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**ОРГАНІЗАЦІЙНО-УПРАВЛІНСЬКІ УМОВИ ДІЯЛЬНОСТІ ФАХІВЦІВ
ВІТЧИЗНЯНОЇ ФАРМАЦЕВТИЧНОЇ ГАЛУЗІ У 20-60-х РОКАХ ХХ СТОЛІТТЯ***Наталія Шолойко,*кандидатка фармацевтичних наук, доцентка,
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У статті окреслено шляхи розвитку вітчизняної фармацевтичної галузі у 20-60-х роках ХХ століття, появу нових форм лікарського обслуговування населення та управлінських структур з організації аптечної справи в країні. Проведено історико-ретроспективний аналіз передумов підготовки фахівців для фармацевтичної сфери в Україні в один із основних періодів її становлення, висвітлено закономірності розвитку в загальному контексті професійної медичної освіти та з'ясовано обставини виникнення провідних ознак організаційно-управлінської культури у фармації. Доведено, що в попередні історичні періоди розвитку галузі передумовами виникнення організаційно-управлінської культури фармацевтів були: структурування аптечної справи, її зосередження в руках держави, розширення медичної промисловості й поліпшення лікарського обслуговування населення, вирішення науково-практичних питань щодо фармацевтичної освіти, нової народної аптеки й організації контролю якості аптечної продукції, розширення фармацевтичної промисловості та централізація постачання в аптечній мережі.

Проаналізовано науковий доробок видатних діячів фармації (М. Бергольц, Н. Валяшко, А. Гінзберг, Г. Коган, В. Дзвонів, А. Орехов, А. Степанов, Я. Фіалков, С. Шубін, Д. Щербачов та ін.), які в цей період внесли своєю працею значний доробок у розвиток фармацевтичної науки, побудову і вдосконалення системи фармацевтичної освіти, а саме: створення перших підручників з фармації, з технології лікарських форм; заснування школи вивчення органічних речовин шляхом спектрографічних досліджень; розробка та впровадження технології лікарських форм і галенових препаратів; дослідження лікарських рослин, вміле поєднання експерименту з науковими дослідженнями тощо. Це сприяло науковій розробці питань теорії та практики фармації, підвищенню кваліфікації членів товариства, розширенню й поглибленню їхніх спеціальних знань, а також вихованню на основі кращих традицій вітчизняної фармації, медицини та природознавства, наданню науково-методичної та практичної допомоги працівникам і керівникам аптечних мереж.

Ключові слова: професійна освіта, майбутні фармацевти, історико-ретроспективний аналіз, історичні передумови підготовки фахівців для фармацевтичної сфери, виникнення ознак організаційно-управлінської культури фармацевтів.

Formulation of the problem. Contemporary pharmacy constitutes a medical-social complex that deeply affects all aspects of human life and society. Being a complex socio-economic system and a specific sector of the healthcare industry, it serves the most important social function of preserving and improving the health of the population through the provision of highly qualified pharmaceutical care (Mnyushko, 2009). Today, amidst the general modernization of professional education sectors, it is crucial to reevaluate the conceptual principles of ensuring effective training for future pharmacists, which primarily include acquiring historical experience in building management structures and shaping professionals.

For the study of the development of professional training for pharmaceutical professionals, a retrospective analysis of the scientific, practical, and production activities of the pharmacy network is of significant interest, revealing closely interconnected patterns determined by the

socio-economic and state-political development of Ukraine. Works by scholars on the history of pharmacy and the development of the pharmaceutical industry, as well as the history of pharmaceutical education, allow for the identification of kernels of positive experience in various types of pharmaceutical workers' activities, which are undoubtedly valuable for modern understanding and critical analysis and are advisable for use in improving the organization of the educational process for professional training in the educational system of Ukraine. It is also worthwhile for contemporary pharmaceutical professionals to be aware of and build upon the best traditions of domestic pharmacy and their social orientation.

Analysis of the latest research. The issue of the history of professional training for pharmaceutical professionals in Ukraine is relevant in our time because an objective analysis of past pedagogical experience contributes to the further development of pharmaceutical science, education, and practice. Certain aspects of our pharmacy history are still insufficiently studied, particularly the history of professional training for pharmaceutical professionals in Ukraine from the second half of the 19th century to the mid-20th century, which, from a historical and pedagogical perspective, poses a multifaceted problem for investigation, especially when approached from contemporary viewpoints.

Attention has been devoted to the historical aspects of pharmaceutical workforce training in the research of I. Hubs'kyi, B. Parnovskyi, O. Zalisko, A. Nemchenko, Z. Mnushko, M. Ponomarenko, M. Slabyi, and many other scholars. For example, in the domestic professional literature addressing the history of the chosen issue, a significant contribution is the monograph by I. Hubs'kyi titled «Pharmacy in the USSR», which provides a deep analysis of the certification of pharmacy workers and the granting of qualification categories from the perspective of an organizer in this field (Hubs'kyi, 1958); the pharmaceutical profession as one of the components of historical-civilizational epochs in the modern post-industrial context of digital and internet technology development has been discussed by M. Syatynya in the monograph «History of Pharmacy» (Syatynya, 2001). A significant aspect of these investigations is that by illuminating the history of healing from ancient times to the present day, renowned researchers pay attention to the development of knowledge aimed at the search for and improvement of pharmacognosy, recommending consideration of the experience of eminent organizers of pharmacy science and practice from previous generations. Another significant normative aspect of the chosen issue is that certain historical acquisitions are reflected in modern documents: the main requirements for students and pharmacy workers are outlined in the Code of Conduct for Pharmacy Workers adopted at the first congress of the Pharmaceutical Association of Ukraine (1998); the Code of Ethics for Pharmacy Workers (2007); the Ethical Declaration of Behavior for professionals involved in the creation, production, circulation, promotion, and advertising of medicinal products (2007); the Code of Promotional Ethics (2007), and so on.

