

УДК 94:615(497.11)(497.11)"1815/1941"
340.134:615.1(497.11)"1815/1941"

DOI <https://doi.org/10.31212/tokovi.2023.3.ars.13-38>

Оригинални научни рад/Original scientific paper

Примљен/Received: 9. 9. 2023.

Прихваћен/Accepted: 15. 11. 2023.

Jasmina ARSIĆ

Faculty of Pharmacy, University Business Academy, Novi Sad
PhD programme History and Philosophy of Natural Science and Technology,
University of Belgrade

Dušanka KRAJNOVIĆ

Faculty of Pharmacy, University of Belgrade
dusica.krajnovic@pharmacy.bg.ac.rs

Medicines Policy and Drugstores in Serbia Until the Second World War*

Abstract: The paper analyzes the effects of medicines policy on the functional separation of pharmacy and drugstore businesses from the early 19th century to the Second World War. Attempts to maintain personal and professional interests in the delivery of medicines prompted the long-standing dispute between pharmacists and druggists over the control and trade of drugs and poisons. The issue of state control generated complex processes that emphasized the professional role of pharmacists as providers of pharmaceutical services and druggists as wholesalers of medicines.

Keywords: wholesale drugstores, retail drugstores, history of pharmacy, drug policy, medicines, poisons, legislation, public health

Introduction

In 1830, Serbia obtained a special order known as “Hattisherif” from the Turkish Sultan, which regulated the keeping and sale of medicines¹ and

* The research of Dušanka Krajnović was funded by the Ministry of Science, Technological Development and Innovation, Republic of Serbia through Grant Agreement with University of Belgrade-Faculty of Pharmacy No: 451-03-47/2023-01/200161. The authors would like to thank professor emeriti Mary Schaeffer Conroy, University of Colorado, for her valuable suggestions that help them improving the manuscript and editing the English language.

1 Today, “medicine” refers to a prescription or non-prescription drug, herbal or traditional product, compounded preparation, or active pharmaceutical ingredient. It is a substance or combination of ingredients used to treat, prevent, or diagnose a disease. In the past,

poisons. It legally allowed Serbian citizens to open their own hospitals, schools, and churches, thereby leading to the rise of pharmacies. The owners of Serbia's only two pharmacies at the time, the first pharmacists, addressed the issue of the free sale of medicines and poisons in stores, pushing state organizations to create a medicine policy in Serbia in the 1830s. The early pharmacists' objections were used to justify the introduction of official control over the unrestricted sale of drugs and poisons.² In 1830, after a two-year effort to build Belgrade's first pharmacy, pharmacist Mateja Ivanović complained to Prince Miloš Obrenović that merchants continued to sell different remedies despite the existence of a pharmacy in the same city.³ Pavle Ilić, the Kragujevac founder and principal state pharmacist since 1836, protested in 1837 that Kragujevac merchants had "almost formal pharmacies" where poisons were carelessly measured and sold on the same scales as medicines.⁴ On February 6, 1837,⁵ Prince Miloš issued a decree allowing a limited number of stores to keep medicines and poisons as long as they had a written permit from the police authorities and physicians' prescriptions stating the name of the patient, the name of the medicine, and instructions for its use.⁶ Prescriptions could be preserved as verification that drugs were sold in a particular store. Two years later, on May 29, 1839, the Law on the Establishment of the Central Government of the Principality of Serbia, which also formed the Ministry of Internal Affairs (MIA), was enacted and went into effect.⁷ The MIA's Quarantine and Health Department was in charge of the entire healthcare system. This agency was tasked with establishing essential pharmacies, preventing any fraud or misuse of medicines and treatments by untrained personnel. The MIA included a provision within its scope of authority that physicians were not allowed to dispense their own medicines in places where pharmacies existed, but where these did not exist,

"medicine" was a restricted phrase that referred to products that were largely compounded preparations or patent medicines used by pharmacists for the treatment or prevention of disease or injuries.

- 2 Тихомир Ђорђевић, *Из Србије Кнеза Милоша: културне прилике од 1815. до 1839. године*, (Београд: Геца Кон, 1922), 218.
- 3 Тихомир Ђорђевић, *Медицинске прилике у Србији: за време прве владе Кнеза Милоша Обреновића (1815–1839)*, (Београд: Централни хигијенски завод, 1938), 22.
- 4 *Ibid*, 22.
- 5 According to the Julian calendar.
- 6 The decision (effective February 6, 1837) to preserve and sell poisonous substances exclusively in one shop under police supervision and with a doctor's approval: *Зборник закона и уредба у Књажевству Србији у досадашњим зборницима нештампаних а изданих од 2. фебруара 1835. до 23. октобра 1875. год.*, (Београд: Државна штампарија, 1877), 159.
- 7 „Устројеније Централног Правленија Књажевства Србског, Закон о уређењу владе Кнежевине Србије од 29. маја 1839”, *Новине србске*, 7/23. 6. 1839.

the physicians were personally responsible for maintaining portable medicine chests at their own expense.⁸ The issuance of legislation restricting the unauthorized sale of certain medications and poisons and allowing only pharmacies to combine and dispense medicines was a crucial component of this process. Government officials in the MIA began to promote community pharmacies as relatively major social enterprises capable of providing the general population with basic and compounded medicines of good and consistent quality.

Government officials in the MIA began to promote pharmacies as significant social enterprises capable of preparing and distributing high-quality medicinal products. Only educated pharmacists were awarded licences to open pharmacies under the MIA's concession system. As a result, pharmacies became an important part of Serbia's organized healthcare system.

The Law for Pharmacies and Pharmacists on Keeping and Selling Medicines and Poisons, enacted in 1865, outlined the standards for institutions in charge of preserving and selling medicines and poisons.⁹ This event marked the beginning of a Serbian medicines policy centered on pharmacies in the broader social context of healthcare. As a consequence of this statute, a network of pharmacies was established as the entities in charge of drug distribution. After getting a licence from the Ministry of Internal Affairs, educated pharmacists were permitted to open a pharmacy. A concession system regulated the licences. A pharmacy could only be established by a person having Serbian citizenship, a Master of Science in Pharmacy degree, or a Doctor of Pharmacy degree, and a track record of good behavior, or they must gain Serbian citizenship within one year of founding it.¹⁰ A foreigner who agreed to

8 According to an analysis of handy pharmacies as a specific type of pharmacy in Serbia during the 19th century, doctors mostly kept simple medicines in ready-to-use dosage forms (i.e., extracts, ointments, and patches prepared in public pharmacies) rather than performing chemical tests, preparation, and mixing *secundum artem*. Due to their legal right to keep them on hand, they could only utilize simple utensils and equipment if they had to prepare them *ex tempore*. They essentially relied on public pharmacies to obtain the resources they required for their convenience pharmacies (substances, raw materials, and both basic and more complex medications). More information about the medications that doctors keep in Serbian convenience pharmacies can be found here: Dušanka Parojčić, Dragan Stupar, "Portable Medicine Chests in Serbia during the 19th and the First Half of the 20th Century", *Die Pharmazie* 59/2004, 312; Jasmina Arsić, Dušanka Krajnović, "Portable Medicine Chests and Supply of Medicines in Serbia from the 1830s to the Mid-20th Century: Analysis of Medicines List", *Die Pharmazie* 9/2020, 443–454.

9 „Закон за апотеке и апотекаре и за држање и продавање лекова и отрова”, *Зборник закона и уредаба издатих у Кнежевини Србији од почетка до краја 1865. године*, (Београд: Државна штампарија, 1865), 96.

10 *Ibid*, 95–96.

obtain Serbian citizenship within the year the licence was issued, on the other hand, might start a pharmacy. After completing their internship, Assistant Pharmacists were required to go abroad for pharmacy studies, usually at universities in Vienna, Budapest, Prague, Graz, and, starting in 1882, Zagreb.¹¹ After completing their internship, assistant pharmacists were required to study pharmacy at universities in Vienna, Budapest, Prague, Graz, and Zagreb in order to obtain a Master or Doctor of Pharmacy degree.

