Sanatoria in the first half of the XX century in the Province of Vojvodina

Dušanka Dobanovački1, Milan Breberina2, Božica Vujošević3, Marija Pećanac3, Nenad Žakula3, Velimir Trajković3

SUMMARY

Following the shift in therapy of tuberculosis in the mid-19th century, by the beginning of the 20th century numerous tuberculosis sanatoria were established in Western Europe. Being an institutional novelty in the medical practice, sanatoria spread within the first 20 years of the 20th century to Central and Eastern Europe, including the southern region of the Panonian plain, the present-day Province of Vojvodina in Serbia north of the rivers Sava and Danube. The health policy and regulations of the newly built state — the Kingdom of Serbs, Croats and Slovenians/Yugoslavia, provided a rather liberal framework for introducing the concept of sanatorium.

Soon after the World War I there were 14 sanatoria in this region, and the period of their expansion was between 1920 and 1939 when at least 27 sanatoria were founded, more than half of the total number of 46 sanatoria in the whole state in that period.

However, only two of these were for pulmonary diseases. One of them was privately owned the open public sanatorium the English-Yugoslav Hospital for Paediatric Osteo-Articular Tuberculosis in Sremska Kamenica, and the other was state-run (at Iriški venac, on the Fruska Gora mountain, as a unit of the Department for Lung Disease of the Main Regional Hospital). All the others were actually small private specialized hospitals in 6 towns (Novi Sad, Subotica, Sombor, Vrbaš, Vrsac, Pančevo,) providing medical treatment of well-off, mostly gynaecological and surgical patients.

The majority of sanatoria founded in the period 1920–1939 were in or close to the city of Novi Sad, the administrative headquarters of the province (the Danube Banovina at that time) with a growing population. A total of 10 sanatoria were open in the city of Novi Sad, with cumulative bed capacity varying from 60 to 130. None of these worked in newly built buildings, but in private houses adapted for medical purpose in accordance with legal requirements.

The decline of sanatoria in Vojvodina began with the very outbreak of the World War II and they never regained their social role. Soon after the Hungarian fascist occupation the majority of owners/founders were terrorized and forced to close their sanatoria, some of them to leave country and some were even killed or deported to concentration camps.

Key words: History of Medicine; Health Resorts; History, 20th Century; Hospitals, Chronic Diseases; Tuberculosis; Hospital, Private; Non MeSH Vojvodina

INTRODUCTION

The idea of sanatorium* was widely spread in Europe by the end of the 19th century, due to medical advances in treating infectious diseases, tuberculosis in the first place. The campaign combating pulmonary phthisis — tuberculosis made a significant contribution to surgical treatment of this disease (1).

What influenced most the practice of early sanatoria were the fear of contagion and epidemics and the improved understanding of the benefits from the combination of fresh air, preferably from mountain forests, good nutrition and optimal rest as a therapeutic means (2, 3) to invigorate healing of both grownups and children, under the specialists’ supervision. A model of sanatorium as the institutional form (either private or public) embodying ideas of natural healing was set by Herman Brehmer. In 1863, he opened the first sanatorium in Europe, the Brehmerschen Heilanstalt für Lungenkranke in the attractive mountain village of Görbersdorf (now Sokolowisko, Ślask region in Poland) (3).

Being an institutional advancement in treating certain chronic and infectious diseases by both isolating and curing the patients, sanatoria spread within the first 20 years of the new century all over Europe, becoming a part of each particular country’s health care system. However, as usually is the case with various organizational forms of medicine as a curative discipline, the concept of sanatorium appeared in practice in many different forms, depending on actual legal and economic environment in a particular country. The diversity of sanatoria reflected in fact the medical professionals’ response to changing requirements and needs of the society they lived in. So the sanatoria in Europe ranged from magnificent mountainous buildings resembling spa, with bed capacity exceeding 200 to small urban hospitals far from the healing landscapes, for the well-off gynaecological or surgical patients. They were all called sanatoria, but the treatments they provided varied enormously. The majority of them were privately owned, run as commercial business, but not on a large scale in terms of bed capacity.

