

DOI: 10.5937/sanamed17-37207 UDK: 61(091)(497.11)"18" ID: 67545609

Hostory of medicine

DEVELOPMENT OF SERBIAN MEDICINE IN THE 19TH CENTURY

Jevtovic Meta Ivana, Djokic Bojan, Tomovic Miroslav, Kovacevic Zoran, Janicijevic Katarina

¹University Clinical Centre of Kragujevac, Clinic of Pulmonary Diseases,
Department for the inflammatory diseases of the lung, Kragujevac, Serbia

²Health Centre of Petrovac, Department for laboratory diagnostics, Petrovac, Serbia

³University Clinical Centre of Kragujevac, Department for the nephrology, Kragujevac, Serbia

⁴University of Kragujevac, Faculty of medical sciences, Department of Social Medicine, Kragujevac, Serbia

Primljen/Received 15. 03. 2022. god.

Prihvaćen/Accepted 15. 04. 2022. god.

Abstract: With the fall of the medieval Serbian state under Turkish rule, every culture, including medicine, died out, and the people resorted to folk medicine and self-taught doctors, i.e. empiricists. Serbs began to get educated in Vienna and Pest, and there were Serbian doctors in Novi Sad already at the beginning of the 18th century. At that time, the first doctors with diplomas appeared in Serbia, but mostly as personal doctors of the Belgrade pasha or Knez Miloš, i.e. his brother Jevrem in Šabac. In the fourth decade of the 19th century, the first military doctors set out, and the newly created four military district commands got their doctors. The Serbian Medical Association started the first medical journal, "Serbian Archives" in 1874. Josif Pancic is writing the first textbook in natural sciences, and Dr. Acim Medovic is writing the first textbook on forensic medicine. Before the First Serbian-Turkish War, the civilian ambulance numbered 69 doctors, 10 medical assistants, 26 pharmacists, and five pharmacy assistants, while the military ambulance had 19 doctors, five medical assistants, one pharmacist, and four pharmacy assistants. Health was initiated but also the establishment of the Ministry of Health and the higher education institution of the Medical Faculty in Belgrade. Guided by the oath, expertise, and experience, the doctors of that time made a significant effort to improve and develop medicine in Serbia in the 19th century.

Keywords: history of medicine, Serbia, 19th century.

INTRODUCTION

"I swear that I will come to the aid of the poor and the rich with equal zeal, that I will not deviate from the zealous performance of the duties of a district physician neither by bias, nor by friendship, nor by bribery," states the first medical oath from 1839 taken by district physicians and doctors. With the fall of the medieval Serbian state under Turkish rule, every culture, including medicine, died out, and the people resorted to folk medicine and self-taught doctors, i.e. empiricists (1). There were no trained doctors in the First or Second Serbian Uprising, but empiricists provided help. In the Serbia post-uprising, these empiricists even competed with trained doctors, because they were widely known (grandmother Stanija, gendarme Aleksa, uncle Dimitrije and others), and at the beginning of the 19th century the most famous were dolly Mana, lady Mother, and her son hakim Toma (1). Folk medicine has left written traces in the form of a medicinal book "Lekarusha" written by literate folk doctors who changed and augmented them over time. "Lekarusha" presents advice and instructions on diseases, medications, and treatments. The writings were passed from generation to generation anonymously, and it is unknown where or who wrote them. Recent research has shown that various therapeutic anthologies of medieval Serbia are not anthologies of folk medicine but writings created under the influence of Western European scientific medicine from Montpellier. These anthologies contained transcripts from the work of Joanes Platearius called Practica Brevis. These therapeutic anthologies were widely used in our country and were considered folk medicine, when in fact were the medicine of the Montpellier school (2). The most important achievement of folk medicine is variolation against smallpox from scabies of the sick to the healthy. At first, it was done by self-taught the people, and only from 1870 by hakims. Vuk Stefanovic Karadzic wrote in 1837 that Montenegrins knew how to inoculate smallpox by taking pus from patients, and they claimed that they learned to do that from Bishop Petar First. While working in Cetinje, Dr. Milan Jovanovic Batut studied folk medicine in Montenegro and discovered that in the old days, priests used to remove dried scabs from patients, turned them into powder, and used bird feathers to put them in the noses of healthy people or gave them a snort. Later they transferred the pus with a thin silver needle to the scratched skin (1). During the migration of Serbs under Ottoman pressure, a part of Vojvodina was inhabited, which acquired certain political and civil rights from Austria only in the middle of the 18th century. Among other things, Serbs began to get an education in Vienna and Pest, and there were Serbian doctors in Novi Sad already at the beginning of the 18th century (1, 2, 3).