Medicines could be held and sold in the following facilities, according to the Law for Pharmacies and Pharmacists on Keeping and Selling Medicines and Poisons:

- 1) community pharmacies;
- 2) portable medicine chests (portable pharmacies) of physicians in areas where pharmacies did not exist;
- 3) apart from physicians, retail stores licenced to stock some medicines and poisons in areas where community pharmacies are lacking.

As a result, the MIA worked to address the issue of a lack of pharmacies on the one hand while also ensuring public access to medicines on the other. By the end of the 19th century, distinct legislation had been developed to oversee the entire medical sector. The Law on Regulation of the Medical Profession and the Protection of Public Health, passed in 1881 (later known as the Sanitary Law), regulated the sale of medicines and poisons in retail stores along with public pharmacies, portable pharmacies, and retail stores, as it had been regulated in The Law for Pharmacies and Pharmacists on Keeping and Selling Medicines and Poisons, passed in 1865.¹² Article 24 of the Sanitary Law, as mandated by the Law for Pharmacies and Pharmacists on Keeping and Selling Medicines and Poisons of 1865, regulated how medicines, chemicals, and poisons were made available to consumers to preserve public health. According to Sanitary Law, pharmacists, retailers and druggists would be prosecuted if they sold medicines or poisons without an official authorization given by the police authorities, or if they sold any of these things in a quantity greater or lesser than the one authorized by law.¹³ Several authors have already discussed the work of wholesale drugstores following the First World War: Delini wrote about the emergence of the first wholesale drugstores after the First World War in his book “The State of

11 Vojislav Marjanović, *Farmacija u Srbiji u XIX veku*, (Beograd: Srbolek, 1970), 511; Parojčić, Stupar, “Portable medicine chests”, 312–318.

12 „Закон о уређењу санитарске струке и о чувању народног здравља“, *Српске новине*, бр. 79, 9. 4. 1881.

13 „Чл. 24 Закона о уређењу санитарске струке и о чувању народног здравља“, *Српске новине*, бр. 79, 9. 4. 1881.

Pharmacy in Serbia Between the Two World Wars, from 1918 to 1941”, without going into much detail, but mentioning 22 pharmacies located within the borders of the former Kingdom of Serbia.¹⁴ We discussed the activities of the only one co-owned by this notable pharmacist and public figure of the time in greater detail in our article on Velimir Karić.¹⁵

The Sanitary Law also defined how and where to store and label all medication and poison containers in order to readily identify their contents. It was critical to avoid accidental intake and poisoning. Poisons were sold to the public in pharmacies and retail stores for agricultural, residential, and industrial purposes only with a documented permit from police authorities. Poisons for therapeutic use (medicines) were only available with a doctor’s prescription. The Sanitary Law prohibited retail shops from stocking medicines and reserved the ability to maintain poisons for technical and agricultural purposes to traders with a specific permit. Following the passage of the Sanitary Law, which regulated pharmaceutical activities in Article 24, a specific regulation entitled “Rulebook for Pharmacists and the Establishment and Maintenance of Community Pharmacies” (1882) was enacted, which prescribed detailed conditions for pharmaceutical activities in terms of equipment, personnel, and regulations.¹⁶

Furthermore, the Sanitary Law (1881) totally incorporated the provisions from the Law for Pharmacies and Pharmacists on Keeping and Selling Drugs and Poisons (1865), preserving legal measures against the administration

14 Андрија Делини, *Стање фармације у Србији између два светска рата, 1918–1941*, (Београд: Срболек, 1967), 19.

15 Jasmina Arsić, Dušanka Krajnović, “Pharmacy in Serbia: The life and work of a distinguished pharmacist, Velimir Karić (1859–1946)”, *Pharmaceutical Historian* 2/2020, 33–44.

16 „Настављења за апотекаре и за постројавање државних јавних апотека“, *Народно здравље*, бр. 44, 1882, 522–525; *Народно здравље*, бр. 45, 1882, 532–534. In accordance with Article 24 points 5, 22, and 23, as well as points 25 and 27 of the Health Act, and paragraphs 35, 39, and 41 in connection with paragraphs 29, 30, 31, 32, 36, 37, 38, 40, and 42 under b., v., and g., only pharmacists had the authorization to sell drugs to the general public („Настављења за апотекаре и за постројавање и држање јавних апотека“, *Српске новине*, бр. 79, 31. 1. 1882). It is important to note that the military health and quarantine service dominated Serbian territory from the 19th century until the middle of the 20th century, and that the civilian pharmacy service dates from the second half of the 19th century. This paper is not focused on the pharmacy’s role in health care but rather drug policy, or the causes that shaped the evolution of the component of health care relating to people’s access to pharmaceuticals. It should also explore the development of population habits for obtaining drugs from pharmacies, which are expected to ensure the safe use of medicines and their suitable quality.

of harsher drugs or incorrect doses. This ensured a consistent strategy for handling health-related crimes, with legal action required regardless of the outcome.

The aims of this paper were to describe the effects of medicine policy on the following: a) making a clear distinction between drugstore and pharmacy business practices in the first decades of the 20th century; and b) changes and restrictions imposed on the list of medicines and poisons that could be kept in drugstores.

*Social factors and the establishment of retail drugstores
in Serbia in the second half of the 19th century*

The first drugstores appeared in Serbia in the last decade of the 19th century (drugstores owned by Pavle Marinković in 1883, drugstores owned by Tasa Subašić and Petar Đorđević in 1894) and operated as retail stores (retail drugstores) selling various medicines and household chemical products.¹⁷ In reality, a distinction was made between pharmacies and retail drugstores. The latter were firms that offered home supplies alongside medicines and poisons for household use. They not only sold things to consumers and patients, but they also served as wholesalers for pharmacies. Since the scope of work of drugstores was not particularly regulated by the Sanitary Law, they organized their business in accordance with retail shop principles. The professional qualifications of their owners represent the distinctive character of drugstores as shops. They were owned by pharmacists, but they were not permitted to prepare medicines or fill prescriptions. Nonetheless, the fact that medications and poisons could be acquired in drugstores soon conflicted with pharmacies, since retail drugstores began to operate similarly to retail pharmacies.¹⁸ The special conditions for pharmacies and retail drugstores (drugstores) in Serbia will be discussed in this article.

Drugstores on Serbian territory played an important role in the supply and distribution of medical products to pharmacies in the late nineteenth century.¹⁹ Neither the Law for Pharmacies and Pharmacists on Keeping and Selling Medicines and Poisons (1865) nor the Sanitary Law (1881) specifically

17 Светислав Христић, *Трговинско–занатлијски шематизам Краљевине Србије 1900–1901*, (Београд, 1901), 96.

18 Делини, *Стање фармације у Србији*, 19.

19 Dušanka Paroјčić, Dragan Stupar, „Deontološki aspekt razvoja farmacije u Srbiji između dva svetska rata (Prilog proučavanju istorije farmacije u Srbiji)”, *Tokovi istorije* 3–4/2002, 72.

mentioned drugstores, but those stores that kept and sold certain medicines and poisons with a permit from police authorities and the MIA.

The availability of poisonous substances for agricultural, industrial, and commercial purposes was required, but the main challenge for drug policymakers was defining and organizing the list of products to be considered poisonous and arranging their availability in specific health facilities, drugstores, and commercial actions. Since 1881, some commercial goods have been treated as medicines; therefore, drugstores are retail stores that keep and sell poisons and commercial goods in accordance with the Sanitary Law. On December 30, 1881, the Minister of Internal Affairs issued a decree to all administrations in Belgrade ordering the state chemist to create a list of poisonous and medicinal substances so that authorities could manage them in granting approval to traders for holding such substances.²⁰ However, the turn of the century saw a new era in the regulation of pharmacy business practices. Passing regulations governing the sale of medicines and poisons in Serbia was a complex political process made more difficult by competition between pharmacists and druggists. However, the Sanitation Law prohibited stores from keeping medications and reserved the ability to maintain poisons for technical and agricultural purposes to traders with a special permit.