In the southern region of the Panonian plain, in the present-day Province of Vojvodina in Serbia north of the rivers Sava and Danube, the first sanatorium was open in Pancevo, around 1907, by an exceptional multitalented visionary, V. Aleksić MD, but was closed even prior to his unexpected death in 1911 (4). In 1918, the new state was proclaimed — the Kingdom of Serbs, Croats and Slovenians (SHS)/Kingdom of Yugoslavia since 1929. The process of establishing the new state took years to complete, due to huge social issues resulting from the devastating World War I (poverty, poor
health, sanitation problems, typhus, tuberculosis...), and so did the process of creation and institutionalization of the healthcare policy. On the whole, the political framework was liberal enough for introducing the concept of sanatorium as part of the healthcare system. However, that wasn’t the institutionalization of cooperation between the private and public sectors in addressing the “social question” but of private medical practice modelled after the private clinics in Germany and Austria in the first place. The ownership and management of sanatoria were under the control of provincial health boards and central health authorities.

The period of expansion of sanatoria in Vojvodina and the whole Kingdom was between 1920 and 1939, when at least 26 sanatoria were founded in the region of Vojvodina, more than half of the total number of sanatoria in the whole state (5). However, only two of these were for pulmonary diseases. One of them was privately owned, of which the open public sanatorium was the English-Yugoslav Hospital for Paediatric Osteo-Articular Tuberculosis in Sremska Kamenica, and the other was state-run sanatorium (the one at Iriški venac, on the Fruška Gora mountain, a unit of the Department for Lung Disease of the Main Regional Hospital). All the others were actually small private specialized hospitals in 6 towns (Novi Sad, Subotica, Sombor, Vrbas, Vrsac, Pančevo,) providing medical treatment of well-off, mostly gynaecological and surgical patients. During the World War II almost all of the records relating to medical institutions in the Kingdom of Yugoslavia, private and other sanatoria included, were destroyed.

Almost all the sanatoria owners/founders were experienced medical specialists who had graduated from the universities in Austria and Germany, and were well informed of the advancements in western medical practice. They “imported” the concept of sanatorium and applied it in the form that was applicable in “the state in its historical construction”.

The majority of sanatoria founded in the period 1920–1939 were either in or close to the city of Novi Sad, at the time the administrative headquarters of the province called the Danube Banovina (Dunavska Banovina)**. The era of expansion and wide acceptance of sanatoria in Europe lasted less than a century, but only 20 years in Vojvodina. It was cut irreversibly by the World War II in the first place, and in 1948 by nationalisation of all privately owned hospitals, spas and sanatoria, which coincided with the introduction of antibiotic therapy of tuberculosis.

Listed below are the “identity cards” with some of the basic data on 27 sanatoria in Vojvodina that were established in the first half of the 20th century.

SANATORIA IN NOVI SAD

In the newly established state, the Kingdom SHS/ Yugoslavia (1918–1940) Novi Sad was for 14 years the administrative centre of the Dunavska Banovina, one of the three most developed provinces in the newly established state, the Kingdom SHS/ Yugoslavia. The city’s population grew from (approx.) 33,000 in 1910 to 61,000 in 1941. A total of 10 sanatoria were open in Novi Sad, none of them located in a newly built building, but in private residential properties adapted for medical purposes in accordance with legal requirements. The cumulative bed capacity of sanatoria in Novi Sad varied from 60 to 130 (5), reflecting the fact that the majority of them were small private clinics for those who could afford their services.

1. Sanatorium for surgery

Address: Beogradske kej 7 (Figure 1)
Capacity: 12–42 beds
Founder/owner: Slavko Uzelac, MD (Žabalj, 1893–Novi Sad, 1942) (Figure 2).

