

History of dermatology and venereology in Serbia - part III/2: Dermatovenereology in Serbia from 1881 - 1918

Bosiljka M. LALEVIĆ-VASIĆ*

Institute of Dermatology and Venereology, Clinical Center of Serbia, Belgrade, Serbia

*Correspondence: Bosiljka LALEVIĆ-VASIĆ, E-mail: labuba@eunet.rs

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Abstract

Owing to the enforced sanitary laws, the health care service in Serbia evolved systematically till the beginning of the Balkan Wars (1912). At the early phase of this period, in general hospitals dermatovenereology diseases accounted for 10.5% (Užice) to 45% (Zaječar), while venereal diseases prevailed (83.3% and 16.7%, respectively). In the period from 1880 to 1897, there were 12.354 Serbian soldiers with venereal diseases: 56.9% had *Gonorrhoea*, 28.9% had *Ulcus molle*, and 14.2% had *Syphilis*. The first official and professional statistics on *Syphilis* was done in 1898, and according to the report, 0.26% of the population of Serbia was affected by *Syphilis*: 1.42% in the Timok Region and 0.27% in Belgrade. Nevertheless, these data must be taken with caution, being very low. In regions with endemic *Syphilis*, tardive and tertiary *Syphilis* prevailed, whereas out of these regions, secondary forms of the disease were most common. In the period from 1882 to 1910, according to the reports of the Sanitary Department of the Ministry of Defense, skin diseases were reported in 3.1% to 15.2% of all hospitalized soldiers. Leprosy was diagnosed in 15 cases in Serbia; notification of all cases became compulsory in 1890. From 1912 to 1918, Serbia was at war, and the most common skin disease was a *dermatozoonosis* – *pediculosos* (lice infestation), which caused a tragic epidemic of exanthematous typhus in the army, but also among civilians. It was estimated that there were 500.000 sick persons, out of which over 150.000 died, including 56% of physicians and other medical staff working in hospitals. Disinfestation was the main treatment modality, using steam in so called "Serbian barrel". At the Thessaloniki front line, in the Dermatovenereology Department, there were 41 dermatoses or groups of dermatoses, affecting the hospitalized soldiers, but scabies was scarce, owing to good hygiene. After the end of the First World War, the Serbian army and population were decimated, and the country ruined. Reconstruction of the country began once again.

At the end of the 19th century, based on the act of the *Sanitary Law*, a regular public health reporting network was developed in Serbia, from peripheral, executive sanitary branches to sanitary authorities. Unfortunately, in the 20th century, most of these invaluable reports, including annual sanitary reports, were ruined or lost during the wars and foreign occupation of Serbia. That is why, using a method of random sampling, 5 monthly reports were taken as crude indicators of the development of dermatovenereology diseases in Serbia during the period 1887 – 1890. The reports were taken from three regional general hospitals (2 from Zaječar, 2 from Niš, and 1 from Užice), distributed from the North-East to the West Serbia. It was established that out of all patients, dermatovenereology diseases accounted for

45% of diseases in Zaječar General Hospital (1, 2), 38.6% in Niš General Hospital (3, 4), and 10.5% in Užice General Hospital (5). These data lack statistical significance, because precise data require larger studies. However, it is obvious that the occurrence of these diseases decreased from the East to the West border of the country. According to these reports, in regard to dermatovenereology diseases, including 84 patients, there were 83.3% of patients with venereal diseases, and 16.7% of patients with skin diseases. The diversity was even higher at the specialized Department of Skin Diseases and Syphilis (DSDS) of the General Public Hospital (GPH) (Figure 1) in Belgrade: in January and February of 1890, there were 94.5% of cases with venereal diseases, and 5.95% with skin diseases (6, 7). Although venereal diseases were treated in hospitals