Internal determinants of drugstores status in the early 20th century

The founding of the first drugstores signaled the beginning of a dispute between pharmacists and drugstores at the end of the 19th century. In order to maintain their former professional status in the direct sale of medicines to the general public, both druggists and pharmacists faced a trend brought about by the European industrial revolution: large-scale production of patent medicines that differed from compound medicines and apothecaries' specialties. Simultaneously, public health officials sought to protect the population by limiting the availability of toxic substances.

This condition affected the discussion between retail pharmacy owners (druggists) and pharmacists about who would be largely responsible for distributing medicines, which escalated into conflict by the turn of the 20th century. Permission to open a new pharmacy was granted under the requirements of the Sanitary Law in municipalities with less than 2,000 residents. Under specific conditions, a new pharmacy could be opened if the number of cit-

20 „Распис свим начелствима и управи вароши Београд“, *Народно здравље*, бр. 33, 30. 1. 1882, 410–411.

izens exceeds 6,000.²¹ The legislation governing the expansion of pharmacies on Serbian land required that the creation of a new pharmacy establishment might be directly dependent on the increase of the population in a specific area, regardless of current circumstances or additional needs.²²

Pharmacists with a Master of Pharmacy degree faced significant challenges because they were unable to obtain a concession to start a new pharmacy. Graduate students with a Master of Pharmacy degree were unable to find work in an established pharmacy because hiring another pharmacist was prohibitively expensive and readily replaced by an assistant pharmacist. As a result, they were unable to purchase an existing pharmacy, and the only choice available to those pharmacists was to start a drugstore.

The Pharmacy Society of Serbia (established in Belgrade in 1879)²³ was formed by pharmacy owners in order to maintain their professional status and extend their role in healthcare. At the time, new legislation was enacted to regulate the position and role of drugstores in the Serbian medicine supply chain. On August 14, 1904 (according to the Julian calendar), the first rules governing the formation and operation of drugstores (hence the “rules”) were enacted.²⁴ They established the terminology and scope of pharmacy practice. Drugstores are referred to as “retail stores that are allowed to keep and sell medicines, poisons, and various technical and agricultural items in accordance with the rules prescribed”.²⁵ The Rules outlined the look of drugstores, the items that might be kept, druggists’ rights and responsibilities, and the interaction between druggists and apothecaries. They also limited the number of drugstores to pharmacies. The rules allowed for the establishment of one to three pharmacies. Any Serbian citizen could run a drugstore if he had a Master’s degree in pharmacy, was granted a permit by the MIA, and paid the required tax. The standards for the interior and equipment were also stated in the Rules.

The MIA-appointed Committee was tasked with analyzing the need for any drugstore ahead of its operation. In terms of layout and equipment, the Rules mandated that drugstores must meet specific criteria, such as a space

21 „Закон о уређењу санитетске струке и о чувању народног здравља“, *Српске новине*, бр. 79, 9. 4. 1881.

22 *Санитетски закон*, чл. 24, стр. 2; Делини, *Стање фармације у Србији*, 19.

23 *100 година Фармацеутског друштва Србије 1879–1979*, ур. Момчило Горуновић, (Београд: Галеника-Медицински послови, 1983), 5.

24 „Правила по којима ће се отварати и држати дрогеријске радње“, Посебан отисак из 12-ог броја *Гласа Апотекарства* из 1924. г., (Нови Сад: Штампарија Јовановић и Богданов, 1924).

25 *Ibid.*

large enough to store medications and other items, a cellar, an attic, or a separate room. The Rules also governed the labeling of medicines and poisons in drugstores. Druggists were obliged to label their shopping bags and items with proper manufacturer's markings, and labels had to provide some basic information about a particular drugstore: its name, address, and the owner's name and surname. The standards for proper storage of medicines and poisons were the same for pharmacies and drugstores: medicines had to be exhibited on shelves alphabetically. Strong-acting substances²⁶ had to be kept in lockable containers. All medicines stocked in drugstores were required to adhere to authorized pharmacopoeias and sanitation compendiums. Furthermore, druggists were required to keep mandatory reference books in their stores. They also kept record books with regular entries of medicines and poisons given to pharmacies and intended for industrial or technical purposes, which were supported by permission obtained from the authorities.

The Rules granted drugstores the authority to possess and sell certain medications, poisons, and commercial products. Concurrently, the Rules prohibited drugstores from selling or dispensing the following medicines and medical substances to patients: a) prescription medicines; b) new medicines not listed in pharmacopoeias; c) all medicines and their preparations prepared in accordance with the rules stated in official pharmacopoeias; d) all medicines and their preparations officially signed (+) as *separanda* or (++) as *claudenda* in pharmacopoeias. The same rule applied to drugstores as it did to pharmacies when it came to transferring ownership to a third party: a formal permit from the MIA was required.

A clear separation between the scope of activity of drugstores and ordinary stores was another step towards improving public health. The Rules allowed druggists to sell a variety of products for technical, industrial, and agricultural purposes only to those who had secured a permit from the police authorities. Drugstores were compelled to record the names of poisons in a special record book, together with the purchaser's name, address, and the reason for purchasing that specific poison. The permit was to be no more than 10 days old and was stored as a document with a record book that had to be retained for at least 10 years. Keeping records of the quantities of poisons sold along with information on the purchaser ensured proper poison and strong-acting

26 This term refers to medications that, while effective at treating specific medical conditions, may also be associated with a higher risk of side effects due to their potency. Depending on their particular characteristics and how they are administered, potent medications may or may not be poisons.

substance control. Poisons were distributed in well-closed vials with a good twist, with the signature clearly stating “poison” and the drugstore seal. The right to sell poisons was a manager’s or committed individual’s personal duty, and selling poisons to youngsters under the age of 15 was strictly prohibited.

The scope of practice of retail drug stores before the First World War - a debate provoked by the Retail Stores Act of 1910

The dispute between druggists and pharmacists was rooted in disparities in roles, legislation, and tradition, despite the fact that these two groups of pharmaceutical professionals had similar competencies as pharmacy graduates. Their education and competences provided the foundation for employment in both pharmacy and trade, but their roles and approaches to pharmaceutical services differed, particularly in light of the historical and legal frameworks that shaped their practices. Pharmacists were more focused on medication compounding and pharmaceutical services, while druggists were more engaged in selling ready-made medicines and products at lower prices.

With the foundation of the Kingdom of Serbs, Croats, and Slovenes (later Yugoslavia), the rivalry between these two groups of pharmaceutical professionals was exacerbated by inherited varied laws, cultural divisions, and political forces. Clear rules and regulations defined by legislation have become critical for organizing the pharmaceutical business and assuring the safety, efficiency, and quality of medications on the market. However, due to the various legal systems and cultural practices that distinguish different locations, applying these regulations proved difficult. Resolving the conflicts between druggists and pharmacists required not only the alignment of rules and regulations but also the recognition of their critical societal and professional contributions to the healthcare system.

