



The influence of two Milan Jovanovićs on the establishment of civil and military medical service in Montenegro

Uticaj dva Milana Jovanovića na osnivanje civilne i vojne zdravstvene službe u Crnoj Gori

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Introduction

Montenegro preserved its independence through constant struggles and conflicts. The warrior tradition has become a characteristic of everyday life. Scarce natural resources and a relatively small area surrounded by enemies prevented significant economic and other development and, therefore, the absence of organized medical care. In constant battles, the soldiers themselves, i.e., able-bodied men and their tribal organizations, carried the basic logistics of weapons, clothing, and food. The main supply line was through women, who brought food to their relatives on the battlefield and often extracted the wounded and dead. For centuries, they were the only and the main military medical service (MMS), which took care of its closest ones. Due to the small population, all able-bodied men participated in the fighting, so there was no room to deal with the logistic, extracting the wounded or caring for them, which required a significant commitment and a reduction in the available number of fighters. Old men were often on the front battle lines, but also pupils and students. In addition to women, traditional healers, i.e., healers and herbalists (balm healers), also provided significant help. These are individuals who, from generation to generation, passed on knowledge of the treatment and care for the sick, dealing with folk medicine and medicinal herbs and balms, which are nowadays considered quackery. As such, they were extremely valued and respected in society, both in war and peace¹, and they summarized their knowledge in special books – *ljekaruša*, which represented

collections of knowledge and experiences acquired up to that point. The most famous folk healers/wound healers were from the Iličković brotherhood² from Crmnica, Montenegro, who had a great reputation among the people. About a dozen of them served Montenegro at all times. The Ministry of Military Affairs treated them as “domestic military medical personnel”, and in 1880, the Montenegrin Senate awarded them the title “people’s physicians”. Even after the establishment of MMS and the official ban on their work, they continued with their mission. There were no permanent and educated doctors, except for those who served as “externals” at the court, and, therefore, no permanent medical service that would take professional and organized care of the wounded and sick at the front. Medical service was the last thing that was taken into account in the Montenegrin Armed Forces, not only because of the low level of awareness of its importance but also because of the scarcity of material resources and the lack of food, weapons, and ammunition, the acquisition of which was a priority. As a result, the Montenegrin soldiers had bad general health and hygiene¹.

The year 1873 is considered the turning point in the development of modern Montenegrin medicine, including military medicine. That year, the construction and equipping of the hospital in Cetinje, Montenegro, was completed. In 1875, the outbreak of the Herzegovina Uprising occurred when a large number of civilians and wounded arrived in Montenegro. In order to take care of these people, the Committee to Aid Herzegovinian Fighters and Their Refugee Families (Committee for Suffering Herzegovinians) was formed in

Cetinje, through whose efforts the Senate ratified the Geneva Convention on November 29, 1875 (this date is taken as the establishment date of the Montenegrin Red Cross). In addition, numerous international committees were formed to help the Herzegovinian insurgents, and with the help of these committees, the first hospitals outside Cetinje were opened. The most significant and large-scale activities were carried out in Russia, where a large Red Cross campaign was organized to help the insurgents with money and equipment. Moreover, medical teams with experts, hospitals, and outpatient units were formed. They arrived in Montenegro in stages and were the backbone of medical care³. During the war, there were five to six hospitals in Montenegro, and there was no medical service within the army. From the uprising in Nevesinje, Bosnia and Herzegovina, to the establishment of peace made in San Stefano, that is, during the three years of hostilities, interrupted by brief truce periods, the number of wounded reached 8,000, and the number of sick 12,000, and all of them were on the shoulders of voluntary help because there was no separate MMS. Thus, for the first time, aid was provided to the Montenegrin Armed Forces at the front in an organized and professional manner, and from the beginning of 1876, we can conditionally speak of an organized and established MMS comprised of doctors from outside of Montenegro and members of medical missions, predominantly from Russia⁴.