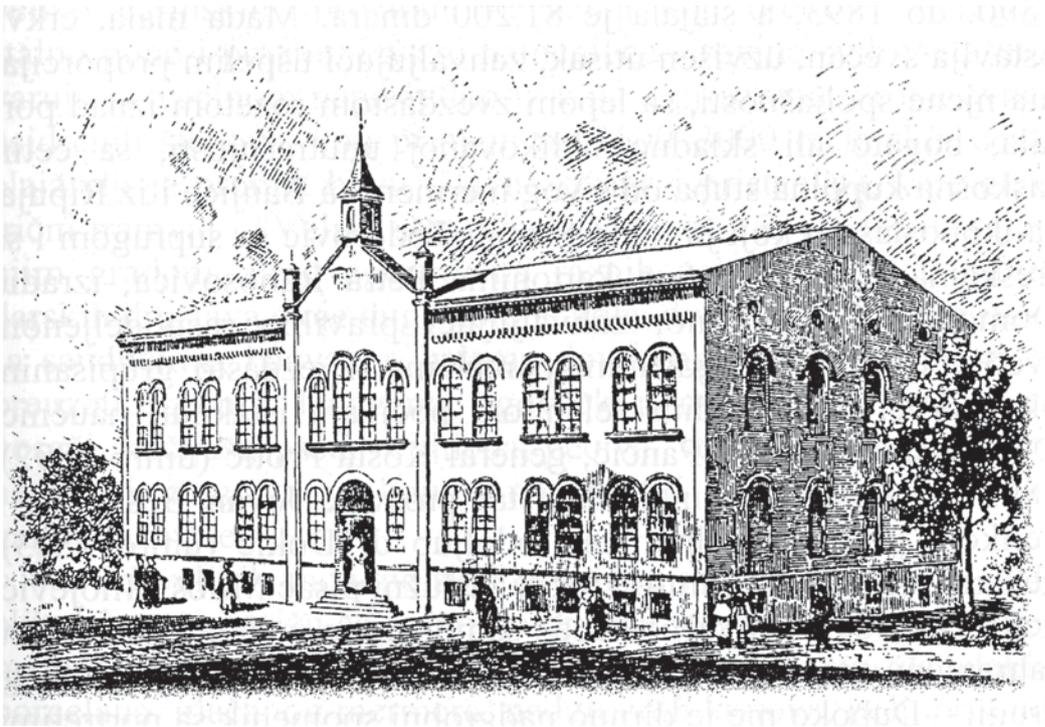


Figure 1. The General Public Hospital in Belgrade

almost by rule, patients with skin diseases were mostly outpatients. However, it is obvious that the former were still predominant. The situation was similar in Europe, which was documented at the International dermatovenereology congresses in Vienna (1892), London (1896), Paris (1900), Rome (1912), and Copenhagen (1930), where *Syphilis* (SY) was in the focus of interest (8).

Venereal diseases

Considering the fact that in regard to civilian, more military sanitary reports were saved, and that it was believed that conditions in the army depicted the “consequences and reactions of the diseases among civilians”, the following data are about the appearance of venereal diseases in the Serbian Army in the period 1880 – 1897: there was a total of 12.354 cases of venereal diseases, out of which 56.9% accounted for *Gonorrhoea* (GO), 28.9% for *Ulcus molle* (UM) and 14.2% for *Syphilis* (SY) (9).

Syphilis

At the turn from the 19th to the 20th century, anti-syphilis services in Serbia satisfied professional requirements, already in practice in Europe. The basic points included: microscopic diagnosis of *Treponema*

Pallidum, Wassermann’s reaction, arsenic therapy (1909) (10), treatment of venereal diseases free of charge (1887, 1895) (9), and prostitution regulations (11). Apart from frequent presentations on syphilis and other skin diseases, in 1899 prevention of SY was the main topic in the Serbian Medical Society (SMS) (12), as well as on the 1st Congress of Physicians in Serbia (1904), where articles on SY presented true research studies (13-16). After the end of the Serbian-Bulgarian war (1885), the period of peace was associated with work on the enforcement of the *Sanitary Law*, but collection of data for sanitary reports about patients with SY was irregular and slow. It was not before 1898, when data on patients with SY were gathered on the whole territory of Serbia. Based on these data, a report was submitted at the International Congress in Brussels. These data were saved in the thesis of Dr. Milutin Perišić: “La syphilis en Serbie” (1901, Nancy). In the total sample, 0.26% of Serbian population suffered from SY; the greatest percentage was recorded in the Timok Region (North-East Serbia) – 1.42%, whereas 0.27% were recorded in Belgrade. Although V. Mihailović considered this to be the first official and professionally done statistics about the spread of SY in Serbia, he thought that the

number of patients must have been higher and he accepted these data with caution, because the number of physicians was insufficient and unfamiliar with that job, the number of statisticians was low, the studied period was short (9), and the knowledge about skin lesions poor (15).