The Kingdom of Serbs, Croats, and Slovenes’ tripartite method of organizing healthcare services added to the difficulty of regulating access, drug distribution, and matching professional standards within the pharmaceutical profession.²⁷ The transition from the Kingdom of Serbs, Croats, and Slovenes to the Kingdom of Yugoslavia in 1929 was critical for social and political changes, including administrative system modifications. The establishment of *banovinas* as territorial subdivisions aimed at centralizing power, strengthening administration, and improving the country’s economic situation. The

27 Branko Petranović, *Istorija Jugoslavije 1914–1941*, I, (Beograd: Nolit, 1988), 80.

passage of the Vidovdan Constitution during this time period constituted a watershed moment in the protection of citizens' health. The constitution clearly outlined the state's role for protecting health, particularly for mothers and children, and also for providing free medical aid and free distribution of medicines. These legal measures had a considerable impact on the organization of public health services, allowing all residents greater access to healthcare and laying the groundwork for universal health coverage.²⁸

The separation of the Ministry of Public Health from the Ministry of Internal Affairs, as well as the reorganization of regional health administration organs, point to a consolidation of authority and the construction of a unified health administration inside the country.²⁹ The foundation of regional sanitary administrations was unique in that it recognized previously existing positive law on certain territories prior to the formation of the Kingdom of Serbs, Croats, and Slovenes. In this sense, the state acknowledged the plurality of legal systems that existed prior to its establishment. Except for Vojvodina, the provisions of Article 24 of the Sanitary Law from 1881 and 1891 were in effect in Serbia, as were all subsequent revisions to this law.³⁰

The XIV legal article from 1876 dealing with this sector was in effect in Vojvodina,³¹ whereas the Law on Pharmacy from January 11, 1894 was in effect in Croatia.³² The Law on the Organization of Pharmacies from December 18, 1906, was applied in Slovenia and Dalmatia. The Order for Pharmacies in Bosnia and Herzegovina was issued on October 17, 1907.³³

The enactment of the unified pharmacy law in 1930, followed by amendments in 1931 and 1941, exemplifies efforts to establish a uniform policy for medications and pharmaceutical services throughout the country.³⁴

28 *Ibid.*, 78.

29 „Уредба о устројству Министарства Народног Здравља,” *Службене Новине Краљевине Срба, Хрвата и Словенаца*, 287/20.

30 „Закон о уређењу санитарске струке и о чувању народног здравља,” *Српске новине*, бр. 79, 9. 4. 1881; „Измене и допуне Закона о уређењу санитарске струке и о чувању народног здравља,” *Српске новине*, бр. 79, 1891.

31 The Public Health Law was passed in 1876, and Chapter 14 governs public health administration.

32 „Закон о лјекарништву,” *Sbornik zakonah i naredbah valjanih za Kraljevine Hrvatsku i Slavoniju*, XI, br. 38, 11. 4. 1894, 353–359.

33 „Red za ljekarnice u Bosni i Hercegovini,” *Glasnik zakona i naredaba za Bosnu i Hercegovinu 1907*, (Sarajevo: Zemaljska štamparija, 1909), 254–273.

34 „Закон о апотекама и надзору над прометом лекова,” *Службене новине Краљевине Југославије*, бр. 85, 14. 4. 1930; „Закон о изменама и допунама у Закону о апотекама и надзору над прометом лекова од 7. априла 1930. године,” *Службене новине Краљевине Југославије*, бр. 285, 6. 12. 1931.

Despite the prior different legal systems that existed in the provinces that ultimately formed the Kingdom of Yugoslavia, all of these reforms attest to the efforts to create a consolidated and efficient pharmacy system inside the state.

The increased number of pharmacies, as well as the limits imposed on holding and selling medications and poisons, impeded retail drugstore practice. A Master's Degree in Pharmacy, nor a licence to open a pharmacy or a drugstore, provided an individual has the right to open a pharmacy or a drugstore or to sell medicines and poisons. Furthermore, a permit from the MIA, which oversaw and carefully controlled all pharmacy and drugstore operations, was required. An extra qualification for druggists was that they held a Master of Pharmacy degree. This legislation was difficult to implement because there were no pharmaceutical schools in Serbia at the time where pharmacists and assistant pharmacists could further their education. There were no pharmacies in which non-masters of pharmacy may study and graduate. However, with the passage of the Retail Sales Act (1910),³⁵ pharmacists were granted the authority to offer medicinal specialties, including drugs and poisons, in retail pharmacies. In other words, according to the Retail Sales Law, the privilege to sell pharmaceuticals, including extremely potent drugs and poisons, was not limited to the pharmacist. Druggists argued that because the Retail Stores Law required particular qualifications for druggists that were the same as those necessary for pharmacists, they were equivalent to pharmacists. To compete with pharmacies, druggists resorted to the only viable solution available to them: decreasing the pricing of medications and other products. This behavior annoyed pharmacy owners and managers. Pharmacists saw druggists as non-collegiate competitors driven solely by market principles and not bound to the rigid regulations of medicine storage and preparation placed on apothecaries, especially since some druggists were pharmacists by training. Nonetheless, druggists as drugstore owners refused to let pharmacy owners dominate them, and they fought for what they saw to be their professional status and right to dispense to the public. In the years that followed, the issues of drugstores and their owners were discussed on numerous occasions between the Ministry of Public Health and the Ministry of Commerce and Industry. This topic was also the subject of official complaints to the authorities and was discussed in broad public press articles in addition to professional articles in the pharmacy press.³⁶

35 „Закон о радњама”, *Српске новине*, бр. 140, 29. 6. 1910.

36 Archives of Yugoslavia (Arhiv Jugoslavije – AJ), Fund 65, Ministry of Trade and Industry of KY, folder 99, Act no. 30185 submitted to the Minister of Trade and Industry on the

Druggists understood the Retail Stores Law (1910) as giving them the ability to enter the free market without having to follow prior legislation that required them to seek legal authorization from the MIA for their operation. Due to a lack of clarity and disputes between the Retail Stores Law, the Sanitary Law of 1881, and later approved Rules regulating the formation and business of drugstores in 1930, druggists were able to flout earlier rules that restricted their practice. Druggists, in particular, neglected the drugstore-to-pharmacy ratio. The Chamber of Commerce sided with the druggists in the 1920s.³⁷ Without consulting sanitary authorities, any individual previously granted the right to run a pharmacy was capable of running a drugstore, which meant that anyone who addressed the Chamber of Commerce was issued the permit in question.

The first wholesalers in the new state's social circumstances

The Rules for Keeping and Selling Poisons and Poisonous Products in Retail Stores were enacted in 1921 in order to establish state control over the trade in poisons in order to safeguard public health and avoid any abuse, accidental or intentional poisoning.³⁸ Only those with a poison management permit from the Ministry of Public Health were allowed to possess poisons under these rules. The written permit required that anyone handling poisons have knowledge and training, as well as information regarding the purpose of the purchase. The Great Prefect had the authority to inspect and manage retail stores suspected of maintaining and selling poisons and medicines, as well as to levy fines and seize products. The Rules for Keeping and Selling Poisons and Poisonous Products in Retail Stores applied to establishments that oper-

scope of work of druggists in the territory of the Kingdom of SCS on September 12, 1924; Notification of the Chamber of Commerce in Belgrade to all trade associations regarding the contents of the letter from the Ministry of Public Health no. 6865 dated October 23, 1922, stating that the Rules governing the opening and operation of drug stores dated July 28, 1904 are still in effect throughout Serbia. Drugstores were subject to particular regulations under those laws, although Article 22 of the Stores Law (regarding professional training) states that the opening of drugstores must be proportional to the number of open pharmacies in the town. Only a Master of Pharmacy could establish a pharmacy in an area with multiple pharmacies, whereas a pharmacist could only open one. The Rules provide for the cooperation of health authorities when granting approval for the opening of drugstores, i.e. Previously, the Ministry of Public Health was responsible for deciding on the qualifications of candidates and issuing a full-fledged certificate on the number of accredited pharmacies.

37 Because the Chamber of Pharmacists was created in 1925, pharmacies were under the control of the Chamber of Commerce at the time.

38 „Правила о држању и продаји отрова и отровних ствари при трговинама”, *Службене новине Краљевине Срба, Хрвата и Словенаца*, бр. 47, 2. 3. 1921.

ated in areas where no drugstores existed. The privilege of retail shopkeepers to continue selling poisons was revoked in areas where retail drugstores existed or following the establishment of one.