At the same time, we note that despite the significant number of works, there are problematic issues that have not been addressed or resolved in a separate comprehensive study. Therefore, in our scholarly investigation, we endeavor to reflect on the peculiarities of the training and activities of pharmaceutical professionals and relevant structures in Ukraine during the 20s-60s of the 20th century in a historical-pedagogical context.

The aim of the article is to study the peculiarities of the functioning and development of the pharmaceutical sector in Ukraine depending on the socio-economic situation and the evolution of pharmacy practice to utilize the positive experience of previous generations of pharmaceutical professionals in the current stage of the country's development, as well as to clarify the circumstances surrounding the emergence of leading educational features of the organizational and managerial culture of representatives of various professions in pharmacy.

Research methods. A historical-retrospective analysis of the prerequisites for training specialists for the pharmaceutical sector in Ukraine in one of the main periods of its formation highlights the patterns of development in the general context of professional medical education and clarifies the circumstances of the leading features of organizational culture in pharmacy.

Presenting main material. The description of the research data in this investigation begins from 1919 when the entire pharmacy network in the country was nationalized; this year in the field of pharmacy construction was characterized by extensive discussions on the organization of medical services for the population. Representatives of the industry and the public believed that medical assistance should be quick, accessible, and rational; it was decided to consolidate pharmacies, remove questionable products from their sale, and organize as wide a provision of the population with sanitary and hygiene items as possible. Methods of pharmacy management, financing, and supply were also improved, and the organization of pharmacy warehouses and laboratories was enhanced. Pharmaceutical departments of medical institutions, with the assistance of the Councils of Workers' Deputies and professional unions, took into account the nationalized pharmacies and their economy and carried out corresponding work on personnel deployment to the new authorities. In a short time, regulations and instructions were developed regarding the dispensing of medicines, monitoring of pharmacy operations, and the catalog of pharmaceutical products was reviewed and cleared of dubious preparations and various patented products. Only proven, health-beneficial medicinal products were left in the list of medicines allowed for dispensing from pharmacies.

The country's transition to a different path of economic development led to the emergence of new forms of medical services for the population and the determination of ways to develop pharmacy affairs: in 1922, it was transferred to economic accounting; local pharmacy administrations were created, which united all pharmacies, drugstores, and other pharmacy institutions; pharmacies at outpatient clinics were liquidated; the main institution providing medical services to the population became a state-owned pharmacy. Since medicines in pharmacies were dispensed for a fee, only the insured part of the population received medications free of charge through the healthcare authorities. During the NEP period, private pharmacies were allowed to operate under the supervision and control of local healthcare authorities. At the same time, the pharmaceutical industry began to recover. The State Medical Supply Department was established under the People's Commissariat of Health, later reorganized into the Main Medical Supply Department, that is, into a single all-union body for the production and trade of medicines.

To summarize the practical work on medical services for the population and determine the ways to address future tasks, a large pharmaceutical conference was convened in 1926. It noted the strengthening of the entire pharmaceutical sector, the expansion of the medical industry, and the improvement of medical services for the population. The conference approved the concentration of pharmacy affairs in the hands of the state and discussed important scientific and practical issues related to pharmaceutical education, the "new Soviet pharmacy," and the organization of quality control of pharmaceutical products, the expansion of the pharmaceutical industry, and the centralization of supply to the pharmacy network (Chernykh & Podolska, 1999). The conference decided to improve the scientific, practical, and production activities of the pharmacy network and demanded its re-equipment, considering the need to create proper conditions for the manufacture of medicines and ensure the high quality of both the medicines entering the pharmacy and those manufactured within it. These decisions formed the basis for the further development of pharmacy affairs.

Up to this time, the domestic pharmaceutical industry had already mastered the production of many medicines and medical products necessary to meet the needs of healthcare institutions and the population. Local pharmacy administrations established laboratories where galenic preparations and basic medicines were produced mainly from local raw materials. However, the overall state of pharmacy affairs, the development of pharmacy as a science, and the level of operation of pharmacy institutions lagged behind «the overall level of healthcare development in the country». There was a shortage of highly qualified pharmaceutical personnel, especially scientific ones. To address these issues, a pharmacy workers' conference was convened again in 1932, with representatives from all republics participating. It raised important questions about the accelerated development of pharmacy affairs and defined the tasks for further improvement

of medical services for the population (Hubsy, 1958), as the pharmaceutical industry was experiencing disruptions, there was a shortage of medicines, and their prices were high, especially in the Soviet republics.

In 1936, the People's Commissariat of Health of the USSR was established, which included the pharmacy inspection. In the same year, the All-Union Medicinal Plant Trust was organized to oversee the procurement of medicinal raw materials in the country. Along with the government decree «On raising the salaries of medical workers and increasing allocations for healthcare», this created conditions for some improvement in the organization of healthcare and the development of pharmacy. In September 1936, the Council of People's Commissars of the USSR adopted a resolution on the organization of training for pharmaceutical personnel of higher and middle qualifications. Later, in 1937, scientific degrees of candidate and doctor of pharmaceutical sciences were established, thus defining pharmacy as a science.