He was killed at his sanatorium’s entrance by the Hungarian fascists who also stole much of his property during their January raid in 1942 (5–8).

2. Sanatorium for surgery and gynaecology

Address: Jevrejska ulica 11 (Figure 3), the first floor of the founder’s family home
Capacity/equipment: 8 beds and operating theatre
Founder/owner: Aleksandar-Šandor Šosberger, MD (Novi Sad, 1873–Novi Sad, 1944) (Figure 4).

After graduating from the Medical Faculty in Budapest in 1894, Dr Šosberger spent three years practicing in hospitals in Berlin, Munich, Jena and Heidelberg. Having returned to Novi Sad he worked hard, specialized gynaecology and obstetrics, and became very eminent. He was the first director of the municipal hospital and founder of the Gynaecology Clinic.
He introduced the Wasserman method, and was the first medical practitioner in Novi Sad to use the roentgen in diagnostics, and to perform the Caesarean section (in 1910). He and his wife committed suicide in 1944 so as to avoid the Hungarian fascists terror and deportation to extermination camps (5, 8–10).

3. Sanatorium for surgery, gynaecology and obstetrics (1922–1932)
Address: Pavela Šafarika ulica 31 (Figure 5)
Capacity/equipment: 10–15 beds and delivery room
Founder/owner: Nikola-Nika Mrvoš, MD

Two other specialists worked in this sanatorium with Dr. Mrvoš: Stanko Matanović M.D, specialist in surgery, until his tragic death in 1932, and Miladin Veličković Svinjarev, MD specialist in gynaecology and obstetrics, until his death in 1929. The Sanatorium consisted of two rooms in Dr. Mrvoš’s family home. Patients were treated for surgical, gynaecologic and obstetric problems, even deliveries were performed. Dr. Mrvoš closed his Sanatorium when he moved to Zagreb in 1932 (5, 8). The house was torn down in early 2000s, according to the City centre reconstruction plan.

4. Sanatorium for surgery and gynaecology
Address: Jaše Tomića ulica 38 (currently Dunavska ulica 24) (Figure 6)
Capacity: 18–24 beds
Founder/owner: The founder and first owner was Stanko Matanović, MD (Kranji Do nearby Cetinje, 1875–Novi Sad, 1932) (Figure 7). After his death the owner was Vladimir Jakovljević, MD (Ada, 1893–Novi Sad, 1960) (Figure 8).

Dr Matanović graduated from the Medical faculty in Heidelberg, practiced surgery assisting Professor Cherny. He was appointed Head of Surgery Department of the State hospital in Novi Sad, and worked in the Sanatorium for only four years (5, 6, 8, 11). After Dr Matanović’s death in 1932 the Sanatorium was owned by Vladimir Jakovljević, MD who worked there until 1948 (5, 8, 12). He had graduated from the Medical Faculty in Budapest in 1920. Over the next four years he specialized surgery in Paris, Berlin, Munich and Heidelberg. In 1932 he was appointed Head of Surgery Department in the State Hospital in Novi Sad (6, 13).
5. Sanatorium for gynaecology and obstetrics
Address: Laze Nančića ulica 30 (Figure 9), since 1944
at Željeznička ulica 7
Capacity: 10–16 beds
Founder/owner: Branko Ilić, MD (Žabalj, 1889–Novi Sad 1966) (Figure 10).

Dr Ilić was specialist in gynaecology and obstetrics and Sanatorium practice was well known for pregnancy terminations. Sanatorium was closed in 1942 when Dr Ilić, being a Jew, was deported to a concentration camp (5, 8).

6. Sanatorium for gynaecology and obstetrics
Address: Vase Stajića ulica 19
(Figure 11)
Capacity: 8–10 beds
Founder/owner: Desider Kajner, MD

Dr Kajner was specialist in gynaecology and obstetrics and Sanatorium practice was well known for pregnancy terminations. Sanatorium was closed in 1942 when Dr Kajner, being a Jew, was deported to a concentration camp (5, 8).