Following the foundation of the Kingdom of Serbs, Croats, and Slovenes, new laws on pharmacies, retail drugstores, and wholesale drug stores were imposed throughout the country through the construction of a new sanitary and health care system. Changes in practice were implemented slowly due to significant legislative variances in medicine policy (for example, the regions that had been under Austro-Hungarian authority were regulated differently). Several political and societal factors should also be examined. Serbia had no drug industry prior to the First World War. Health care was in step with society as well as the country's economic and social circumstances. There are several causes for this, but to name a few, there is no organized service for collecting data on people's health, a small number of doctors, pharmacists, nurses, and other health workers, and insufficient finances for more effective health care procedures. The Serbian people welcomed the end of the Great War in a state of severe economic underdevelopment and destruction. Following the First World War, the basic demographic indicators in the Kingdom of SCS were those of an impoverished country with a high birth rate and mortality rate.³⁹ The administrative division of the state into *banovinas* was carried out by the Law on Banovina Administration in October 1929.⁴⁰

On April 7, 1930, a new unified law, The Law for Pharmacies and Monitoring on Medicines' Dispensing and Supply⁴¹ went into effect and was applicable throughout the country. It governed all aspects of pharmacy business, drug and poison manufacture and trade, the development of wholesale drugstores, and chemical-pharmaceutical factories and laboratories. As previously stated, before the Great War, there were problems with druggists' rights compared to pharmacists' rights due to discrepancies in legislative interpretations. Newly imposed social and health system changes resulted in various new restrictions, as shown in Table 1, pertaining to medicine supply and the sale of poisons and toxic materials.

39 Радомир Герић, Владимир Јеремић, Милоје Ракић, Александар Николић, *Здравствено задругарство*, (Београд: Задруга, 1982), 16.

40 „Закон о називу и подели Краљевине на управна подручја“, *Службене новине Краљевине Југославије*, бр. 232, 4. 10. 1929.

41 „Закон о апотекама и надзору над прометом лекова“, *Службене новине Краљевине Југославије*, бр. 85, 14. 4. 1930.

Table 1. Several milestones were considered important to discuss in regard to the drugstores issue

Year	Milestones
1881	List of poisonous and medicinal substances
1882	Poisonous substance possession and selling regulations
1904	Rules governing the establishment and operation of drugstores and the restrictions on retail stores keeping medicines or poisons in areas where drugstores or pharmacies exist
1910	The Retail Stores Act and druggists' scope of practice
1922	The rise of many wholesalers
1928	Drugstore and retail store regulations, including wholesale drugstore practices
1930	The Narcotic and Poison Control Rulebook, along with the status of retail drugstores
1932	Poison Sales and Control Regulations, and the Poison Lists

In 1922, the Kingdom of SCS had 53 wholesale drugstores, 22 of which were located within the former Kingdom of Serbia's borders.⁴² After much consideration, the Minister of Commerce and Industry enacted new rules for drugstores and retail stores (hence the "New Rules") in 1928, previously acknowledged by the Minister of Public Health. With the passage of the New Rules, the practice of drugstores was more clearly specified and defined as wholesale entities that sold all types of retail merchandise, from those for medical purposes (medicines, drugs, bandages, hygiene), and cosmetic products to various pharmacy and laboratory equipment, in addition to products and substances for technical and agricultural use applications (poisons and poisonous products). Their business was exclusively wholesale, and they had no dealings with the general public. Serbian citizens who met the general requirements for retail stores and submitted documents proving: a) they held a Master's or Doctoral degree in Pharmacy; b) they held an Engineer's or Doctoral degree in Chem-

42 „Правила о дрогеријама и радњама са материјалном робом“, *Службене новине Краљевине Југославије*, бр. 45, 19. 6. 1928.

istry; and c) they had at least one year of working experience in a drugstore in Serbia were granted a permit to open a wholesale drugstore.

In the case of multiple wholesale drugstore owners, only one of them was obliged to obtain a Master's or Doctoral degree in either pharmacy or chemistry and thus be regarded as accountable for the wholesale drugstore's commercial activity.

However, there was one caveat to the New Rules for Drugstores and Retail Stores. Possession of a Master of Pharmacy degree and a pharmacist license did not guarantee the ability to start a pharmacy, wholesale drugstore, or retail store that sold poisons and other harmful products. To do so, the individual needed a license to possess and sell poisons, which was provided by the Ministry of Public Health, which had sole jurisdiction in that area. However, as before, the problem was that Serbia lacked schools that would allow wholesalers and their employees to obtain the certifications required to maintain and sell poisons and thus be granted this authority by the Ministry of Public Health.

*Regulation of wholesalers, pharmacies, and retail drugstores
in the storage and distribution of medicines and poisons*

On November 18, 1929, the Law on Trade and Control of Narcotic Drugs and Poisons was passed in the Kingdom of Yugoslavia, following proposals from the Ministers of Trade and Industry, Social Welfare, and Public Health.⁴³ Poisons were defined in this statute as any substances or preparations that could produce pathological or functional alterations in the human or animal organism. The law announced the establishment of a Rulebook on the Trade in and Control of Narcotics and Poisons, which would regulate poison lists and storage and circulation conditions.⁴⁴ This Rulebook from 1930, together with the Regulation on Medicines and Medicinal Specialties from June 5, 1930, confirms that wholesale drugstores are permitted to sell medicinal specialties. This provision states unequivocally that drugstores are authorized for the wholesale distribution of pharmaceutical specialty products, demonstrating a deliberate strategy to control the sale of these products.

While pharmacists were pleased that their role in medicine policy had been expanded, druggist owners of retail drug stores were irritated that the

43 „Zakon o prometu i kontroli narkotičkih droga i otrova“, *Službene novine Kraljevine Jugoslavije*, br. 281, 30. 11. 1929.

44 „Правилник о промету и контроли наркотичних дрога и отрова“, *Службене новине Краљевине Југославије*, бр. 150, 5. 7. 1930.

legislation sought to grant pharmacists a monopoly in the storage and sale of medicines, drugs, and poisons.

The 1930 Rulebook on the Trade and Control of Narcotics and Poisons classified substances and preparations into three categories based on their toxicity and purpose of use. Although the term “poisons” was used, the Rulebook included several substances and preparations from official *materia medica*, some of which had narcotic effects and some of which had no therapeutic purposes. All of the listed substances are available in pharmacies and wholesalers. The First Group compiled a list of chemicals used for medical (therapeutic) or scientific purposes. These substances might be used alone or in therapeutic mixtures, and they could be obtained through a doctor’s prescription. Some of them were recognized by current pharmacopeias and were included in official drug pricing lists for human use. Aside from pharmacies, chemical and pharmaceutical industries and laboratories were also allowed to maintain chemicals specified in the First Group as raw materials for manufacturing. Wholesalers (wholesale drugstores) could stock the First Group substances in order to supply health institutions, scientific organizations, and laboratories. Since they supplied directly to the public, retail drugstores were not permitted to keep substances from the First Group.

The Second Group compounds and preparations had no pharmacological effects and were used for technical, agricultural, or household applications. They could be stored in pharmacies, wholesale drugstores, and retail drugstores. Pharmacies and wholesale drugstores could offer toxic preparations for pest control, but only to people who received a special permit from the relevant authority to employ these poisons. Wholesale drugstores supplied pharmacies and medical facilities. Retail drugstores offered these items directly to customers as long as they followed safeguards and safety procedures (individuals with a specific permit from the administrative authorities).

The substances containing poisons listed in the Third Group (poisons with a broad range of applications or common poisons) could be kept and sold by pharmacies, wholesale drugstores, retail drugstores, and trade shops if these entities had special permits to sell these substances issued by administrative authorities – the Ministry of Social Welfare and Public Health, the Ministry of Trade and Industry, or a local Ban.