Eminent scientists in pharmacy during this period included M. Bergoltz, N. Valiashko, A. Hinzberg, G. Kogan, V. Dzvoniv, A. Orekhov, A. Stepanov, Y. Fialkov, S. Shubin, D. Shcherbachov, and others, who contributed to the development of pharmaceutical science and the creation and improvement of the pharmaceutical education system. M. Bergoltz was renowned for his research on medicinal plants containing glycosides and served as the director of the Leningrad and later Moscow Pharmaceutical Institutes, as well as the chairman of the State Pharmacopoeial Committee. N. Valiashko was the founder of the school for studying organic substances through spectrographic research, guiding the completion of 25 candidate and doctoral dissertations. G. Kogan worked in the field of pharmaceutical technology and galenic preparations, authoring the first textbook on this discipline. P. Orekhov and his disciples enriched pharmaceutical science by obtaining new alkaloids of significant medical importance. S. Shubin contributed to the technology of pharmaceutical forms and galenic preparations, skillfully combining experimentation with scientific research, and authored one of the finest textbooks on pharmaceutical technology used by successive generations of domestic pharmacists.

Pharmacy administrations, as standard bodies, worked on improving and rationalizing pharmacy production, equipping pharmacies with the most rational pharmacy equipment and inventory to facilitate work, ensure increased labor productivity, and address issues related to bringing medical services closer to rural populations. Pharmacies were reconstructed and furnished with new-design pharmacy furniture and burette installations developed by the Leningrad Scientific Research Pharmaceutical Institute and the Central Pharmacy Scientific Research Station (Moscow), as well as with instruments and reagents for quality control of pharmaceutical products, and more. They began to use semi-finished products and pre-prepared medicines more widely, and serial production of finished medicines was organized in galenic laboratories. In 1935, in Ukraine, a new type of pharmacy establishments called pharmacy points was established at rural paramedic-obstetrician stations, allowing for the provision of ready-made medicines and dressing materials directly in villages where there were no pharmacies. Ukraine's experience in organizing medical services for populations in remote areas was soon adopted by other republics.

Alongside the expansion of pharmacies and pharmacy points, a network of specialized pharmacy shops was established. Improvements in the organization of pharmacy institutions and the expansion of the pharmacy network, as well as increased production of galenic preparations in pharmacy laboratories, demanded clear quality control of pharmaceutical products, a task undertaken by pharmaceutical science. In December 1938, the Pharmacy Inspection of the People's Commissariat of Health of the USSR held a special conference, which identified ways to strengthen the quality control of pharmaceutical products, bring it closer to pharmacies by organizing control-analytical cabinets and desks, and increase the number of control-analytical laboratories in all regional centers. During 1940 alone, over 70 control-analytical laboratories were established, and as of January 1, 1941, there were 295 control-analytical laboratories, over 1100 control-analytical cabinets and desks, which ensured quality control of pharmaceutical

products and contributed to the improvement of drug manufacturing technology in pharmacies. Pharmacies transformed into state healthcare institutions, which, alongside medical services to the population, carried out significant work in disseminating sanitary-hygienic knowledge. In the pre-war years, the medical industry grew significantly, largely already meeting the needs of healthcare authorities and the population for domestically produced medicines and medical products. There is data indicating that during this period in the USSR (excluding the Baltic republics), there were 270 pharmacy warehouses, 149 galenic-pharmaceutical factories and laboratories, 179 optical workshops and workshops for repairing medical instruments and equipment, 9723 pharmacies (excluding departmental pharmacies and pharmacies of closed type at medical institutions), 109 branches of pharmacies (pharmacy points) in cities, and 13,864 pharmacy points in rural areas, along with 1400 pharmacy shops. During the World War II, this played a significant role, as galenic laboratories produced approximately 8,000 tons of streptomycin, 50 tons of calcium chloride, over 80 tons of sodium chloride, and more than 150 tons of various disinfectants from 1941 to 1943. The main raw material for galenic production was medicinal plants; pharmacy administrations initiated and organized the mass collection of wild medicinal plants, involving public organizations, schools, collective farms, and local populations. From 1941 to 1945, several thousand tons of medicinal plants were collected, and a significant amount of tinctures and decoctions were produced. At the initiative of pharmacy workers, during the war years, enterprises of local industry were organized to produce essential medicines and care items for the sick from local raw materials or waste from local industry production. Bandages were manufactured at production facilities of the pharmacy system, and in large cities in unoccupied territories, the production of syringes, artificial teeth, and pharmacy equipment was also established; at the Central Pharmacy Scientific Research Laboratory, research was conducted on the creation of new drugs from medicinal plants, replacing deficit types of raw materials (animal and vegetable fats, ethyl alcohol, etc.).

