy in pediatric practice [13, 14]. Scientists from the University of Aston, Birmingham, (UK) in their works actualize the need for pharmaceutical, medical and pedagogical cooperation in order to achieve maximum therapeutic benefit in pediatric patients with chronic diseases [15]. Colleagues from Switzerland [16] and America [17] prove the role of pharmaceutical informing of medical specialists in the achievements of personalized medicine, emphasizing the importance of pharmaceutical information in the prevention of undesirable and dangerous drug reactions when choosing pharmacotherapy.

The review of scientific publications can be continued, but the position of scientists regarding the issue under study, will remain unchanged – the role of pharmaceutical knowledge in the prevention of dangerous

³ Order of the Ministry of Education and Science of the Russian Federation No. 219 dated 27.03.2018 "On approval of the state educational standard of higher education-specialist's program with a specialization in 33.05.01 "Pharmacy". URL: <http://www.consultant.ru/cons/cgi/online.cgi?req=doc&ts=1049196536041681072637900574&cacheid=9C443E5F58B8734C3DFEF56B2244D60D&mode=splus&base=LAW&n=296116&rnd=DE4CA02918499814E30E01A8BEABE09D#9p93zns8tu/> (accessed 14.06.2019)

⁴ Приказ Order of the Ministry of Labor of Russia No. 91n dated 03.09.2016 "On the approval of the professional standard" of Pharmacist ".URL: <http://www.consultant.ru/cons/cgi/online.cgi?Req=doc&ts=112742015309484619432120582&cacheid=3C043F863335363DBDA01171&mode=196697&rnd=DE4CA02918499814E30E01A8BEABE09D#1hsop1e9sbr/> (access date 10/14/2019)

events associated with the use of drugs, is extremely significant. The foregoing makes it possible to assert that the primary importance in the implementation of professional information consultancy competencies of a pharmacy specialist, acquires a preventive component of a specialist's professional activity.

By the "preventive approach in the organization of pharmaceutical services", a complex of professional information and recommendations given by a pharmacy specialist focused on preventing the risks of pharmacotherapy associated with pharmaceutical and medico-biological aspects of drugs and the formation of health-preserving principles of behavior in society in order to preserve and strengthen public health", is meant. This thesis serves to achieve the aim set by the authors. To concretize the proposed definition, it should be notified that well-known characteristics of drugs and the risks of pharmacotherapy associated with them, have been taken by the authors as the basis for the concepts of "pharmaceutical and medico-biological aspects". [18]. The ideology of the preventive approach lies in the oldest principle of medical ethics and deontology "primum non nocere",⁵ the identical concept and methodology of which is reflected in the concept of "pharmaceutical vigilance".

"Pharmaceutical vigilance is adequate alertness of pharmacy specialists in their professional activities, aimed at reducing the risks of adverse drug reactions, optimizing a rational choice and consulting support of pharmacotherapy, as well as implementing an active professional position in the prevention of diseases and other activities focused on human health maintenance.

As it follows from the definition, the practical significance of the proposed methodology is not limited to the pharmacotherapeutic aspects of the professional activities of a pharmacist, but it is also focused on maintenance and promotion of personal and public health. It should be notified that health is the most important individual and social resource, but the concepts of personal and public kinds of health are not identical. According to the scientists in the field of health care, public health cannot be restricted to the corpus of indicators of the health of individuals [20]. According to the World Health Organization's Constitution, adopted in 1946, health is defined as "a state of complete physical, mental and social well-being, and not just the absence of physical defects and diseases." However, this definition is not to be used to assess health at the individual and population levels.

Taking the thesis "public health is health for all"⁶ and his own criterion for assessing the health of the society as "a productive way of life" as a basis, Professor Lisitsyn Yu.P. proposed a challenging definition of the term "public health" – this is the quality of society that provides

conditions for the lifestyle of people who are not burdened with diseases, physical and mental disorders, i.e. the condition in which the formation of a healthy lifestyle is ensured. It is common practice to measure public health in statistical indicators: morbidity, mortality, average life expectancy, etc. At the same time, it is advisable to assess individual health by personal well-being, work qualification, personal perception of well-being, joy of life, etc." [20].