New regulations on the sale and control of poisons⁴⁵ were enacted in 1932, further clarifying the storage and sale of the three types of substances and

45 „Уредба о промету и контроли отрова”, *Службене новине Краљевине Југославије*, бр. 97, 2. 11. 1932.

preparations. Substances in the first group were intended to be employed as medications or for scientific purposes. In addition to pharmacies, they might be kept in wholesale drugstores that do not sell these products to consumers. Regulations prohibit retail drugstores from selling certain medicines and poisons. Poisonous substances designated in the Second Group could be kept and sold in retail drugstores with authorization from the administrative authorities. Poisons in the Third Group were permitted to be stored and sold in retail drugstores that sold directly to consumers, as well as wholesale drugstores that supplied industrial, agricultural, or household disinfection products.

The disappearance of retail drugstores from the supply chain and pharmacy network

On June 16, 1933, the Minister of Public Health issued instructions for the application of the new Regulations from 1932, which set the stage for the disappearance of retail drugstores from the medicines policy in the following years.⁴⁶ Retail druggists were directly impacted by this instruction because they were permitted to sell all substances and goods (referred to as poisons in the Regulation) except those included in the First Group of the Regulation on Trade and Control of Poison from 1932. Since practically all medicines previously available at retail drugstores were included in the First Group, they were gradually phased out and changed into storefronts of retail shops selling miscellaneous commodities. Educated pharmacists who owned such retail drugstores either changed the business into wholesale drugstores or quit running their businesses.

We identified 210 identical items (medicines, patent medicines, and chemicals) by comparing both lists of the First Group of Poisons stated in the Rulebook on the Trade and Control of Narcotics and Poisons and the First Group in the New Regulations. From 1865 to 1927, 5 pharmacopoeias were issued at the territory of Serbia and we found 156 pharmaceutical products from the First group that were official in those national pharmacopoeias⁴⁷ as

46 AJ, 65–99, Act no. 5719 submitted from the Chamber of Pharmacists to the Minister of Trade and Industry on October 7, 1930.

47 *Pharmacopoea Serbica*. Ed. 1a, (Belgrade: Typographia Principatus Serbiae, 1881); *Short composition of Pharmacopoeia for Serbia*, (Belgrade: Ministry of Internal Affairs Principality of Serbia, 1866); *Pharmacopoea Serbica*. 2. ed. (Belgrade: Ministry of Internal Affairs Kingdom of Serbia, 1908); *Serbian pharmacopoeia*. Second edition, (Belgrade: Pharmacy Chamber of the Kingdom of Serbs, Croats and Slovenes, 1926); *Provisional Military Pharmacopoeia*, (Belgrade: Ministry of the Army and Navy of the Kingdom of Serbs, Croats and Slovenes, 1927).

well as in the Price Lists of Medicinal Specialties and Patented Preparations from 1929 and from 1932.⁴⁸ The list of First Group substances introduced by the Rulebook on the Trade and Control of Narcotics and Poisons in 1930 and specified in the Regulations on the Sale and Control of Poisons in 1932 included the following:

Acetanilid (Antifebrinum); Acetphenetidin; Acetopyrinum; Acetyl p Amidosalol, Acidumacetylosalicylicum and all its preparations, regardless of the brand-name (e.g. Aspirin, Acetysal); Acidum diacetylbarbituricum, and its salts and preparations, regardless the brand-name (e.g. Veronal, Medinal); Acidum dijodosalicylicum; Acidum hypophosphorosum and its salts; Acitrin; Acoïn; Aconitin and its compounds; Actol; Acykal; Adalin; Adrenalin and its compounds and preparations regardless of the brand-name medicines; Aether pro narcosi; Agaricin; Agurin; Albroman; Alival; Allosan; Aloïn; Alphol; Alysïn and its salts; Amphotropin; Amygdalin; Anaesthesin and its compounds; Anisotheobromin; Antinervin; Apolysin; Aponal; Argentum lacticum; Argentum proteinicum and its compounds under trade-name; Arhovin; Arsen compounds and its trade-name drugs; Asparol; Aspirophen; Astfolin; Atropine and its salts; Benzoidyhydrin; Benzosol; Berberine and its salts; Bismuthum (Bismuth) compounds and its brand-name drugs; Bromopyrin; Bromural; Cantharides and Cantharidin; Chelidonin and its salts; Chinaphenin; Chinin and its salts; Chineonal; Chinophen; Chinopyrin; Chloralanxid (Chloralformamid); Chloroformium pro narcosi; Chlorylen pro narcosi; Citrophen; Colchicin; Convallamarin; Cotarnin and its salts; Creosotal; Cuprum and its compounds and brand-name medicines; Curare; Cycloform; Cymarin; Degalol; Desalgin; Dial; Digitoxin; Dimethylarnidophenyl-dimethylpyrazolonum compounds and its brand-name medicines (e.g. Pyramidon, Amidopyrin, Dimopyran); Dormiol; Duboisin; Dymal; Emetin and its salts; Erythrolum tetranitricum; Eucaïnium B. and its salts; Ecupin and its salts; Euphorbium; Euphorine; Euphtalmin and its salts; Eupyrin; Europhen; Flores Convallaria majalis; Folia Belladonnae; Folia Digitalis; Folia Hyosciami; Folia Neriioleandri; Folia Stramonii; Fructus Papaveris; Guajacetin; Guajacol, esters and ethers; Guajasanol; Hedonal; Herba Aconiti; Herba Adonis. Aestivalis; Herba Adonis vernalis; Herba Conii; Herba Convallar.; Herba Gratiolae; Herba Lobeliae; Herba Pulsatillae; Herba Sabinae; Hetralin; Hexophan; Hirudin; Holocain and its salts; Homatropin and its salts; Hydrargyrum benzoic, oxydat. sicc.; Hydrargyrum oleïnicum;

⁴⁸ *Price list of medicinal specialties and patented preparations*, (Belgrade: Pharmacy Chamber of the Kingdom of Serbs, Croats and Slovenes, 1929); *Price list of medicinal specialties and patented preparations*, (Belgrade: Pharmacy Chamber of the Kingdom of Yugoslavia, 1932).

Hydrargyrum salicylicum; Hydrargyrum succinimidatum; Hydrargyrum tannic. oxyd; Hydrargyrum thymoloacet. compounds and its brand-name medicines; Hydrastinin and its salts; Hyoscin; Hyosciamin and its salts; Hypnal; Hypnon; Isopral; Jodum and its salts, which is use as medicines; Jodival; Jodol; Jothion; Lactophenin; Loretin; Luminal; Maretin; Melubrin; Methylum amino-oxybenz. orthoform; Moronal; Natrium santonicum; Neraltein; Neuronal; Nirvanol; Novalgin; Novatropin; Novocain and its salts; Oleum Chenopodii; Oleum Crotonis; Oleum Sabinæ; Oleum Tanacetii; Optochin and salts; Orexin; Ortoformneu; Orthoformium hydrochlor.; Papaverin and its salts; Paracodin and its salts; Paramorfan; Peletierin and salts Perichol; Peronin; Phenocoll and salts; Phenyl dimethylpyrazolon its salts and brand-name medicines (eg. Antipyrin); Physostigmin and its salts; Pilocarpin and its salts; Pneumin; Podophylotoxin; Propaesin; Proponal; Quebrachin; Radix Aconiti; Radix Belladonnae; Radix Filicis maris; Radix Gelsemi; Radix Hydrastidis; Radix Ipecacuanhae; Radix Jalapae; Radix Turpethi; Radix Veratri albi; Radix Veratrinigr.; Radix Veratri viridis; Resina Jalapae; Resina Podophylli; Rhizoma Scopoliae carniolic; Rivanol; Salophen; Santonin; Scammonium; Semen Colchici; Semen Hyoscyami; Semen Physostigmatis; Semen Sabadillae; Semen Stramonii; Semen Strophanti and its preparations as well as those components that are used as medicines; Sera, vaccines and all organo-therapeutic preparations; Scopolamin and its salts; Solanin and its salts; Solutio arsenicalis Fowleri; Somnal; Sozodol pur. (acid.) and its compounds; Spartein and its salts; Stovain; Strophantin; Sulfonal; Theacylon; Thein (Coffein); Theobromin and its salts; Theocin and its salts; Tolyantipyrin and its salts; Traumatol; Trichlorphenol as brand-name medicines; Trigemin; Trional; Triphenin; Tutocain and its salts; Utrogen; Veramon; Veratrin and its salts; Voluntal; Vucin and its salts; Yatren; Yohimbin and its salts and all approved drugs, and apothecary specialties that contain any amount of drugs and preparations listed in the First list.