During the war years, the healthcare system, like the entire national economy of the country, suffered significant losses. Thousands of medical and pharmacy institutions, pharmacy production facilities, pharmacy warehouses, over 4600 pharmacies, and 7000 pharmacy points were destroyed or looted in temporarily occupied territories. Therefore, the restored pharmacy administrations faced the task of rebuilding the pharmacy network, equipping it with necessary inventory and equipment, and organizing uninterrupted service for the population in liberated areas. To address these issues as quickly as possible, it was necessary to establish a central authority to oversee pharmacy affairs because the Pharmacy Inspection of the People's Commissariat of Health of the USSR could not ensure the fulfillment of these functions due to its lack of influence on the organization of pharmacy network supplies. Therefore, in 1945, the Main Pharmacy Administration (GAPU USSR) was established within the People's Commissariat of Health of the USSR, which was entrusted with organizing the supply of the pharmacy network and overall management of pharmacy affairs in the country. It was subordinate to the offices of «Chempharmtrade» and «Medinstrumenttrade», which distributed medical products manufactured by industrial enterprises of all departments of the country. The creation of GAPU allowed for a more comprehensive consideration of the demand of healthcare authorities and the population for medicines and medical products, centralizing them, organizing the placement of orders for their production, and involving enterprises of other departments in the production of medical goods, thus significantly expanding the material and technical base of the pharmacy economy and overall contributing to meeting the needs of healthcare authorities and the population for medical preparations and other medical products.

Relying on the Central Pharmacy Research Institute, established in 1944 on the basis of the Central Pharmacy Research Laboratory of the People's Commissariat of Health of the Russian Soviet Federative Socialist Republic (RSFSR) and the Central Pharmacy Research Laboratory of the People's Commissariat of Health of the Ukrainian Soviet Socialist Republic (USSR), GAPU USSR quickly introduced unified methods and forms of pharmacy management planning, established staffing norms for pharmacies, determined consumption standards for essential

medications, centralized the distribution of all manufactured medicines and medical products in the country, and also worked on expanding the pharmacy network and training pharmaceutical personnel.

In 1946, the All-Union Scientific Pharmaceutical Society was established; in the same year, the eighth edition of the State Pharmacopoeia of the USSR was published, which essentially became a newly developed code of state standards for medicinal products, primarily domestically produced, based on the principles of state healthcare.

Regarding the training of pharmaceutical personnel and pharmacy managers, refresher courses for employees were organized at pharmaceutical institutes and faculties; since 1954, distance learning for pharmacists from individuals with secondary pharmaceutical education has been initiated. This not only contributed to the improvement of the qualifications of pharmacy workers and the professional culture of pharmacy establishments but also led to the improvement of healthcare services for the population. However, quality medicines were not always sufficient during this period.

As of the beginning of 1959, the number of pharmacy establishments in the country exceeded 95,000, including 13,506 pharmacies only in the GUP system, 82,000 pharmacy points, and 284 control-analytical laboratories. Additionally, over 400 analytical cabinets and 7,000 analytical tables were established alongside pharmacies. Approximately 75,000 pharmacists with higher and secondary education were engaged in providing healthcare services, including 17,680 pharmacists. The training of pharmaceutical personnel was conducted by 16 pharmaceutical institutes and faculties, as well as around 40 pharmaceutical schools. In 1958, medications and medical products worth over 8.3 billion rubles were dispensed by pharmacy establishments to the population and medical institutions (almost 4 times more than in 1940). By the beginning of the 1960s, a clear structure of management bodies was established in the country. The overall management of the entire healthcare system was carried out by the Ministry of Health of the USSR as a union-republican ministry, which developed long-term plans for the development of healthcare in the country, coordinated and directed the development of medical and pharmaceutical science, issued the State Pharmacopoeia, conducted measures to reduce morbidity and organize healthcare services for the population, methodically managed the training of personnel, carried out state sanitary supervision, approved the nomenclature and categorization, as well as staffing norms of healthcare institutions. The Ministry of Health was tasked with determining the need for medicines and medical products, placing orders for their production, quality control of medicines and medical products, and their inter-republican distribution; this ministry also handled international relations on healthcare and pharmaceutical issues. Direct management of healthcare in the republics was entrusted to the ministries of health of the union republics and local healthcare authorities - regional (territorial, city) departments of health, which were departments of the respective executive committees of local councils.

Within the structure of the Ministry of Health of the USSR, there were relevant departments and divisions. The Department of Specialized Medical Care, with its Medical Radiology Division, had the following main tasks:

- Studying the health status of the population, developing measures to reduce morbidity and mortality;
- Planning measures for further improvement of medical and preventive care and bringing it closer to the population, primarily in the areas of cardiovascular pathology, tuberculosis, oncology, psychoneurology, dentistry, traumatology, dermatovenereology, child health, women's health, and industrial workers' health;
- Providing methodological assistance to the ministries of health of the union republics in organizing medical and preventive care (Syatunya, 1998).

The State Sanitary Inspection was tasked with:

- Developing measures based on the achievements of medical science and practice and studying the health status of the population aimed at further improving the sanitary conditions of the country, reducing and eliminating infectious diseases;

- Monitoring the implementation of measures to improve sanitary and hygienic conditions in workplaces and living areas to prevent and reduce infectious diseases;
- Carrying out state preventive and current sanitary supervision in accordance with established procedures;
- Exercising control over measures to ensure radiation safety;
- Providing methodological assistance to the ministries of health of the union republics in organizing sanitary and epidemiological work;
- Organizing and directing measures for border sanitary protection, combating particularly dangerous infections (plague, cholera, etc.). (Slipchuk, & Tsekhmister, 2017).