In areas with endemic SY (Eastern Serbia), at the end of the 19th century, SY was still the leading health problem (17). Since there were no hospital reports about the types of SY in that region, based on his own observations and annotations, Micić concluded that primary SY was very rare, whereas tertiary, congenital-tardive and secondary SY occurred in the following relations: 10 : 7 : 2, while there were no registered cases with central nervous system SY (15). However, SY was often registered as the cause of death in young children (18). According to the hospital reports in the Timok Region, during a ten-year period (1894 – 1903), the number of SY patients decreased by 50%, due to the organization of health services (15).

In Belgrade, outside the endemic SY area, according to the aforementioned monthly reports of the DSDS - GPH, the secondary SY was most predominant (74%), whereas the primary (13%) and tertiary (13%) types were rather rare (6, 7). The value of these results, regardless if they originated from hospital reports (DSDS), or personal observations (Micić's analysis), does not exhibit the real situation, because patients with primary lesions rarely visited physicians, for patients with secondary lesions hospital treatment was mandatory, whereas those with tertiary lesions were mostly outpatients (15). As a special treatment modality, mobile hospitals were established, moving from one village to the other (see above). The first case of progressive paralysis (PP) caused by SY was reported in 1889, almost 15 years after Fournier pointed to the association of this disease with SY (parasyphilis) in 1875 (19). In the Hospital for Mental Diseases in Belgrade (1861 – 1904), out of 637 cases of PP, which were considered to be polyetiological conditions and clinically a rather unspecific disease, a retrospective analysis revealed that there were 105 cases with syphilis PP, as well as that "intellectual work" negatively affected appearance of this disease (14).

In regard to the treatment of syphilis, mercury was used in the early stages of the disease, sometimes

combined with iodine preparations; in patients with end-stage syphilis iodine preparations were used (15), and later arsenic as well (10). Early stages of SY were regularly treated in hospitals, whereas those with end-stages were mostly outpatients (15). In any case, the treatment was individual, and patients were considered disease-free and harmless to environment only after 2 years (17). Fournier's belief that rational and accurate treatment was the prophylaxis of this disease was fully accepted (15).

The situation abruptly changed during the war period (1912 – 1918). The First and the Second Balkan War (1912 – 1913), although ending in victory, led to exhaustion of the Serbian army, as well as its equipment, hygiene and health-related issues. In such conditions, Serbia entered the First World War in 1914, against a superior enemy, which was followed by the epidemic of exanthematous typhus. In 1915, under constant attacks of the enemy, the whole Serbian army (20), with the Government, King and numerous refugees (13% of the population) retreated to the island of Corfu (21) which was under the allies. During the exhausting retreat which lasted from November 26th, 1915 to February 20th, 1916 (according to the Julian Calendar), the Serbian army was exposed to hunger, freezing and diseases, acute infectious diseases predominated, and thousands of Serbian soldiers ended their lives in the mountains of Albania. It was estimated that around 80.000 people died during the exodus (22). At the same time, Serbia was under occupation, so that few representatives of the civilian sanitary service in the country were forced to end their organized work. That is why venereal diseases were completely neglected, both in the army and among civilians. The circumstances were so tragic, that there might have been a possibility that the number of diseased even decreased. Since the Archive of the Sanitary Service in Kraljevo was burnt down in 1915, data on diseases of that time, including venereal diseases, are unavailable (23).

Prostitution

The first Circular on Prostitution "regulations" was issued in 1871, by which work of the first "whorehouse" in Belgrade was authorized (16). This regulation was not generally accepted, and some groups of physicians thought that prostitution had to be prohibited (13). The *Sanitary Law* (1881), however

accepted the former standing, and it was elaborated in already mentioned *Circular on Prostitution Regulation*, with basic terms as follows: every prostitute had to be registered in a certain whorehouse (tavern, pub), own a booklet, had to be under the supervision of the Sanitary Police and twice a week visit a specialized physician within the special police office, while sick prostitutes were hospitalized for treatment (11). These regulations on prostitution were revised in 1884 and 1900 (16) and were in effect for years.

Gonorrhoea and Ulcus Molle

Gonorrhoea and UM were rather frequent, sometimes even more than SY (see above). Clinical features corresponded to those in the previous chapter (see Part II). Due to the lack of annual health reports, it is impossible to get more information regarding this issue.