Retail drugstores that sold their products directly to consumers were stripped of the privilege to maintain and sell poisons from the largest group of poisons, along with other medicines that included certain amounts of those poisons, under this new legislation. However, it should be noted that wholesale drugstores that serviced healthcare facilities were immune from this limitation. The Rulebook featured an additional 11 preparations that were eventually deleted from the Regulation's list, six of which were official in the pharmacopoeias⁴⁹ from the territory of Serbia and/or were on the Price Lists of Medici-

49 *Pharmacopoea Serbica* (1881); *Short composition of Pharmacopoeia for Serbia* (1866); *Pharmacopoea Serbica* (1908); *Serbian pharmacopoeia* (1926); *Provisional Military*

nal Specialties for 1929 and from 1932⁵⁰, while 21 preparations were added to the Regulation (Table 2).⁵¹

Table 2. List of substances and preparations from the First Group introduced by the official Rulebook on the Traffic and Control of Poisons in the 1930s and omitted from the First Group in the Rulebook on the Traffic and Control of Narcotic Drugs and Poisons in 1932

The list of substances and preparations that were omitted from the First Group of the Regulations on Sale and Control of Poisons	The list of substances and preparations from the First Group that were introduced by the Rulebook on the Trade and Control of Narcotics and Poisons
<p>Apocodoin and its salts; Apomorphin and its salts; Arecolin and its salts; Cannabinum tannic.; Codein and its salts; Coniin and its salts; Ingluvinum; Methylsulfonal; Physostigmin and its salts; Cinchonimun and its salts; Fungus Secalis and all its preparations, as well as those components that are used as medicines</p>	<p>Acidum carbolicum except acido carbolicum crudo 20%; Acidum phosphoricum glaciale; Acidum salicylicum; Acidum succinicum; Acidum sulfocarbolicum; Aethylium chloratum; Aluminium aceticum solutum; Alummol; Ammonium aceticum solutum; Ammonium succini cum pyro-oleosum solutum; Analgenum; Antidotum arsenici; Aristolum Aqua carbolata; Aqua chlori; Chinidinum and its salts; Coffein and its salts; Cominum and its salts; Eucainum; Exalginum; Theophyllin and its salts</p>

The 1930 Regulations enlarged the list of poisons so that the most significant changes in the lists of poisons were connected to those poisons that were authorized to be supplied directly to customers in pharmacies. Our analysis

Pharmacopoeia (1927).

50 *Price list of medicinal specialties and patented preparations*, (Belgrade: Pharmacy Chamber of the Kingdom of Serbs, Croats and Slovene, 1929); *Price list of medicinal specialties and patented preparations*, (Belgrade: Pharmacy Chamber of the Kingdom of Yugoslavia, 1932).

51 „Правилник о промету и контроли наркотичних дрога и отрова“, *Службене новине Краљевине Југославије*, бр. 150, 5. 7. 1930.

of the entities listed in the Second Group in the Rulebook on the Trade and Control of Narcotics and Poisons and the Regulations on the Sale and Control of Poisons revealed the presence of 11 products at both. From 1929 to 1932, seven of the eleven products were officially listed in the pharmacopeias⁵² and/or in the Price lists of medicinal specialties and patented preparations from 1929 and from 1932.⁵³ The following are common poisons found in the Rulebook on the Trade and Control of Narcotics and Poisons and the Regulations on the Sale and Control of Poisons that belong to the Second Group:

Agaricum album or Fungus Laricis; Amylnitrit; Antimony and its chlorine and oxygen compounds; Buthylchloralumhydrat; Fructuscoculi; Hydrocyanic acid and phosgene gas; Hydrocyanic acid and all simple water-soluble cyanides, with the exception of complex cyan compounds (eg. Kalium ferro and ferri cyanide) Mercury oxides and salts together with compounds of chlorine, bromine and iodine; Phosphorus yellow and pest control agents containing phosphorus; Radix Bryoniae; Strychnine and its compounds and preparations.

Three poisons from the list of the Second Group that were present only in the Rulebook were: Arsenic compounds, Nicotine and its compounds, and Ol. Sinapis aethereum.

A comparative analysis of the Third Group of Poisons specified in the Rulebook and the Regulations revealed that 35 products appeared on both lists. The following substances are listed in the Rulebook on the Trade and Control of Narcotics and Poisons and Regulations on the Sale and Control of Poisons as common poisons of the Third Group:

Aethylaether; Ammonia; Argentum salts (except listed in Group I); Aurum and Zinci salts; Barium compounds; Bromum^bBulbusScillae and its preparations (poisons for mice and rats); Carbol;Carboneum-sulfuratum; Fluorides (soluble) ; Gummi gutti; Kali causticum; Lead salts soluble in water (e.g. Plumbum acetic.); Lysol; Methylalcohol; Mineral acids; Natrium causticum; Nithrobenzol; Pierinic acid and its salts; Plumbumnitricum; Potassium chromate (yellow and red); Pyrogallic acid Raw and similar cresol soaps, if they are not sold in original wrappers; Silicicum Hydrofluoric acid and its salts; Soap (liquid

52 *Pharmacopoea Serbica* (1881); *Short composition of Pharmacopoeia for Serbia* (1866); *Pharmacopoea Serbica* (1908); *Serbian pharmacopoeia* (1926); *Provisional Military Pharmacopoeia* (1927).

53 *Price list of medicinal specialties and patented preparations* (1929); *Price list of medicinal specialties and patented preparations* (1932).

and bar); Thallium and its salts and compounds; Uranium water soluble and Uranium colors; Zinci salts (water soluble); Zinnober.

Twenty pharmaceutical products discovered in five pharmacopoeias official on Serbian territory from 1865 to 1927⁵⁴ were listed in the Price Lists of Medicinal Specialties and patented Preparations from 1929 and 1932.⁵⁵ The regulation of 1932 included substances containing arsenic in the Third Group of poisons. Regulations restricting their ability to keep poisons had a significant impact on druggists. By 1932, they were limited to selling and keeping medicines that were already a part of their goods. Even though pharmacists would still be considered regular shopkeepers, this suggested that some drugstores would close and their owners would be fired. Interestingly, the Chamber of Pharmacists advocated for druggists to be permitted to sell common medicines and chemical products for use in industrial, domestic, and agricultural applications, even while they supported the regulations on poisons. Drugstores were not allowed to sell even approved chemicals straight to customers for use as medicines, the Ministry of Social Welfare and Public Health said. The Chamber of Pharmacists reversed course in 1936 and called for a ban on drugstores selling any kind of medication. As a result, druggists' range of activities was substantially reduced in comparison to pharmacists' when it came to selling poisons to customers directly as well as authorized medical supplies. Consequently, pharmacies evolved into sanitary services, and drugstores were only permitted to sell medicines to healthcare facilities rather than to individuals.