The Department of Medicines and Medical Equipment with Quality Inspection: developed the main directions and indicators for the long-term planning of the development of the medical industry – chemical and pharmaceutical, finished drugs, antibiotics, vitamins, blood substitutes, endocrine drugs, medical instruments, devices, apparatus, equipment and medical products from glass; carried out coordination and long-term planning of research and development works in the field of medicines and medical equipment; set the level of wholesale and retail prices for medical products; carried out state control over the quality of medical products. The Main Directorate of Inter-Republican Medical Supply and Sales (Golovmedspojivzbut) had the following main tasks:

- determination of the country's need for medical products (medicines, endocrine and bacterial preparations, vitamins, medical equipment products, etc.) based on applications from the ministries of health of the Union republics and other agencies; submitting in the established order proposals for the export of these products, as well as submitting, if necessary, applications to relevant organizations for the purchase of medicines and medical equipment abroad;
- distribution of the above-mentioned medical products between the Union republics, ministries and agencies and allocation of these products for export;
- development of the main indicators regarding the long-term planning of the development of the pharmacy business, as well as organizational forms of medical care for the population;
- development of resolutions and provisions on the pharmacy business and implementation of general methodical guidance for the organization of medical services for the population;
- provision of institutions and organizations of union subordination with all materials according to the plan of material and technical supply (Gubsky, & 1958).

In the structure of the Head of Medical and Consumer Affairs, there was a pharmacy department, which was entrusted with the creation of provisions, rules and instructions for the organization of medical care for the population, the order of storage, manufacture, quality control and dispensing of drugs in pharmacy institutions, recommendations to the ministries of health of the Union republics regarding the improvement of medical care for the population and pharmacy management. In addition, the Ministry of Health of the USSR functioned as: Administration of Institutes of Vaccines and Serums, Planning and Financial Department, Department of Medical Educational Institutions and Personnel, Department of External Communications, etc.; the following worked under the Ministry: Academy of Medical Sciences, Institute of Health Care Organization and History of Medicine, All-Union Research Chemical and Pharmaceutical Institute, All-Union Institute of Medicinal and Aromatic Plants, Central Pharmacy Research Institute and a number of other research institutes, as well as trust for cultivation and procurement of medicinal plant raw materials.

Let's focus on those bodies of state management of the pharmacy business, which determine our research interest. The State Pharmacopoeia Committee, as a body of the Ministry of Health of the USSR, was part of the Department of Medicines and Medical Equipment with Quality Inspection. It included representatives of science, medical industry and pharmacy; the main task was the standardization of medicines used for treatment, preventive and disinfection purposes in medical and veterinary practice. This committee performed the functions of: a) compilation of the State Pharmacopoeia of the USSR and periodic additions to it; b) approval of technical conditions for medicinal products; c) consideration and coordination of the standards of herbal medicinal raw materials, chemicals, chemical reagents and technochemical products used in medical, sanitary and hygienic institutions, factories and in the pharmacy network; d)

clarification on the quality of drugs used in the health care system; e) standardization of methods and conditions of drug preparation and development of their quality standards; e) compilation of pharmaceutical guidelines (manual) of the USSR; g) consideration and drawing up conclusions from comments to the state pharmacopoeia and other reference publications; h) systematic publication of documents that regulated testing methods and standards of good quality of medicinal products not included in the State Pharmacopoeia. For advisory work, the State Pharmacopoeia Committee had a number of commissions: chemical, pharmaceutical, pharmacological, etc. (Aptechnoye delo, 1958).

The Pharmacological Committee, as a body of the Ministry of Health of the USSR, considered and made decisions on the expediency of using new medicines in medical practice, as well as on the removal of outdated medicines from the scope of use (without the permission of the Pharmacological Committee, medicines could not be used in medical practice); the committee established the procedure for experimental and clinical testing of new drugs, authorized their testing, discussed the materials of clinical trials, and decided on the use of new drugs in medical practice. Simultaneously with the issuance of permission for the use of new medicinal products, the Pharmacological Committee approved instructions on indications and contraindications for their appointment and established higher single and daily doses of these drugs (Slipchuk, & Tsekhmister, 2017).

Within the Main Directorate of Interrepublican Medical Supply and Sales of the Ministry of Health of the USSR, there operated the Pharmaceutical Council as an advisory body, the main task of which was to consider and discuss scientific and practical measures for organizing pharmacy affairs in the country. Accordingly, the Pharmaceutical Council reviewed and discussed prospective development plans for the pharmacy network, issues related to organizing healthcare services for the population, and the supply of medications and medical products to medical and preventive institutions. It also addressed matters concerning quality control of pharmacy products, the training and improvement of pharmacy personnel, accounting and planning in the pharmacy sector, rationalization and innovation, as well as the fundamental principles governing the operation of the pharmacy network. Decisions of the Pharmaceutical Council, adopted by a majority vote of its members, were approved by the head of the Main Directorate of Medical Supply and Sales of the ministry (History of Pharmacy of Ukraine, 1999).

Supplying the pharmacy network with medicines and medical products in the early 60s of the 20th century. carried out by the Main Department of Inter-Republican Medical Supply and Sales of the Ministry of Health of the USSR as part of the Soyuzkhimfarmtorg and Soyuzmedinstrumenttorg offices; the first was entrusted with the supply of the pharmacy and treatment network with medicines, ready-made medicines, vitamins, endocrine, bacterial preparations, patient care items and other goods, and the second was with the supply of medical instruments, equipment and apparatus. Some goods, for example, dressing materials, vegetable and animal fats, ethyl alcohol, laboratory and pharmacy utensils, etc., were received by the main pharmacy departments of the Union republics from the funds allocated by the State Plans of the Union republics. Reagents were supplied to the pharmacy network through Soyuzreaktivzbut and its specialized local stores. Items of sanitation, hygiene and some other items were received by the pharmacy chain according to the orders of the relevant republican and regional (territory) trade organizations (Syatinya, 1998).