The first organizational steps towards the establishment of MMS were made when doctor and military officer Nikola Kovačević was promoted to the rank of medical captain and appointed as the first military doctor of the newly established Standing Army in 1896. By assuming this duty, he began work on the organizational structure of the professional medical service in the Montenegrin Armed Forces⁵, so that on December 19, 1903, with the passing of the Law on the Organization of the Ministry of Military, the Medical Department was established within the General Military Department. Under his order, the Military Medical School program for military medical assistants, i.e., military paramedics, was established in 1906⁶. In this school, located in Cetinje, three classes with 56 cadets in total were educated⁷. With this program, one medical non-commissioned officer in each infantry battalion was trained. By decree on the formation of the Montenegrin Armed Forces in 1908, divisions of the Montenegrin Armed Forces were formed, which included one medical company⁷. In 1912, before the Balkan wars, the Montenegrin Armed Forces had four medical companies¹.

A special contribution to the establishment and development was made by two Serbian doctors with the same first and last name. Those two doctors were Milan Jovanović Morski (Bombajac) and Milan Jovanović Batut.

The influence of Milan Jovanović Morski (Bombajac) on the development of medicine and military medical service in Montenegro

Numerous doctors came to Montenegro during the war period after the beginning of the Herzegovina uprising, but Dr. Milan Jovanović Morski (Bombajac) played a notable

role. He was born in 1834 in a place named Jarkovac in Banat, Serbia, which was then former Austria. He studied lower secondary school in Vršac, Serbia, and higher secondary school in Timisoara, Romania, and Pest, Hungary, (1854). He started his studies in medicine in Vienna, Austria, (1861–1865) but finished them in Leipzig, Germany, (1867). He received his doctorate in the field of malaria in Leipzig (August 1867). Besides being the founder of the modern science of hygiene in Serbia and a lecturer of forensic medicine and dialectics at the Great School in Belgrade, Serbia, Morski was also extremely research- and travel-oriented⁸. Because of his frequent travels, he got the nicknames Morski (sea, transl. note) and Bombajac (Bombay, India, transl. note). He wrote several travelogues and literary works and did a considerable number of translations. Since 1869, he had been a member of the Serbian Learned Society. In addition to the above, before coming to Herceg Novi, Montenegro, he worked as a doctor in Bogoslovija (Seminary) (1865–1869), a private doctor in Novi Sad, Serbia, (1871–1875), and as a high school principal in Novi Sad⁹.

All of the above influenced that, upon his arrival in Montenegro, not only was he the court physician of the prince's family but also the teacher of the heir to the throne, Danilo Petrović Njegoš, from 1876 to 1879. Before serving as a court physician (from 1877), at the beginning of the Herzegovina uprising, he organized a special clinic for the reception and treatment of the wounded, and he was also a municipal doctor (physicist) in Herceg Novi in 1875¹⁰.

Undoubtedly patriotic Morski came to Herceg Novi in the beginning of 1875 to provide medical assistance to a large number of refugees who found refuge in this city¹¹. At the invitation of Prince Nikola Petrović, he moved from Herceg Novi to Cetinje in 1876. In this period, there was no permanent doctor or medical staff with a university degree in Cetinje, except for one Frenchman (medical major Gustav Friley). Morski first worked on providing medical aid to the wounded and refugees during the Montenegrin-Ottoman War (1876–1878). His role was particularly important in the first months of the war when he tried to organize a medical service in Cetinje in a modern way despite numerous problems and shortcomings. With the arrival of the Russian medical mission in Montenegro, his work became somewhat easier. In the period of stabilization of war conditions, in 1877, he was appointed court physician of the Petrović Njegoš dynasty⁶. In the winter of 1877/78, as a court physician, he stayed in Naples with Princess Milena and Crown Prince Danilo Petrović Njegoš, taking care of their health on the way¹⁰. Through his service with the Petrović Njegoš dynasty, he influenced the promotion of the need to establish a health service on a modern basis. Although he spent a relatively short period in Montenegro, from 1876 to the end of September of 1878, his role was great because it was a period of war in which the development of certain services was faster than in peacetime⁶.

Morski stayed in Montenegro in difficult war conditions, although his activity as an individual was quite limited. He was important in the work of MMS in the army and with refugees from Herzegovina. His presence in Montenegro as

an expert had an impact on the organization, method, and implementation of sanitary measures not only in the Montenegrin Armed Forces but also in refugee shelters. In mid-1876, he organized an improvised hospital for the reception of seriously wounded people who came from the front. He organized volunteer paramedics, mostly Montenegrin women, to work under his instructions and provide medical assistance. He was especially dedicated to maintaining hygiene and health culture, as well as preventing infectious diseases. Without any previous catches and medical personnel, he managed to start the development of military health when the Montenegrin Armed Forces were fighting many battles from Herzegovina to Podgorica. He left Cetinje for Herceg Novi in September 1878 and soon got a job as a doctor in the shipping company "Lloyd" on whose ships he sailed from the Adriatic to Bombay (1878–1882), which is how he got his nickname. Since 1892, he had been a regular member of the Serbian Royal Academy. After leaving Montenegro, he worked as a military doctor (second class medical captain) in the Šumadija Cavalry Corps, Serbia, (1885–1886) and as a professor of military hygiene and doctor (medical major) at the Military Academy (1889–1896). He died in Belgrade on June 6, 1896⁹.