7. Sanatorium for gynaecology, surgery and orthopaedic (Figure 12)
Address: Kralja Petra II ulica 151, (presently Futoska ulica)
Capacity: 10–16 beds
Founder/owner: Ferdinand Nandor Brezovski, MD (?–1942)

Dr Brezovski, a surgeon, Chair of the Surgery Ward of the State Hospital in Novi Sad, and owner of a private sanatorium run by him from 1920 until his sudden death in 1942 (5, 8). The building in which Sanatorium was located was demolished in the mid-1950s and the Institute for Health Care was built in its place.
8. Sanatorium for eyes diseases
Address: Pavla Simića ulica 1 (Figure 13)
Capacity: 5 beds
Founder/owner: Borislav Mirić, MD (Gospodinci, 1888–?) (Figure 14) specialist in ophthalmology and Chair of the Eye Department of the State hospital. He left Novi Sad in 1942 (5, 6, 8).

9. General Practice Sanatorium
Address: 7 Werböczy Istvan utca (today Stražilovska ulica 5) (Figure 15)
Capacity: 10 beds
Founder/owner: Imre Benedek, MD

Dr Benedek was specialist in gynaecology and obstetrics. Being a Jew, he was killed by Hungarian fascists during their January raid in 1942 (5, 8). The Sanatorium provided general types of medical services.

10. “Betania” Sanatorium for internal diseases and psychiatry (Figure 16)
Address: 7 Ujvidék Munkás utca (presently Branimira Ćosića ulica 7) (Figure 17)
Capacity: 30 beds
Founder/owner: Co-owners and founders of the Betania sanatorium were Dezider Annau, M.D (Veliki Bečkerek, currently Zrenjanin, 1898–New York, 1969) and Pavle Bogdanović, MD

The first pavilion was built in the early 1900s as the mission of the episcopal methodistic church from America (today evangelistic-methodistic church) to serve as a hospital for mental diseases, named Betania *** and later for tuberculosis. Dezider Annau / Deysö, MD was graduated from the Medical Faculty in Budapest in 1923 and specialized psychiatry and neurology in Zurich, Paris and Vienna. He moved to Novi Sad in 1926 where he was the first neuropsychiatrist at the State Hospital, Chair of its Psychiatry Ward. He also developed private practice at 16 Kralja Aleksandra ulica (the second floor of the Menrat Palace) and a private Psychiatric sanatorium (Betania) (8). In 1949 he moved to America (15).

Dr Pavle Bogdanović was the co-owner for 5 years. He graduated from the Medical Faculty in Graz in 1921 and specialized internal diseases in Graz and Vienna. He was the first to involve electrocardiography in diagnostics. Later, he moved to Belgrade where he was appointed Chair of Cardiology Department in the State Hospital (5, 8, 16).

The Methodist church nuns took care of patients in the Sanatorium (8). Before the World War II the Methodist School for Girls was run at “Betania” as a boarding school, the curricula of which focused on trade skills and housewife duties and responsibilities. After the WW II the Betania pavilions were used as the Regional hospital for tuberculosis (17). The building is ruined down according the reviving plan for Gynaecology and obstetric clinic.
11. Sanatoria in Sremska Kamenica (Fruška Gora slopes)
English-Yugoslav Hospital for osteoarticular tuberculosis

Address: Sremska Kamenica (currently a Novi Sad suburb on the right bank of the Danube river)

Capacity/equipment: 20–max. 46 beds, operating theatre, roentgen, elementary school

Founder/owner: Katherine MacPhail, MD, MB ChB (Figure 18)