The leadership of pharmaceutical affairs in the republics was carried out by the Main Pharmacy Administrations of the Ministries of Health of the union republics, abbreviated as "GAPU." The main task of the GAPU in the republics was to organize medical services for the population and supply medical institutions with medications and other medical products. The GAPU of the republics directly or through regional (city, territorial, autonomous republic) pharmacy administrations managed all the activities of the pharmacies in the republic.

Regional (regional, city, ASSR) pharmacy administrations were subordinated either directly to the Main Pharmacy Administration of the Union Republic on the basis of branches, or to the relevant department of local health care. The gap of the republic determined the need for medicines, supplied the pharmacy network with medical goods, organized the training and

retraining of pharmaceutical personnel, planned the development of the pharmacy business in the republic, and systematically monitored the activity of the pharmacy network, the state of medical care for the population, the quality of pharmacy products, and also planned their turnover, stock, financial activity, capital construction of pharmacy institutions, supervised the implementation of all planned tasks and managed their financial and economic activities; republican Pharmacy Councils operated during the Gap of the Republics (Hubsnyi, 1964).

The main task of the regional (ASSR, regional, city) pharmacy administration was the organization of medical services for the population and the supply of medical and preventive institutions of the region (region) with medicines and medical products. The pharmacy department carried out its work in coordination with the regional (territory, city) department of health care, submitted its annual applications for medicines and medical products to it for consideration, jointly worked out the distribution of the most important medicines and medical products. Pharmacy administrations included various self-supporting pharmacy institutions and enterprises: interdistrict offices, pharmacies, drugstores, warehouses, as well as production enterprises; the opening of pharmacies and other pharmacy institutions and enterprises was carried out by the pharmacy management according to the approved plan. One of the main functions of the pharmacy management was the management and control of the activity of the pharmacy network of the region (region, city), implementation of measures aimed at improving the work of pharmacy institutions. The pharmacy management was engaged in improving the qualifications of pharmacy workers, organized the purchase and procurement of medicinal plant raw materials, managed the organization of accounting and reporting in pharmacy institutions, and directly controlled their pharmaceutical and economic activities. The interdistrict office was organized only in those cases when individual districts of the region or region were significantly distant from the regional (regional) center and the pharmacy administration could not ensure proper management and supply of the pharmacy network of these districts. The main task of the interdistrict office was the organization of medical services for the population of several districts and the supply of medical and preventive institutions with medicines and medical products. The work of the inter-district office was carried out on the basis of planned tasks and directives of the GAP of the republic or the regional (territory) pharmacy administration, in coordination with the district health care departments. The interdistrict office included pharmacies and pharmacy points, drugstores, pharmacy warehouses, kiosks and trays, control and analytical laboratories and various production enterprises, for example, galena laboratories (Slipchuk, & Tsekhmister, 2017).

The All-Union Scientific Pharmaceutical Society was an authoritative voluntary organization of pharmaceutical workers engaged in research and practical work in the field of pharmacy and related disciplines. His tasks included: promoting the scientific development of the theory and practice of pharmacy; promoting the improvement of the qualifications of members of the society, expanding and deepening their special knowledge, as well as education based on the best traditions of domestic pharmacy, medicine and natural science; providing scientific-methodical and practical assistance to health care bodies, institutions and enterprises in improving medical care for the population and implementing the latest achievements of pharmaceutical and medical science into practice; development and submission for consideration of the Ministry of Health of the USSR, the Ministry of Health of the Union Republics and local health authorities of proposals for improving the pharmacy business and medical service to the population and scientific work in the field of pharmacy; summarizing the work experience of practical workers and innovators in the field of pharmacy; promotion of the achievements of pharmaceutical and medical science regarding new drugs among the general pharmaceutical and medical community and the population.

Conclusions. Therefore, during one of the previous historical periods of the development of the pharmaceutical industry (the 1920s to the 1960s), there was a revival of pharmaceutical education and its institutionalization, which contributed to the professional training of pharmaceutical specialists with higher education. This development was also facilitated by the

establishment of regional pharmacy administrations throughout the territory of Ukrainian lands starting from March 1, 1935, replacing the branches of the All-Ukrainian Pharmacy Administration. The expansion of the pharmacy network led to a significant demand for pharmaceutical professionals with secondary and higher specialized education.

In the 1950s and 1960s, there was an expansion of the idea of continuous education, driven by the increasing number of pharmaceutical professionals with higher pharmaceutical education, necessary for the development of pharmaceutical science and industry management practices. The establishment of the All-Union Scientific Pharmaceutical Society contributed to the scientific development of pharmacy theory and practice, the enhancement of the qualifications of its members, the expansion and deepening of their specialized knowledge, as well as the cultivation based on the best traditions of national pharmacy, medicine, and natural sciences. It also provided scientific, methodological, and practical assistance to workers and managers of pharmacy networks.

Prospects for further research. The conducted research did not exhaust all the historical-pedagogical aspects of the multifaceted issue of pharmaceutical professionals' training, particularly concerning the formation of their organizational and managerial culture. Further scholarly studies are needed for the establishment and development of professional training for pharmaceutical professionals in Ukraine in the modern period; analysis of teaching methods for individual pharmacy disciplines; the emergence of scientific schools at medical universities; research activities of teachers and students in relevant educational institutions; connections between these institutions at the international level, as well as collaboration with scientific and charitable societies and public organizations.