The influence of Milan Jovanović Batut on the development of medicine and military medical service in Montenegro

Milan Jovanović Batut was born on October 10, 1847, in Sremska Mitrovica, Serbia,¹² He attended high school both in Pančevo, Serbia, and Sremski Karlovci, Serbia, but finished it in Osijek, Croatia, (1865). He completed his medical studies in Vienna (1878). Until 1880, he worked as a practical doctor in Sombor, Serbia¹³. On August 17, 1880, he received an invitation from the Montenegrin government (from the then Minister of Education and personal friend, Jovan Pavlović) and was appointed the head of the health department at the Ministry of Internal Affairs. Taught by the experience from his previous position, the Montenegrin government entrusted him with the task of organizing and managing Montenegrin health care. He was soon appointed as the chief physician of the Cetinje Hospital and also the fourth manager of the hospital "Danilo I". He stayed in Montenegro until October 1882¹¹. At his suggestion, a competition was announced in 1881 for ten district doctors in Andrijevica, Bar, Grahovo, Danilovgrad, Podgorica, Rijeka Crnojevića, Kolašin, Nikšić, Šavnik, and Ulcinj (Montenegro). The competition was also announced for a veterinarian working in Cetinje. Only two doctors (Petar Miljanić in Podgorica and Đorđe Babić in Bar) were registered for the competition⁶.

In 1881, the entire medical staff, apart from Milan Jovanović Batut, included Dr. Petar Miljanić, Jovo Mišić, Filip Salambros, assistant Janko Teodorides, four paramedics, one bandager, administrator Popović, porter, cook and cook assistant, employee in charge of water, and assistant administrator¹⁴. With the arrival of a young doctor Jovanović from Sombor to the manager position of the hospital "Danilo I" and "state physician", the period of establishment of modern

MMS and its organization began. Until his arrival, Montenegrin medicine relied on foreign doctors, mostly French, at the court. Milan Jovanović Batut worked in extremely difficult conditions, where there were no educated doctors, with a low level of awareness of the importance of health and education, with quack doctors as the dominant, and, it can be said, the only doctors outside the court. Immediately after his arrival, he began raising awareness of the need for the development of medicine, primarily by training the staff; hence, he started by providing practical training for the clinical staff. He pointed out to the authorities the need to establish a Medical Council (the forerunner of the Ministry of Health) and that raising awareness about diseases, hygiene, and medicine must be part of the general emancipation of citizens⁴. After arriving in Cetinje, he started with the reform, solved numerous problems in the operation of the hospital and the functioning of the medical service, introduced rules and work procedures, and strived to establish a medical system based on modern medical science, for which he received undivided support from the Prince and other authorities. In the hospital "Danilo I", he established and published rules. The rules applied first to patients who come for examination, as well as to those who visit them¹⁵. Over time, resistance to his ideas and aspirations grew stronger, especially in rural parts of Montenegro, where individuals felt their personal positions were threatened, and the low level of understanding and importance of medicine did not favor radical reforms. Determined to put an end to quackery, he succeeded, despite public and open resistance, especially from the folk doctors of the time, in passing the law banning the practice of quackery in Montenegro, with the threat of strict punitive measures. Special resistance, as expected, was shown by "domestic military medical personnel" and "folk doctors" from the Iličković brotherhood. Two years after November 1891, the collection of rules, regulations, and orders in the medical profession was published, prohibiting quackery. The Iličkovićs turned to Prince Nikola, who expressed understanding for their work, and, at the suggestion of the Minister of Defence, Ilija Plamenac, on December 1, 1895, the Iličkovićs were praised, rewarded, and assigned to the service in military units, with *stotinaš* (centurion) ranks "by which they will be distinguished from other peasants for their merits and be proud among Montenegrins"⁴.