THE ARRIVAL OF LEARNED DOCTORS TO SERBIA FROM THE END OF THE 18TH AND THE BEGINNING OF THE 19TH CENTURY

The first doctor, a Serb, was Dr. Jovan Apostolovic, born in Budim. He studied medicine in Germany, and in 1759 he began to practice medicine in Novi Sad, which was declared a free town only a decade before. Novi Sad did not have a city physician but only a surgeon-healer, Andrija Leb. Only in 1762 was Dr. Jovan Apostolovic appointed the first city physician of Novi Sad. By the second half of the 18th century, there were four Serbian doctors in Vojvodina, and in the first half of the 19th century, there were already thirty (4). In the vassal principality of Serbia, Hatisherif from 1830 allowed the opening of the first hospitals. At the time, the first doctors with diplomas appeared in Serbia, but usually as personal doctors of the Belgrade pasha or Knez Miloš, i.e. his brother Jevrem in Šabac. Not having favorable conditions for work and life, these doctors stayed in Serbia for a short period (1). Among the first to persist in the principality for a long time were Bartolomeo Kunibert from Italy, Dr. Jovan Stejic from Arad, Dr. Carlo Pacek from Slovakia, Dr. Emerich Lindenmeier, an Austrian from Banat, and Carlo Belloni, a Slovak from Upper Hungary, and others. Hence, in 1838, before the end of the first reign of Knez Miloš, there were nine doctors and four medical assistants in Serbia, and the first pharmacies opened in Belgrade. One was opened by Mata Ivanovic, a pharmacist from Zemun, in 1830, and another by pharmacist Pavle Ilic, a native of Veliki Beckerek in Kragujevac, in 1836 (3). In the fourth decade of the 19th century, the first military doctors set out, and the newly created four military district commands got their doctors. In 1836, the first border quarantines were

established, the most important one in Aleksinac (5). During the rule of The Defenders of the Constitution (1838-1958), the civil and military medical service became part of the Ministry of Interior, in which the Quarantine Department with medical care was formed. Dr. Karlo Pacek for quarantine affairs and Dr. Jovan Stajic for medical affairs were appointed as the head of that department. After the departure of Dr. Pacek with Knez Mihajlo from the country in 1842, Dr. Stajic remained alone as the head of that department and remained there until 1845, when he was appointed Secretary of the State Council. He was replaced by Dr. Lindenmeyer. Dr. Pacek drafted the Law on the Establishment of District Physicians, but in the absence of doctors, some positions of district physicians were filled by medical assistants (5). The newly-organized medical service began to solve many problems rapidly, such as combating infectious diseases in humans and livestock, introducing smallpox variolation, increasing the number of doctors, opening hospitals and pharmacies, appointing the first municipal doctors and midwives, sending state cadets abroad to study medicine, inspecting the composition and effect of mineral waters, etc.