This hospital/sanatorium was established in 1934 as a peacetime work of Katherine S. MacPhail, MD (Scotland, 1887–St. Andrews, 1974). Katherine S. MacPhail graduated MB ChB (Bachelor of medicine and surgery) from the Glasgow University in 1911. During the World War I in 1915 she joined a team of Scottish women working as medical staff in the war-torn Serbia (18). After the War she opened the Anglo-Serbian Children’s Hospital in Belgrade. In 1934 she founded and built up the English-Yugoslav Children’s Hospital for Treatment of Osteoarticular Tuberculosis, on the beautiful slopes of the Fruška Gora mountain, in Sremska Kamenica, a small village on the right bank of the Danube river, opposite Novi Sad, at a 4-5 km distance. The Hospital-sanatorium possessed all the characteristics of a well-equipped sanatorium (19), with an operating theatre and roentgen diagnostics. It was privately owned but all the children were treated free of cost. The age for admission was up to 14. The Sanatorium provided very advanced therapy, comparable to those in Switzerland and England: aero and heliotherapy, good quality nourishment, etc (Figure 19). Also school lessons were organised as well as several types of handwork as the work-therapy (20). Over the 1934–1937 time period around 458 children underwent hospital treatment (18). During the war years the Sanatorium was closed.

As the World War II ended, the Sanatorium was reactivated, but with the 1948 final nationalisation of all medical institutions in the communist Yugoslavia it was transformed into a ward of the orthopaedic surgery under the supervision of the referent Belgrade and Novi Sad clinics (21).

Figure 18. Katherine S. MacPhail, MD surgeon (Courtesy of prof Želimir Mikić, MD PhD)

Figure 19. Sanatorium in Sremska Kamenica: a. Sanatorium view, b. Room for patients, c. Heliotherapy, d. Lectures in hospital elementary school (Courtesy of prof Želimir Mikić, MD PhD)
12. Sanatorium at Iriški venac
Address: Iriški venac (on the Fruska Gora mountain, cca. 20 km from Novi Sad, 50km from Belgrade)
Bed capacity: n/a
Founder/owner: State-owned

Built in 1926 for abandoned children it was soon transformed into a sanatorium for pulmonary tuberculosis, as a sub-department of the Department for lung disease in the State hospital (22) where both children and adults were treated. Dr Tomaž Furlan, MD applied the collapse therapy here (1), which he himself had experienced earlier at the Golnik sanatorium (currently in Slovenia).

The Sanatorium also had two small local units, one at the Beočin Monastery (on the Fruška Gora slopes) (Figures 20, 21) and the other in Bačka Palanka (Zavišić private hospital); these two were used as sanatorium units for a few years after the World War II.

13. “Vidaković” Sanatorium
Address and capacity: n/a
Founder/owner: Franjo Vidaković, MD (Čantavir 1984 –?). Dr Vidaković graduated from the Medical Faculty in Budapest in 1923, and specialized surgery and gynaecology in Subotica and Belgrade. He also worked at the Department for Surgery and Gynaecology of the General Hospital in Subotica (23).

14. “Park” Sanatorium
Address: (currently) Ulica Đure Đakovića 21
Capacity/equipment: operating room, roentgen, diathermy, hydrotherapy
Founder/owner: Imre Wilheim, MD (1886–1930)
Dr Wilheim was a well known surgeon and he opened his sanatorium in a building with attractive facade, spacious backyard and terrace built in early 1930s to house this sanatorium, which was well equipped, even a roentgen apparatus was used in diagnostics. The patients were treated for surgical, gynaecological, internist and psychiatric diseases. Deliveries were also performed. After the owners death in 1930 the Sanatorium was transformed into a pension (boarding house). Later the Jewish Hospital was located in that building, then Maternity Ward and the Vocational Medical School, and currently the Secondary Vocational School of Economics (23, 24, 25).