Skin diseases

During the period of peace, there were not many statistical data on skin diseases, because the diseased often chose self-medication, their work capacity was not compromised, and finally they were not used to visiting a doctor or be hospitalized. That is why we have to use the Military Sanitary Reports once again. In the period 1882 – 1910, according to the official reports of the Sanitary Department of the Military Ministry, there exist data for a period of 18 years: out of the total number of hospitalized patients, 3.1% - 15.2% suffered from skin diseases. According to the writer of these reports, a discrepancy was probably the consequence of varied number of outpatient visits, which was 10 – 20 times higher than the number of hospitalized patients. According to the Military Sanitary Reports from 1882, the following dermatoses were reported and in regard to the total number of hospitalized patients they occurred as follows: 4.2% of patients with *Scabies*, 4.2% with *Herpes Tonsurans*, 1.6% with *Eczema* and 2.2% with *Erysipelas* (24).

Serbia of that time was also affected by leprosy. After a thorough examination of the sanitary reports and consulting physicians, in the period 1880 and 1913, J. Žujović found 15 affected patients: 11 with established, and 4 with a probable illness. Out of the total number: 5 patients were from Central Serbia, 3 from the Eastern Serbia near the Romanian and Bulgarian borders, 1 from the border with Bosnia,

2 from Belgrade and 4 cases from other parts of Serbia (10). This disease was given high priority, and a directive was issued: all new cases of leprosy, found while registration of SY was performed, had to be reported to the Ministry of Internal Affairs right away (9), and in 1890 a Special Assembly of the SMS was held, dealing with cases of leprosy in Serbia (12). In the same year, reporting leprosy cases became mandatory (10).

During the war (1912 – 1918), data about dermatovenereology departments were also incomplete and unreliable, whereas their sources were semi-official, semi-private information of high sanitary service managers, and later published articles of the war participants (23).

The most significant skin disease during the war was one of the dermatozoonoses – pediculosis, which spread among the civilians after the Balkan wars (1912 – 1913), and even more in the army. It caused a disastrous epidemic of spotted typhus (20) which lasted from November 1914, to March 1915. It was estimated that around 500.000 people were affected by spotted typhus in Serbia. Out of the total number, about 150.000 died, as well as 30.000 Austrian prisoners (23). Many physicians also lost their lives, but the number was not completely established; according to one source, 124 physicians died from spotted typhus (20), while according to another, 56% of physicians and health care professionals who worked in hospitals, also lost their lives due to this disease (23). At the end of 1914, the National Board for the Eradication of the Epidemic, tried without success, depedication with sulphur and later with naphthalene. Successful treatment, however, was achieved after steam disinfection using improvised tin barrels, designed by an English doctor in Kragujevac, Dr. William Hunter, who named it “Serbian Barrel” (25). After the epidemics, only 200 physicians, capable of work remained (23), and they took part in the Serbian army during the breakthrough of the Thessaloniki front (25). Naturally, we don't have any data on other dermatovenereology diseases of that time. However, foundation of a *Department for Skin and Venereal Diseases* in the *Prince Alexander Serbian Reserve Hospital* at the Thessaloniki front in 1917 (see above), means that these diseases still existed. Kopsa had no data about the number of patients with skin

diseases during the existence of this department, but reported 41 dermatoses or groups of dermatoses affecting the soldiers. The spectrum of dermatologic diagnoses was very wide and corresponded with current dermatologic knowledge in Europe brought by educated physicians. Among them, there were a great number of patients with eczemas caused by intertrigo, filth, itching and scratching, with dermatozoonoses and scabies, as well as cooker eczema. A form specific for war periods was caused by gun and shrapnel injuries, in open and complicated fractures (mostly due to suppuration and iodine), which were treated by x-ray or medications. Many soldiers suffered from fungal and pyococcal diseases. Exanthematous diseases caused by medications were also frequent, but misdiagnosed as Morbilli, exanthematous typhus or SY. Scabies was least present at the Thessaloniki front, because bathing was frequent and obligatory, while great attention was paid to hygiene (24).

After the end of the First World War, the decimated Serbian army returned to their ruined country. Following the army, refugees and young people who gained education during the war in allied countries returned to their homeland as well.

Conclusion

Reconstruction of the country began once again.