THE DEVELOPMENT OF SERBIAN MEDICINE IN THE SECOND HALF OF THE 19TH CENTURY

As early as 1862, three new laws were passed: the Law on the Organization of the Central State Administration, which established ministries, the Law on the Organization of the People's Army, and the Law on General Conscription (1). With this legal transformation, the Military Medical Administration became a department in the Ministry of the Interior, which gave them more favorable conditions for work and development. The number of doctors in the city ambulance increased, and doctors began to come from the universities: Dr. Stevan Milosavljevic in 1855, who after Lindenmeier in 1859 was appointed head of the civilian ambulance and remained there for almost two decades; then Dr. Milosav Pavlovic in 1859, Dr. Filip Tajsic in 1864, and Dr. Josif Pancic and Dr. Vuk Marinkovic. Apart from the increase in the number of trained doctors, other changes are taking place in Serbian health care (1). In 1863, the Lyceum of the Year became the Great School within which the Department of Forensic Medicine and Public Hygiene was established. The first "bosses" of the department were Dr. Acim Medovic, and then Milan Jovanovic-Morski. With the enactment of the Law on Hospitals and Pharmacies in 1865, the Hospital Fund was formed, and the resources for the functioning of the fund were

provided from the annual tax of 1.60 dinars per tax head. The General State Hospital in Paliule in Belgrade was formed in 1867, and with the efforts of Dr. Vladan Djordjevic, the Serbian Medical Association was founded in 1872, and the Serbian Red Cross Society in 1876. The Serbian Medical Association started the first medical journal "Serbian Archives" in 1874. At the same time, the era of printing medical books began; textbooks whose authors were first foreigners or Serbs from Vojvodina. Dr. Vladan Djordjevic is among the first most published authors. The most famous works created in that period are the descriptions of Banja and the history of Serbian medicine by Lindenmeyer, the textbook of hygiene by Dr. Milan Jovanovic-Morski. Dr. Jovan Stojic, Dr. Vuk Marinkovic, and Dr. Josif Pancic are writing the first textbooks in natural sciences, and Dr. Acim Medovic is writing the first textbook on forensic medicine. With the development of medicine in civilian life, the military ambulance is also advancing. Before the First Serbian-Turkish War, the civilian ambulance numbered 69 doctors, 10 medical assistants, 26 pharmacists, and five pharmacy assistants, whereas the military ambulance had 19 doctors, five medical assistants, one pharmacist, and four pharmacy assistants (5). In 1879, Dr. Vladan Djordjevic was appointed head of the medical department of the Ministry of the Interior, and he remained in that position for five years. Thanks to him, Serbian health care has undergone thorough reform. Immediately after being appointed head of the medical department, this experienced and gifted doctor and organizer, who was a military doctor until then, drafted two laws (6). First, the Law on the People's Sanitary Fund was adopted by the Assembly by the end of December 1879. This law united all district hospital funds (established by the law in 1865) into one National Sanitary Fund that increased the hospital surtax by 0.50 dinars per tax head. The revenues of this fund also included the funds of the regular annual state aid and the income of the surtax for district doctors. In this way, the financial basis for the implementation of sanitary reform was created. The second law, the Law on the Regulation of the Medical Profession and the Protection of Public Health, was adopted in 1881. Although the roots of reforms in Serbian health care have been initiated, due to insufficient funds, by a small number of doctors and other medical workers, and especially the low level of health culture of the people, civilian health care has developed quite slowly. At the end of the 19th century and especially the beginning of the 20th century, the first surgical department opened in the improvised space of the General State Hospital in Palilula in Belgrade. Dr. Vojislav Subotic, the former head of the surgi-

cal department of the Zemun hospital, has been appointed the first head of the department. That was the first surgical department in the principality of Serbia. Along with this, the number of doctors significantly increased to 360 before the Balkan wars, and there were about thirty specialists among them. So, before the Balkan wars, we had the first specialists from various branches of medicine and surgery (7). All of this contributed to improving the health service, whose benefits were mostly available to the urban population, while the rural population, with very poor health conditions, remained unprotected. This, as well as the significantly slow development of the health service, was the subject of discussion at the sessions of the Serbian Medical Association, and every year it was the main item on the agenda of its annual assemblies. During one of the annual assemblies, the adoption of the new Law on Health was initiated, but also the establishment of the Ministry of Health, and the higher education institution of the Medical Faculty in Belgrade. However, the Balkan Wars and the First World War delayed the implementation of these initiatives (7). However, the military medical service developed much faster because the war conditions demanded it. From 1886 to 1903, the military ambulance experienced a revival, all under the leadership of Dr. Mihajlo Mike Markovic. His role in the military ambulance was as dominant as the role of Dr. Vladan Djordjevic in the civilian ambulance. As an active participant in the Serbian-Turkish wars, using his experiences, he focused his work on the development of war surgery, neglecting the hygienic-epidemiological service. He brought from Krakow an experienced surgeon, Dr. Roman Sendermayer, as the head of the military-surgical department, which opened in improvised premises at the old Belgrade military hospital. He sent several Serbian doctors to Vienna for specialization, and upon their return, he opened many surgical wards in five divisional hospitals in Belgrade, Nis, Kragujevac, Valjevo, and Zajecar. These surgeons also worked part-time in civilian hospitals, which contributed to the development of civilian medical care (1).