ЛІТЕРАТУРА

Аптечное дело в Украинской ССР. (1958). Киев: Изд-во ГАПУ МЗ УССР.

Аржанов, Н. П. (1997). Попытки реформы фармацевтического образования в России начала века. *Провизор*, 23, 20-21.

Валяшко, Н. А. (1905). История кафедры фармации и фармакогнозии, фармацевтической лаборатории и биографии преподавателей. В кн. *Медицинский факультет Харьковского университета за 100 лет его существования* (с. 283-295). Харьков.

Губский, И. М., Милинович, И. А. (1958). *Аптечное дело на Украине*. Чернигов: Облтипография им. С. М. Кирова.

Губский, И. М., Бушкова, М. Н., Яковец, Н. И. (1958). *Аптечное дело в Украинской ССР*. Чернигов: Облтипография им. С. М. Кирова.

Губський, І. М. (1964). *Аптечна справа в УРСР*. Київ: Здоров'я.

Мнушко, З. М., Діхтярьова, Н. М. (2009). *Менеджмент та маркетинг у фармації*. (Ч. I: Менеджмент у фармації) (2-ге вид.). Харків: Вид-во НФаУ: Золоті сторінки.

Памяти профессора М. Е. Бергольца. (1961). *Аптечное дело*, 4, 94-99.

Перцев, І. М., Сало, Д. П., Буханець, О. І. (1974). Вплив природи мазевої основи та рідких добавок на звільнення левоміцетину з мазей. *Фармацевтичний журнал*, 4, 66-72.

Пономаренко, Н. С. (1990). *Организационные принципы, методические основы и формы совершенствования системы последипломного обучения провизоров*. (Дис. д-ра фармац. наук). Харьковский государственный фармацевтический институт. Харьков.

Рабинович, М. С. (1940). Памяти академика Александра Павловича Орехова. *Журнал общей химии*, 10 (9), 23-29.

Сліпчук, В. Л., Цехмістер, Я. В. (Ред.) (2017). *Професійна підготовка фахівців фармацевтичної галузі в Україні (XX - початок XXI століття)*. Київ: Едельвейс.

Сятиня, М. Л. (1998). *Фармацевтична справа в Україні: Минуле, Сьогодні, День прийдешній*. Київ: Ін-т історії України НАН України.

Сятиня, М. Л. (2001). *Історія фармації*. Львів: Вид-во «Місіонер».

Тертышный, А. Г. (1965). К истории фармацевтической печати в России. *Аптечное дело*, 14 (4), 32.

- Фесенко, В. Ю. (2012). Микола Валяшко – фундатор вітчизняної фармацевтичної освіти. В кн. В. М. Вашкевич (Ред.), *Гілея: науковий вісник* (Вип. 66, с. 92-98). Київ: ВІР УАН.
- Черних, В. П., Подольська, Є. А. (Ред.). (1999). *Історія фармації України*. Харків: Прапор; Вид-во УкрФА.
- Щепінова, В. М., Черних, В. П. (Ред.). (1999). *Видання Української фармацевтичної академії (1991-1999)*. Харків: Золоті сторінки: Вид-во Української фармацевтичної академії.

REFERENCES

- Aptechnoe delo v Ukraynskoï SSR [Pharmacy in the Ukrainian SSR]*. (1958). Kyev: Yzd-vo NAFU MZ USSR [in Russian].
- Arzhanov, N. P. (1997). Popytky reformy farmatsevycheskoho obrazovanyia v Rossii nachala veka [Attempts to reform pharmaceutical education in Russia at the beginning of the century]. *Provyzor [Pharmacist]*, 23, 20-21 [in Russian].
- Chernykh, V. P., & Podolska, Ye. A. (Eds.). (1999). *Istoriia farmatsii Ukrainy [History of pharmacy of Ukraine]*. Kharkiv: Prapor; Vyd-vo UkrFA [in Ukrainian].
- Fesenko, V. Yu. (2012). Mykola Valiashko – fundator vitchyznianoï farmatsevychnoi osvity [Mykola Valyashko – founder of the pharmaceutical industry]. In V. M. Vashkevych (Ed.), *Hileia [Gileya]: naukovyi visnyk* (Vyp. 66, s. 92-98). Kyiv: VIR UAN [in Ukrainian].
- Hubskiy, Y. M., & Mynyovych, Y. A. (1958). *Aptechnoe delo na Ukrayne [Pharmacy in Ukraine]*. Chernyov: Obltypohrafiya ym. S. M. Kyrova [in Russian].
- Hubskiy, Y. M., Bushkova, M. N., & Yakovets, N. Y. (1958). *Aptechnoe delo v Ukraynskoï SSR [Pharmacy in the Ukrainian SSR]*. Chernyov: Obltypohrafiya ym. S. M. Kyrova [in Russian].
- Hubskiy, I. M. (1964). *Aptechna sprava v URSR [Pharmacy business in the Ukrainian SSR]*. Kyiv: Zdorov'ia [in Ukrainian].
- Mnushko, Z. M., & Dikhtiarova, N. M. (2009). *Menedzhment ta marketynh u farmatsii [Management and marketing in pharmacy]*. (Ch. I: Menedzhment u farmatsii). Kharkiv: Vyd-vo NFaU: Zoloti storinky [in Ukrainian].
- Pamiaty professora M. E. Berholtsa [In memory of Professor M.E. Bergolts]. (1961). *Aptechnoe delo [Pharmacy]*, 4, 94-99 [in Russian].
- Pertsev, I. M., Salo, D. P., & Bukhanets, O. I. (1974). Vplyv pryrody mazevoi osnovy ta ridkykh dobavok na zvilnennia levomitsetynu z mazei [Influence of the nature of the ointment base and liquid additives on the release of chloramphenicol from ointments]. *Farmatsevychny zhurnal [Pharmaceutical journal]*, 4, 66-72 [in Ukrainian].
- Ponomarenko, N. S. (1990). *Orhanyzatsyonnye pryntsyipy, metodycheskye osnovy y formy sovershenstvovanyia systemy posledyplomnoho obuchenya provyzorov [Organizational principles, methodological foundations and forms of improvement of the system of postgraduate training of pharmacists]*. (D diss.). Kharkovskiyi hosudarstvennyi farmatsevycheskyi ynstitut. Kharkov [in Russian].
- Rabynovych, M. S. (1940). Pamiaty akademyka Aleksandra Pavlovycha Orekhova [In memory of academician Alexander Pavlovich Orekhov]. *Zhurnal obshchei khymyy [Journal of General Chemistry]*, 10 (9), 23-29 [in Ukrainian].
- Shchepinova, V. M., & Chernykh, V. P. (Eds.). (1999). *Vydannia Ukrainskoi farmatsevychnoi akademii (1991-1999) [Publication of the Ukrainian Pharmaceutical Academy (1991-1999)]*. Kharkiv: Zoloti storinky: Vyd-vo Ukrainskoi farmatsevychnoi akademii [in Ukrainian].
- Slipchuk, V. L., & Tsekhmister, Ya. V. (Eds.) (2017). *Profesiina pidhotovka fakhivtsiv farmatsevychnoi haluzi v Ukraini (XX - pochatok XXI stolittia) [Professional training of pharmaceutical specialists in Ukraine (20th - early 21st century)]*. Kyiv: Edelweis [in Ukrainian].