15. Sanatorium for gynaecology
Address: 174 Lenkei utca (currently Ulica Ivana Gorana Kovačića)
Capacity/equipment: 20 beds, operating theatre, roentgen
Founder/owner: György Sánta, MD (Tenke 1863 – Budapest 1947)
Born in Budapest, Dr Sánta graduated from the Medical Faculty there finished specialization in surgery before the World War I and worked at the Red Cross hospital in Budapest. He moved to Subotica, a town in the peripheral area of the Austrian empire until 1918. In the 1901–1914 period he was Chair of the Surgery and Gynaecology and Obstetrics wards at the City Hospital. He had his Sanatorium built in 1906 (23) and in the same building there was the headquarters of the municipal Red Cross organization, of which Dr. Sánta was a member since its founding in 1886. During the World War I he worked in the military surgical service of the Austrian empire, and his Sanatorium also provided all the necessary medical care to the wounded (23).

16. Sanatorium for surgical and gynaecological diseases (1920–1926)
Address: Trg Princeze Jelene 16 (currently Trg Nikole Pašića)
Capacity: n/a
Founder/owner: Radovan Klisić, MD ( ? – Beograd, 1928) and Lothar Fronius, MD (probably Bečka Crkva 1890–Vršac 1926)
By the beginning of 20th century Vršac had a population of 25,000 inhabitants, well-developed small-scale industry, trade and three hospitals. Dr Radovan Klišić had specialized gynaecology and obstetrics in Kiev (Ukraine) and surgery in Odessa (Ukraine). Dr Lothar Fronius was a military surgeon who had graduated from the Medical faculty in Budapest (26, 27). After Fronius’s death Radovan Klišić, Mane Budisavljević and Alexander Hübsch established the Banat sanatorium.

17. “Banat” Sanatorium
Address and capacity: n/a

In the newspaper Vojvodina daily from the early 1920s this sanatorium was advertised as providing operative and conservative treatment of surgical and gynaecological diseases. However, the Sanatorium closed in a few months’ time and Dr Klišić moved to Belgrade (26, 27).

18. Sanatorium for surgical diseases (1926–1944)
Address: 62 Osthajmer strasse (currently Ulica Ivana Milutinovića)
Capacity: 5 beds

Having graduated from the Medical faculty in Graz Dr Seemayer also specialized surgery there. He founded his Sanatorium in 1926 and after the World War II he donated his entire sanatorium to the Health Care organization of the Soviet Red Army (26, 27).

19. Sanatorium for surgery and obstetric diseases (1927–1942/43)
Address: Karadžorđeva ulica 27 (currently Ulica 2.oktobra 27)
Capacity: probably 6 beds
Founder/owner: Alexander Hübsch, MD (Kovin 1893–Novi Sad 1965).

Dr Hübsch graduated from the Medical faculty in Budapest in 1918, and specialized in Budapest as well (24). First he worked in the Banat sanatorium for a year (1926–1927) along with Dr Mane Budisavljević, surgeon and Director of the Municipal Hospital in Vršac and Dr Radovan Klišić (26, 27). In 1927 he opened his own sanatorium, where he worked until 1943.

20. Sanatorium for surgery (1931–1941)
Address: n/a
Capacity: n/a
Founder/owner: Vilko Baum, MD (Vukovar 1896–Zagreb 1956).

Dr Baum had graduated medicine in Wien and specialized in surgery and obstetrics in Zagreb (currently in Croatia). He worked for the State Railway Company and in his own sanatorium from 1931 to 1941. Being a Jew he and his family were imprisoned by the Nazi German command of Vršac during the World War II (26, 27).