CONCLUSION

Guided by the oath, expertise, and experience, the doctors of that time made a significant effort to improve and develop medicine in Serbia in the 19th century. Unfortunately, the Balkan Wars and the First World War prevented them from further improving their health conditions in that period.

Acknowledgment

None.

Conflict of Interests: The authors declare no conflicts of interest related to this article.

Funding: None

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Sažetak

RAZVOJ SRPSKE MEDICINE U XIX VEKU

Jevtović Meta Ivana, Dokić Bojan, Tomović Miroslav, Kovačević Zoran, Janićijević Katarina

¹University Clinical Centre of Kragujevac, Clinic of Pulmonary Diseases,
Department for the inflammatory diseases of the lung, Kragujevac, Serbia

²Health Centre of Petrovac, Department for laboratory diagnostics, Petrovac, Serbia

³University Clinical Centre of Kragujevac, UKC Kragujevac, Department for the nephrology, Kragujevac, Serbia

⁴University of Kragujevac, Faculty of medical sciences, Department of Social Medicine, Kragujevac, Serbia

Padom srednjovekovne srpske države pod tursku vlast, svaka kultura, i medicina izumire, a narod je pribegao narodnoj medicini i samoukim lekarima, empiričarima. Srbi su se počeli školovati u Beču i Pešti, a već početkom 18. veka u Novom Sadu je bilo srpskih lekara. U to vreme pojavljuju se prvi lekari sa diplomama u Srbiji, ali uglavnom kao lični lekari beogradskog paše, ili kneza Miloša, odnosno njegovog brata Jevrema u Šapcu. U četvrtoj deceniji 19. veka postavljeni su prvi vojni lekari, a novostvorene četiri komande vojnih okruga dobile su svoje lekare. Srpsko lekarsko društvo pokrenulo je prvi medicinski časopis "Srpski arhiv" 1874.

Josif Pančić piše prve udžbenike iz prirodnih nauka, a dr Aćim Medović prvi udžbenik sudske medicine. Pre Prvog srpsko-turskog rata, civilna ambulanta je brojala 69 lekara, 10 lekarskih pomoćnika, 26 farmaceuta i pet apotekarskih pomoćnika, dok je vojna ambulanta imala 19 lekara, pet saniteta, jednog apotekara i četiri apotekarska pomoćnika. Pokrenuto je zdravstvo i osnivanje Ministarstva zdravlja, te visokoškolske ustanove Medicinskog fakulteta u Beogradu. Vođeni zakletvom, stručnošću i iskustvom, tadašnji lekari su uložili značajan napor da unaprede i razviju medicinu u Srbiji u 19. veku.

Ključne reči: istorija medicine, Srbija, 19. vek.

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Correspondence to/Autor za korespondenciju

dr Ivana Meta Jevtovic

University Clinical Centre of Kragujevac, Clinic of Pulmonary Diseases, Serbia Zmaj Jovina 30, 34000 Kragujevac, Serbia

Mob: +381 64 2571684 E-mail: mocakg@mts.rs

How to cite this article: **Jevtovic MI,** Djokic B, Tomovic M, Kovacevic Z, Janicijevic K. Development of Serbian medicine in the 19th century. Sanamed.2022; 17(1): 41-44.