It is important to note that in the modern ideology of Russian healthcare system, the issues of health protection at the individual and population levels are extremely important. The key thesis on which the state policy in the field of health protection is based, can be defined as follows: health is the highest value of a person and society as a whole, and the most important principle of the country's health care system development is maintenance and promotion of personal and public health. The main documents defining the concept of the state policy in the field of health care,^{7,8,9,10} are focused on the maintenance of public health through the implementation of the state programs aimed at the formation of the active motivation of the individual and society as a whole. It should be emphasized that the concept of public health, considered from the standpoint of conditions and lifestyle, is directly related to strategies and social policies in the field of maintenance and promotion of health of the Russian Federation population. In this regard, there is a need for search and updating the conceptual directions of the professional activities of a pharmacy specialist from the standpoint of a preventive approach and the development of organizational technologies for strategic management of a pharmacist's information consultancy services, taking into account the implementation of the state tasks concerning public health maintenance.

The implementation of the following information consultancy services of a pharmacy specialist in the form of certain professional functions is proposed by

⁷ The Constitution of the Russian Federation (adopted by a nationwide vote on 12.12.1993 with amendments approved during the all-Russian vote on 01.07.2020). URL: <http://www.consultant.ru/cons/cgi/online.cgi?req=doc&ts=3158312190537975609232308&cacheid=57F1054E5D1306E48974280A63B9D093&mode=splus&base=LAW&n=2875&dst=100067&rnd=0.4768493268810434#1wkaai07uy6/> (accessed 14.06.2019).

⁸ Federal Law of the Russian Federation No. 323-FZ dated 21.11.2011. "On the basics of health protection of citizens in the Russian Federation" URL: http://www.consultant.ru/document/cons_doc_LAW_121895/ (accessed 12.14.2020).

⁹ Resolution of the Government of the Russian Federation No. 1640 dated 26.12.2017 " On Approval of the State Program of the Russian Federation "Development of Healthcare" URL: <http://www.consultant.ru/cons/cgi/online.cgi?req=doc&ts=10842090910694717951872893&cacheid=A8DB92BD22089A186A084A5DC5417A0F&mode=splus&base=LAW&n=360632&rnd=0.3187056380265709#1x83q3vw692/> (accessed 14.10.19).

¹⁰ Passport of the national project " Demography, approved by the Presidium of the Presidential Council for Strategic Development and National Projects, Protocol No. 16 dated 24.12.2018.

⁵ First of all, do no harm".

⁶ Halfday T. Mahler, WHO, 1976.

the authors: educational, consultancy, informational, accompanying, social prevention. Their implementation will help with maintenance and promotion of personal health and improving the public health indicators in the

future. To implement in practice the above listed functions, a list of pharmaceutical services has been developed, and professional competencies of pharmacy specialists have been formed (Fig. 1).