Summary

The changing role of drugstores in Serbia at the turn of the 19th and 20th centuries reflects health authorities' efforts to identify and implement medication policy goals. Despite being founded primarily to supply medications to pharmacies, drugstores were involved in the direct supply of drugs to Serbian citizens during the 19th century. However, starting in 1904, different regulations began to limit the activity of drugstores. By analyzing regulatory, sociological, and historical elements, we attempted to explain how the activities and operations of drugstores and pharmacies developed on Serbian territory and perhaps even draw an outline of subsequent medication policy in

54 *Pharmacopoea Serbica* (1881); *Short composition of Pharmacopoeia for Serbia* (1866); *Pharmacopoea Serbica* (1908); *Serbian pharmacopoeia* (1926); *Provisional Military Pharmacopoeia* (1927).

55 *Price list of medicinal specialties and patented preparations* (1929); *Price list of medicinal specialties and patented preparations* (1932).

the Serbian healthcare system. Following the creation of the Kingdom of SCS/ Yugoslavia, laws concerning the storage and circulation of medicines, drugs, and poisons were enacted, which helped to improve the population's health security. These regulations emphasize the distinction between drugstores and pharmacies, and they also recognize each entity's right to offer specific medicines and poisons. The old practice of drugstores keeping and selling a wide range of medical products was changed by the regulation on the circulation and control of medications and poisons. A comparative analysis of the three groups of poisons defined by the Rulebook on the Traffic and Control of Narcotic Drugs and Poisons (1930) and the Regulation on the Traffic and Control of Poisons (1932) demonstrates how the distinction was established in the pharmacy, wholesale drugstore, and retail drugstore business sectors. As a result, their domain of operation was completely separated, while drugstores obtained a significant position exclusively in the supply chain.

Sources and Literature

- Archives of Yugoslavia (Arhiv Jugoslavije – AJ). Fund 65, Ministry of Trade and Industry of the Kingdom of Yugoslavia
- *Cenovnik lekovitih specijaliteta i patentovanih lekova*. Beograd: Apotekarska Komora Kraljevine Srba, Hrvata i Slovenaca, 1929.
- *Cenovnik lekovitih specijaliteta i patentovanih preparata*. Beograd: Apotekarska Komora Kraljevine Jugoslavije, 1932.
- *Glas apotekarstva*
- *Glasnik zakona i naredaba za Bosnu i Hercegovinu*
- *Kratki sastav Farmakopeje za Srbiju*. Beograd: Ministarstvo unutrašnjih dela Kneževine Srbije, 1866.
- *Pharmacopoea Serbica*. Ed.1a. Beograd: Typographia Principatus Serbiae, 1881.
- *Privremena vojna Farmakopeja*. Beograd: Ministarstvo vojske i mornarice Kraljevine Srba, Hrvata i Slovenaca, 1927.
- *Srpska Farmakopeja*, drugo izdanje. Beograd: Ministarstvo unutrašnjih dela Kraljevine Srbije, 1908.
- *Srpska Farmakopeja*, drugo izdanje. Beograd: Apotekarska Komora, Kraljevina Srba, Hrvata i Slovenaca, 1926.
- *Sbornik zakonah i naredbah valjanih za Kraljevine Hrvatsku i Slavoniju*
- *Novine srbske* (Cyrillic)
- *Službene novine Kraljevine Jugoslavije* (Cyrillic)
- *Srpske novine* (Cyrillic)

- *Zbornik zakona i uredaba u Knjažestvu Srbiji u dosadanjim zbornicima neštampanih a izdanih od 2. februara 1835. do 23. oktobra 1875. god.* Beograd: Državna štamparija, 1877. (Cyrillic)
- *100 godina Farmaceutskog društva Srbije 1879–1979*, ur. Momčilo Gorunović. Beograd: Galenika-Medicinski poslovi, 1983.
- Arsić, Jasmina, Dušanka Krajnović. “Pharmacy in Serbia: The life and work of a distinguished pharmacist, Velimir Karić”. *Pharmaceutical Historian* 50/2020.
- Arsić, Jasmina, Dušanka Krajnović. “Portable medicine chests and supply of medicines in Serbia from the 1830s to the mid-20th century: analysis of medicines list”. *Die Pharmazie* 75/2020, 443–454.
- Delini, Andrija. *Stanje farmacije u Srbiji između dva svetska rata 1918–1941*. Beograd: Srbolek, 1967.
- Đorđević, Tihomir. *Iz Srbije Kneza Miloša: kulturne prilike od 1815. do 1839. godine*. Beograd: Geca Kon, 1922.
- Đorđević, Tihomir. *Medicinske prilike u Srbiji: za vreme prve vlade Kneza Miloša Obrenovića (1815–1839)*. Beograd: Centralni higijenski zavod, 1938.
- Gerić, Radomir, Vladimir Jeremić, Miloje Rakić, Aleksandar Nikolić. *Zdravstveno zadržugarstvo*. Beograd: Zadruga, 1982.
- Hristić, Svetislav. *Trgovinsko – zanatlijski šematizam Kraljevine Srbije 1900–1901*. Beograd, 1901.
- Marjanović, Vojislav. *Farmacija u Srbiji u XIX veku*. Beograd: Srbolek, 1970.
- Parojčić, Dušanka, Dragan Stupar. „Deontološki aspekt razvoja farmacije u Srbiji između dva svetska rata (Prilog proučavanju istorije farmacije u Srbiji)”. *Tokovi istorije* 3–4/2002.
- Parojčić, Dušanka, Dragan Stupar. “Portable medicine chests in Serbia during the 19th and the first half of the 20th century”. *Die Pharmazie* 59/2004.
- Petranović, Branko. *Istorija Jugoslavije 1914–1941, I*. Beograd: Nolit, 1988.

Резиме

Јасмина Арсић
Душанка Крајновић

ПОЛИТИКА ЛЕКОВА И ДРОГЕРИЈЕ У СРБИЈИ ДО ДРУГОГ СВЕТСКОГ РАТА

Апстракт: У овом раду анализирани су ефекти политике лекова на функционално раздвајање апотекарског и дрогеријског пословања, од почетка 19. века, па до Другог светског рата. Дуготрајни спор између фармацеута и дрогериста око контроле и промета лекова и отрова био је инспирисан борбом за очување личних и професионалних интереса у снабдевању лековима. Питање државне контроле покренуло је сложене механизме који су истакли професионалну улогу фармацеута као носилаца апотекарске услуге и дрогериста као трговаца лековима на велико.

Кључне речи: веледрогерије, дрогерије на мало, историја фармације, политика лекова, лекови, отрови, законодавство, јавно здравље

Промена улоге дрогерија у Србији на прелазу из 19. у 20. век сведочи о настојањима здравствених власти да установе и спроведу циљеве политике лекова. Иако су биле пројектоване превасходно за снабдевање апотека лековима, дрогерије су током 19. века биле укључене у директно снабдевање грађана Србије лековима. Међутим, поједини закони почели су да ограничавају рад дрогерија од 1904. године. Анализирајући регулативне, друштвене и историјске факторе на територији Србије, покушали смо објаснити на који начин је дошло до промена улога и функција дрогерија и апотека и евентуално скицирати оквире касније политике лекова у здравственом систему Србије. Прописи који се односе на чување и промет лекова, наркотика и отрова, донети након оснивања Краљевине СХС/Југославије, допринели су унапређењу здравствене безбедности становништва. Овим прописима истакнута је разлика у пословању дрогерија и апотека и права сваког ентитета да продаје одређене лекове и отрове. Правилником о промету и контроли наркотичких дрога и отрова измењена је дотадашња пракса да дрогерије држе и продају широк асортиман медицинских производа. Упоредна анализа три групе отрова дефинисаних Правилником о промету и контроли наркотичких дрога и отрова (1930) и Уредбом о промету и контроли отрова (1932) документује на који начин је успостављена дистинкција у пословању апотека, веледрогерија и дрогерија на мало. Ово је за последицу имало потпуно одвајање делокруга рада, због чега су дрогерије добиле значајну улогу само у снабдевању.