His activity led to the adoption of rules for the operation of the Medical Service in coastal ports in 1891, after which the port medical captain's office was formed with equipment for steam disinfection following international sanitary standards, and sanitary passports were introduced¹⁶.

He was also involved in the procurement of books for the patients of the hospital "Danilo I". In one of his letters, Dr. Jovanović states: "We are asking the famous societies of Serbian newspapers, fiction and educational content, and writers and publishers of such books, to send us one copy of their publications, so that a smaller library can be created in the Montenegrin hospital "Danilo I" for the use of convalescent patients"¹⁷. The fact how carefully he took care of the hospital, but also what kind of problems he faced, is best shown in one of his letters: "...I take care of the hospital's

needs with great effort. Whenever I ask for something, they do not have it. For the smallest thing, I have to go from Pontius to Pilate. ... I got upset – all for that. And I am willing to help these people as much as I can”¹⁸.

He was the editor of the journal *Zdravlje*, which contained medical advice to the people. The first issue was printed on January 15, 1880, in Sombor, where 13 more issues were printed. After a short break due to Batut's departure to Montenegro, the journal began being printed again in Cetinje, where six more issues were printed¹⁹.

In addition to general medicine, Batut was also involved in examining the health condition of the Montenegrin people, for which purpose he traveled to Montenegro in 1881 and 1882, but only a small part of his observations remained written down¹⁹. Before the research, he defined the goals and content of the study of the people's health status. His main goals as a doctor were to examine each family individually and to calculate the following from the examination: the overall health of the people; what the most common disease was; how many people were wounded, maimed, blind, mute, insane, paralyzed, present, etc.; how many disabled, partially disabled were there; how many accidents from rifles and other weapons, from fire, frostbite, animals, etc. Apart from this, he recorded and examined infectious diseases, marital and family history, the influence of healers, priests, and other persons on treatment, the response of state institutions to treatment, what the attitude of the people toward their health was, as well as surveying the land and determining the places of healing springs, lakes, waters, caves, and areas. He examined the influence of age and the direction of progress of the population when it comes to their state of health. He paid attention to food, clothing, place of residence and stay, as well as the health of livestock. In addition to all the examinations, he did not forget, as he says: “as a doctor, to help in urgent cases, either with surgery, medicine, advice, or any other way”²⁰.

Thus, on July 16, 1881, after the first analysis, he submitted a report to the Minister of Internal Affairs on the general state of health and recommendations for better work and organization of MMS. It is the first systematized document on the state and conditions of health in Montenegro. In it, he stated that “the health and physical strength of Montenegrins are far worse than could be expected” and that the greatest need was for doctors since there was only one doctor *per* 200,000 inhabitants²¹, compared to America, where there was one doctor *per* 600 people, one *per* 1,000 in France, one *per* 2,000 in Austria, and one *per* 10,000 citizens in Serbia. He further stated that the hospital in Cetinje examined about 5,000 patients *per* year on an outpatient basis and that the existence of one hospital meant that only the most seriously ill patients made the difficult and costly trip (several days of walking) to the doctor only as a last resort²¹. For this reason, he proposed that a central health administration under the Ministry of Internal Affairs be established. That central health administration would have the authority to propose sanitary laws to the Senate for confirmation, manage doctors and medical personnel, propose doctors to the Senate for confirmation, report on the state of health in the country,

conduct health visits, keep health statistics, etc.²². He also advocated for the establishment of district hospitals and the hiring of doctors in Bar, Ulcinj, Nikšić, Podgorica, and Kolašin. The report mentioned above had a significant resonance and influence, so a competition was soon announced for the admission of ten district doctors, to which only two candidates applied, among them Dr. Petar Miljanić, the successor of Dr. Batut. The importance of his reporting is also evidenced by the fact that during his second and more detailed tour of Montenegro in 1882, the authorities ordered all tribal captains to help Dr. Batut and provide all the necessary assistance, even coercion, if the people refused to undergo examinations²³. On the order of Prince Nikola, Dr. Jovanović was sent with a special recommendation from voivode Mašo Vrbica, the then Minister of Internal Affairs of the Principality of Montenegro²⁴. He set out on his journey around Montenegro on July 4, 1882. He set out with a small entourage – from Rijeka Crnojevića to Andrijevića. On his way from Morača, Montenegro he was accompanied by Josef Holeček, a famous Czech writer and journalist²⁵. He visited every part of Montenegro and wrote about it in his occasional letters to Minister Vrbica, apart from his detailed reports.