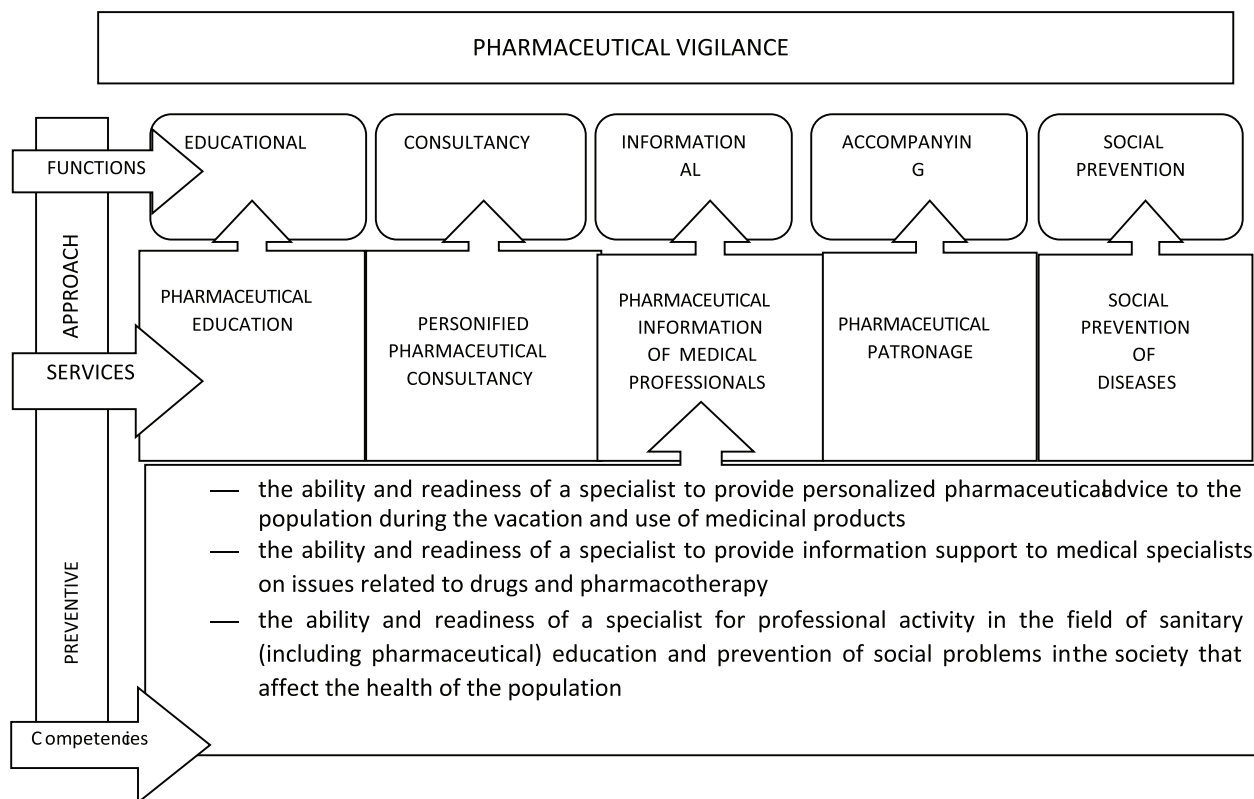


Figure 1 – Functional-applied model of the formation of information consultancy competencies of pharmacy specialists from the standpoint of a preventive approach

Fig. 1 shows that pharmaceutical services are defined as follows: pharmaceutical education; personified pharmaceutical consultancy; pharmaceutical information of medical professionals; pharmaceutical patronage; social prevention of diseases. The definitions of the services under consideration have been proposed, and methodological approaches for their implementation in the healthcare system have been developed.

Pharmaceutical education is a professional activity of a pharmacy specialist aimed at increasing the pharmaceutical literacy of potential drug users and preventing health risks from their use. The methodology of pharmaceutical education is based on the principles of medicinal education presented in the WHO reference paper on the topical issues of sanitary education in the world community. In this document, the WHO experts convincingly argue that “the key determinant of health is the level of health literacy of the population; the degree of education being the most accurate parameter to predict the health of the society in the future. Limited health literacy of citizens is associated with a lower level of their participation in health promotion and disease detection,

reduced ability to self-manage chronic diseases, lack of adherence to pharmacotherapy, higher hospitalization rates, increased rates of morbidity and premature mortality¹¹ Pharmaceutical education, as a significant component of medicinal literacy, deserves a separate study, since a significant part of medical issues, is connected with the use of drugs. A methodological approach to the professional implementation of pharmaceutical education is the promotion of pharmaceutical literacy, which should be understood as the level of education of the population, which is necessary to obtain, understand, evaluate and use pharmaceutical information. All these make it possible to solve standard everyday tasks, using drugs from the standpoint of minimizing health risks, preventing diseases and health promotion, to maintain or improve the quality of life at all its stages.