- Siatynia, M. L. (1998). *Farmatsevychna sprava v Ukraini: Mynule, Sohodennia, Den pryideshnii* [Pharmaceutical business in Ukraine: Past, Present, Future]. Kyiv: In-t istorii Ukrainy NAN Ukrainy [in Ukrainian].
- Siatynia, M. L. (2001). *Istoriia farmatsii* [History of pharmacy]. Lviv: Vyd-vo «Misioner» [in Ukrainian].
- Tertyshnyi, A. H. (1965). K ystoryy farmatsevycheskoi pechaty v Rossii [On the history of pharmaceutical printing in Russia]. *Aptechnoe delo* [Pharmacy], 14 (4), 32 [in Russian].
- Valiashko, N. A. (1905). Istoryia kafedry farmatsii y farmakohnozyi, farmatsevycheskoi laboratoriyi y byohrafii prepodavatelei [History of the Department of Pharmacy and Pharmacognosy, Pharmaceutical Laboratory and Biographies of Teachers]. In *Medytsynskiyi fakultet Kharkovskoho unyversyteta za 100 let eho sushchestvovanyia* [The Faculty of Medicine of Kharkiv University for 100 years of its existence] (pp. 283-295). Kharkov [in Russian].

ORGANIZATIONAL AND MANAGEMENT CONDITIONS OF ACTIVITY OF SPECIALISTS IN THE DOMESTIC PHARMACEUTICAL INDUSTRY IN THE 1920s-1960s

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The article outlines the ways of development of Ukrainian pharmaceutical industry in the 20-60s of the twentieth century, the emergence of new forms of medical care, and management structures for the organization of pharmacy in the country. A historical-retrospective analysis of the prerequisites for training specialists for the pharmaceutical sector in Ukraine in one of the main periods of its formation highlights the patterns of development in the general context of professional medical education and clarifies the circumstances of the leading features of organizational culture in pharmacy. It is proved that in previous historical periods of the industry development the prerequisites for the emergence of the organizational and managerial culture of pharmacists were: structuring the pharmacy, its concentration in the hands of the state, expanding the medical industry, and improving medical care, solving scientific and practical issues of pharmaceutical education organization of quality control of pharmacy products, expansion of the pharmaceutical industry and centralization of supply in the pharmacy network.

The scientific achievements of prominent figures of pharmacy in this period (M. Bergolts, N. Valyashko, A. Ginzberg, G. Kogan, V. Dzvoniv, A. Orekhov, A. Stepanov, J. Fialkov, S. Shubin, D. Shcherbachov, and others) who have made significant contributions to the development of pharmaceutical science, construction and improvement of pharmaceutical education, namely: the creation of the first textbooks on pharmacy, the technology of dosage forms, the establishment of a school for the study of organic matter by spectrographic research, development and implementation of dosage technology and galenic preparations, research of medicinal plants, a skillful combination of experiment with scientific research, etc. It promoted scientific development of questions of the theory and practice of pharmacy, advanced training of members of society, expansion and deepening of their specific knowledge, and also education on the best traditions of domestic pharmacy, medicine, and natural sciences, providing scientific and methodological and practical assistance to employees and managers of pharmacy chains.

Keywords: *professional education, future pharmacists, historical-retrospective analysis, historical preconditions of training specialists for the pharmaceutical sphere, the emergence of signs of organizational and managerial culture of pharmacists.*

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