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Abbreviations

- SMS – Serbian Medical Society
 GPH – General Public Hospital
 SY – Syphilis
 GO – Gonorrhoea
 UM – Ulcus Molle
 PP – Progressive Paralysis
 DSDS – Department of Skin Diseases and Syphilis

Istorija dermatologije i venerologije u Srbiji – III/2: Dermatovenerologija u Srbiji u periodu od 1881. do 1918. godine

Sažetak

Organizacija dermatovenerološke službe: U ovom periodu su doneseni sledeći sanitarni zakoni: *Zakon o uređenju sanitetske struke i čuvanju narodnog zdravlja* (1881), koji je sadržavao mere za sprečavanje veneričnih bolesti i mere za ograničavanje bluda; *Narodni sanitetski fond* (1881) sa samostalnim budžetom za zdravstvo; *Raspis o besplatnom lečenju sifilisa* (1887).

Bolnice: Osnovana su kožno-venerična odeljenja: u Opštoj državnoj bolnici u Beogradu (1881), u Opštoj vojnoj bolnici (1909), ponovo je otvorena Knjaževačka bolnica za sifilis (1881), kao i pokretne i privremene bolnice za lečenje sifilisa i mreža sreskih i opštinskih bolnica. U periodu 1912-1918. godine nastaje ratni period, u toku kojeg dominira vojnosanitetska služba, pa je 1917. otvoreno u Solunu *Kožno-venerično odeljenje* u okviru *Srpske rezervne bolnice prestolonaslednika Aleksandra*.

Lekari: Prvi srpski dermatovenerolog bio je dr Jevrem Žujović (1860-1944), a potom dr Milorad Savičević (1877-1915). Kožne i venerične bolesti lečili su lekari opšte prakse, hirurzi, internisti i neurolozi. Iako

„nedermatolog“, Laza K. Lazarević (1851-1890), lekar i književnik objavio je tri rada iz Dermatovenerologije, a dr Milorad Gođevac (1860-1933) značajnu studiju o endemskom sifilisu.

Dermatovenerološka oboljenja: Od 1885. godine do 1912. napredovala je organizacija dermatovenerološke službe. Zahvaljujući donesenim sanitetskim zakonima zdravstvena služba u Srbiji će se sistematski razvijati do početka balkanskih ratova (1912). U ranoj fazi ovog perioda pojava dermatoveneroloških oboljenja u opštim bolnicama kretala se od 10,5% (Užice) do 45% (Zaječar) i to pretežno na račun veneričnih bolesti (83,3% prema 16,7%).

Venerične bolesti: U srpskoj vojsci, od ukupno 12354 osobe obolele od veneričnih bolesti, u periodu 1880-1897. godine, gonoreja je bila prisutna kod 56,9%, meki šankr (lat. *Ulcus molle*) kod 28,9% i sifilis kod 14,2%. Prva zvanična i stručno urađena statistika sifilisa je iz 1898. i prema njoj u Srbiji je ovo oboljenje postojalo kod 0,26%, u Timočkome okrugu kod 1,42%, a u Beogradu kod 0,27% stanovništva, mada se ove brojke primaju s rezervom, kao niske.

U krajevima s endemskim sifilisom preovlađivao je tardivni i terciarni sifilis, a van njih sekundarni oblici bolesti.

Bolesti kože: U periodu od 1882-1910. godine, prema izveštajima Sanitetskog odeljenja Ministarstva vojnog, kožne bolesti su nađene kod 3,1% do 15,2% od svih hospitalizovanih vojnika. Dijagnostikovano je 15 slučajeva lepre; prijavljivanje ove bolesti je postalo obavezno 1890. godine. Od 1912-1918. Srbija ulazi u ratni period, kada je najznačajnija kožna bolest dermatozoonoza – pedikuloza, koja dovodi do tragične epidemije egzantemskog tifusa u vojsci, ali i

u narodu. Procenjuje se da je bilo 500 000 bolesnih, od kojih je umrlo preko 150 000, kao i 56% lekara i drugog medicinskog osoblja zaposlenog u bolnicama. Za lečenje je bila najvažnija depedikulacija, postignuta pomoću vrele pare u tzv. »srpskom buretu«. Na Solunskom frontu, na tamošnjem Kožno-veneričnom odeljenju među svim hospitalizovanim vojnicima, dijagnostikovana je 41 dermatozozna ili grupa dermatozozna, ali je skabijesa bilo malo jer je higijena bila dobra.

Zaključak: Posle I svetskog rata, Srbija je imala desetkovanu vojsku i narod i razorenu zemlju. Ponovo je počela obnova zemlje.