Health literacy problems are regularly reported internationally [21–25]. The main conceptual ideas of scientific publications can be summarized in the following theses: sanitary education is a special medical

¹¹ Health literac. The solid facts. – Copenhagen, WHO, 2013. 86p. URL: <https://www.euro.who.int/ru/publications/abstracts/health-literacy-the-solid-facts>

and pedagogical activity aimed at improving the culture of public health and achieving a healthy lifestyle, which cannot be limited by the framework of one sphere; interdisciplinary cooperation in sanitary education is carried out through the participation of individuals, groups, populations and organizations in health care, with health professionals playing a leading role.

Patient-oriented pharmaceutical consultancy (PPC) is a professional activity of a pharmacy specialist aimed at minimizing possible undesirable consequences of the use of drugs. Herewith, the patient's concomitant diseases, drugs taken, and / or the patient's belonging to a group of increased risk of developing adverse reactions from the use of drugs, should be taken into account [26]. The PPC methodology is based on the theory of an individual approach to the patient when choosing pharmacotherapy: "Different patients react differently to the same drug, therefore, each prescription should be considered as an experiment, during which the hypothesis about the individual efficacy and safety of the drug should be tested"¹².

Scientists pharmacologists note that an individual approach to pharmacotherapy is of particular importance in the organization of medical care. It is based on the peculiarities of the relationship between the clinical effects of drugs and pharmacodynamic and pharmacological processes [27], and the patient's adherence to medical prescriptions ("Medicines will not work if they are not taken"¹³). At the same time, the organizers of the pharmaceutical business consider pharmaceutical consultancy as an integral part of pharmaceutical and medical care, the purpose of which is human health maintenance by satisfying the needs for rational pharmacotherapy and adherence to the rules for using drugs. A special form of pharmaceutical patient care based on an individual (exclusive for a particular patient) approach has been proposed. A Procedure for patient-oriented pharmaceutical consultancy in the organization of pharmaceutical advisory care from the standpoint of critical assessment, prevention and minimization of undesirable risks of pharmacotherapy for a patient and a personal responsibility of a pharmaceutical specialist for possible events associated with taking drugs, has been developed. It is known that, along with functional and physiological factors affecting the body's reactions to drug intake (gender, age, individual sensitivity, etc.), significant aspects of the safety of pharmacotherapy are the risks associated with unreasonable and / or forced polypharmacy, which is usually caused by polymorbidity, undesirable drug-drug interactions and insufficient patient adherence to the prescribed treatment [28–33]. In this regard, comprehensive PPC can influence the safe-

ty of pharmacotherapy and is associated as an integral component of public health care maintaining. Hereby, potential and real factors should be taken into account.

Pharmaceutical informing of medical specialists is a professional activity of a pharmacy specialist aimed at optimizing information support for the rational choice of safe and effective pharmacotherapy. The pharmaceutical communication methodology, is based on international principles of rational use of medicines, the WHO concept of the importance of patient compliance and the implementation of the role of the pharmacist in the public health system [35–40]. The proposed conception is based on the principle of being "necessary and sufficient". Its main idea includes providing medical specialists with independent, comprehensive and timely information about the pharmaceutical and medico-biological aspects of drugs and the rules for their safe use from the standpoint of the priority of monotherapy, or prescribing as few drugs as possible with the purpose of preventing polypharmacy and undesirable drug-drug interactions. Scientific publications describe modern methods of management and prevention of polypharmacy [29–33,38–40], which are advisable to use in the development of organizational technologies for the selection of rational drug combinations in polymorbid and / or comorbid conditions. Timely pharmaceutical informing of medical specialists about the existing approaches to the choice of drug therapy from the standpoint of scientific evidence and personification, the joint participation of medical and pharmacy specialists in the development and implementation of pharmacotherapeutic programs, will help reduce the risks of adverse events associated with the prescription and use of drugs, and increase patient compliance during the period of its receipt.