He concluded that “the health and physical strength of Montenegrins is far worse than what could be expected”²¹. It is interesting to note that Batut, in his address to Prince Nikola, among other things, talks about being wounded in the war and states: “and there are more of them in Montenegro than anywhere else. There are few adults in our country who have not been wounded at least once, and of those severely wounded, there are quite a large number of those who suffer eternally from the unfortunate consequences”²¹. In his actions, work, and reporting, Dr. Jovanović was precise and systematic, but one cannot fail to state that his reporting was partly exaggerated, but with the main goal of influencing decision-makers to improve the health situation in Montenegro²⁶. This undisputed humanist, professional and lover of his profession made detailed assumptions about modern medicine and the further development of medical service in Montenegro.

The reasons for his sudden departure from Montenegro in October 1882, at a time when he was planning a tour of the southern region of Montenegro, are not fully known. It is assumed that it was an agreement with the head of the medical service of Serbia and his referral to training at the state's expense in the most important European centers, which he crowned in 1919 with the establishment of the Faculty of Medicine in Belgrade. The ministerial council and Prince Nikola I accepted the submitted resignation. During his stay in Montenegro, despite his many obligations, he wrote the booklet “Marriage and the People”¹². From 1882 to 1885, he specialized in Munich, Berlin (Germany), Paris, France, and London, Great Britain, and after that, he worked in Novi Sad as a private physician. In 1887, he was elected full professor at the Great School in Belgrade. He wrote a large number of books and textbooks. He was a great educator in the field of healthcare, and he collected practices from folk medicine, demonstrated bacteriological analyses, and did anthropomet-

ric measurements. For a long time, he was the president of the Main Health Association of the Yugoslav Medical Association and the Society for the Protection of Public Health ¹².

After his short but successful career, he was succeeded by Petar Miljanić ³, a doctor and lawyer who laid the professional and legal foundations of the Montenegrin medical system and who remained the head of the Medical Department until his death in 1897.

Conclusion

Milan Jovanović Morski (Bombajac) acted in wartime circumstances when the priority was taking care of the wounded. He had an impact on the development of the medical service during the war. In addition to the above, working as a doctor for the Montenegrin dynasties, he also influenced the spread of health culture and awareness of the development of the medical service. The first hospital in Cetinje was named after his student, Prince Danilo. In Montenegro, he played an important role in raising and creating awareness about the need for the development and organization of healthcare. Unlike his predecessor, Milan Jovanović Batut worked in Montenegro during the peacetime period (August 17, 1880 – October 1882), when the focus was on overall social development, including the development of the health service. In the absence of adequate local staff, the job of organizing the medical service was left to Batut. In the manner of a great professional, he conducted a detailed analysis of the health conditions and needs in Montenegro. He organized health statistics based on which it was possible to get an overall picture of the health status of the people and the

measures that needed to be taken. Although he did not remain for a long time, his influence on the development of health care in Montenegro and the creation of assumptions for the organization of military health care is very significant. During his stay in Montenegro, he held important state functions and had complete freedom in the development of healthcare. In a short period, he went from being a practical doctor to becoming the organizer and manager of the Montenegrin health system. In this position, he showed perseverance, organizational ability, persistence, dedication, and erudition. He did not act only in one direction but covered a wide range of development areas, from health statistics, institution organization, staffing, field research, and health studies. His contribution to the development of health care in Montenegro is of great importance and, therefore, also important to the development of military health care. On the other hand, the experience he gained in Montenegro was great and represented an important period for his further development – he could show his abilities, and it served him in his later medical career. Although he planned to return to Montenegro, his obligations and training led him elsewhere. In the end, it can be concluded that the stay of this great doctor and intellectual in Montenegro was mutually beneficial and satisfying. Two prominent Serbian doctors, Milan Jovanović Morski and Milan Jovanović Batut, independently of each other in the second half of the nineteenth century, with a gap of several years, stayed in Montenegro and participated in the treatment of sick and wounded soldiers and civilians, but also significantly influenced the formation of organized civil and military healthcare, health education, and the beginnings of hygiene, epidemiology, and health statistics.

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