Pharmaceutical patronage (support) is a professional activity carried out by specialists of the health care system based on an interdisciplinary approach in order to solve medical and pharmaceutical problems of the patient; it is aimed at improving certain aspects of the quality of life and maintaining human health. The methodology of the service is based on the principles of interdisciplinary interaction in the field of public health, the basics of medical prevention and the role of a pharmacy specialist in the health care system [34, 36, 40–44]. According to the concept proposed by Professor Kasavin I.T., "interdisciplinary interaction (which does not imply rigid boundaries of each discipline involved) is a natural state of science, the limiting case of which is relatively strict disciplinary structures, the boundaries of which are set not so much by knowledge systems as by institutional forms" [45]. Relevance, effectiveness, versatility and significance of interdisciplinary interaction for the optimization of medical and pharmaceutical care has been confirmed and re-

¹² A. Goodman, L. Gilman, 1941.

¹³ WHO, 2003, New-York.

peatedly proven by scientists in experimental studies [44, 46–53]. The methodological approach to the professional implementation of pharmaceutical patronage consists in medical and pharmaceutical support, training, control and management of the process of adaptation of a person to physiological characteristics and (or) illness, the ability to perform his usual functions corresponding to his socio-economic status in order to preserve the quality of life associated with his health (health-related quality of life). The term “health-related quality of life” refers to the assessment of parameters associated and not associated with a disease, allowing to differentiate the impact of disease and treatment on the psychological, emotional state of the patient and his social status [54]. Regular monitoring of the patient’s quality of life, systematic consulting support of pharmacotherapy and other aspects that affect the subjective assessment of a person’s health in the framework of interdisciplinary medico-pharmaceutical content with a patient, will make it possible to return to the most important principle of medical care: “treat not a disease, but a patient”.¹⁴

Social prevention of diseases is a conscious, organized activity of a pharmacy specialist aimed at social orientations, habits and worldview of people, the formation of medical and social activities and health-saving principles of behavior in the society in order to improve public health indicators. The methodology of social prevention is based on international principles of pharmacy practice organization, the role of a pharmacy specialist in the health care system, the principles of medical prevention and the priority of preventive activities in the public health system (“A disease is easier to prevent than to cure”¹⁵) [34, 36, 40–44].

As a basis for the implementation of the preventive function of a pharmaceutical specialist, the principle of medical practice was taken. In the 19th century it was voiced by Professor Pirogov N.I.: “Teaching people to be healthy and to heal those who could not be taught this.”

Updating the conceptual directions of social prevention in the framework of the professional activity of pharmacy specialists, includes the promotion of the basic postulates of a healthy lifestyle throughout the entire

life cycle, including prevention of bad habits; development of healthy eating habits; compliance with treatment, work and rest regimens; sleep hygiene; regular and adequate physical activities and walks in the open air; planned trips to dispensary examinations; prevention of psychological health and the formation of healthy relationships in the society, etc.

The development and implementation of the proposed conception is associated with the important mission of a pharmacy specialist in the health care system – promotion of a healthy lifestyle, prevention of diseases and maintenance and promotion of public health in the longer term.

CONCLUSION

The practical result of the conducted research, can be considered the professional competencies, offered by the authors to pharmacy specialists within the framework of their mastering the specialist’s program with a specialization in 33.05.01 “Pharmacy”.

So, as a mandatory professional competence, it is advisable to consolidate “the ability and readiness of a specialist for personalized pharmaceutical consultancy of the population when dispensing and using drugs, as well as information support of medical specialists on the issues related to drugs and pharmacotherapy”.

It is rational to refer “the ability and readiness of a specialist for professional activities in the field of sanitary (including pharmaceutical) education and prevention of social problems in the society that affect public health” to the recommended pharmacists’ professional competencies.

As an epilogue to the scientific review, it is relevant to recall the maxim “Medica mente, non medicamentis”,¹⁶ and notify that the solid ground and centuries-old constants of the pharmacist’s activity and an indicator of his professional maturity as a specialist in the public health system, are permanent professional development, adherence to the norms of medical and human ethics, high social responsibility, full awareness of their mission in the chosen profession and absolute love for pharmacy.

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AUTHOR’S CONTRIBUTION

All authors have equally contributed to the research work.

CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

¹⁴ Mudrykh M.YA. (1776–1831).

¹⁵ Hippocrates.

¹⁶ «Treat with the mind, not with medicine».

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