21. “Sanitas” Sanatorium (1912–1944)
Address: Vršački breg slopes
Bed capacity: n/a
Founder/owner: Riclian Society from Vršac

Riclian Society for preserving health and natural healing, followers of Arnold Ricley who, although not a medical professional, was one of the European pioneers in naturopathy. The Riklian Society in Vršac was an active group of the well-off male citizens in the period 1885–1930s. They invested a massive sum of 350,000 forints to build a first sanatorium in Vršac, called Sanitas, on the Vršac Hill, in 1912 (28). Therapy was based on combining hydrotherapy with fresh and clean air, good nutrition and a lot of rest hours. With its high prices it targeted the well-off citizens. Although it was advertised in the newspapers as healing numerous health disorders and diseases, it resembled more a spa or an early welness centre than a medical institution. After the World War II it was transformed into the Military hospital for tuberculosis, and in 1947 the Vršac Municipal hospital was located in that well-constructed building. In 1955 the Pediatric department was moved there (26, 27, 29). At present the Physical Medicine & Rehabilitation Service is located there.

SANATORIA IN SOMBOR
22. Sanatorium for surgery
Address: Dositejeva ulica 13
Capacity/equipment: roentgen diagnostic
Founder/owner: Antun (Antal) Rill, MD (Kljajićevo, 1891– Sombor,1971)

Dr Rill opened his private practice and sanatorium in 1936 (30). He was a renowned surgeon, famous for his successful throat reconstructions, which he also demonstrated in Sweden, at the Göteborg Hospital. He was an extraordinarily devoted humanitarian, which was proved during the WW II when he admitted in his sanatorium, “operated” and kept in bandages numerous people so as to save them from deportation into nazi concentration camps. It was due to his personal authority that the City Hospital was not demolished by the occupation forces as they were retreating before the advancing Soviet army and Yugoslav partisans (31, 32).
23. Sanatorium for surgery and gynaecology  
Address: n/a  
Capacity: 7 beds  
Founder/owner: Holtzschuch, MD (31,33)  

SANATORIA IN VRBAS  
24. Sanatorium for surgical and internal diseases  
Address: (currently) Ulica Ivo Lole Ribara  
Capacity: 12 beds  
Founder/owner: Bela Tessenyi, MD and Müller, MD  

This sanatorium was opened in 1920s and closed in 1944. the founders and owners were Dr Bela Tessenyi, MD (1896–1981) surgeon and Dr Müller, MD general practitioner (34).

25. Sanatorium for surgical diseases  
Address: Glavna ulica (at present Ulica Maršala Tita 38)  
Capacity: 25 beds  
Founder/owner: Friedrich Hecl, MD  

Both sanatoriums in Vrbas were open until 1944 when they were transformed into military hospitals providing medical services for local people and injured soldiers. The operative program was performed under anaesthesia: appendectomies, inguinal hernias, cholecystectomies, limb amputations, broken legs and arms, skull trepanation after neurotrauma. In 1947 the first floor of Hetzel’s sanatorium was transformed into a surgical unit and the second floor into a gynaecology and obstetrics department (34).

SANATORIUM IN PANČEVO  
26. “Dr. Alexic” Sanatorium  
Address: (at present) Zmaj Jovina ulica  
(today a part of the Healthcare Centre)  
Capacity/equipment: modern laboratory and operating theatre, delivery room, roentgen, sterilizing room.  
Founder/owner: Vladimir Aleksic, MD  
(Banatsko Novo Selo, 1873 – Beograd, 1911)  

Dr Aleksic graduated medicine in Austria, from the Medical School in Graz, and practiced medicine in Pančevo, which was at the time a town in the periphery of the Austrian Empire, close to the Danube river and Belgrade, the capital of Serbia on the opposite bank.  
Dr Aleksic, an extraordinary enthusiast in many fields, who even designed piloted gliders and was a pen friend with the inventors Orville and Wilbur Wright, founded the first sanatorium in Pančevo in the first years of the 20th century. It was a well equipped sanatorium for physical therapy, with a roentgen apparatus, ultraviolet radiation lamp, laboratory for microscopic, bacteriological and chemical analyses. On the ground floor, surrounded by a spacious garden there were patients rooms; the bathrooms were in the basement in which various therapies were delivered, such as: cold and mineral water therapies, electrical, sulphur, iron, iodine and sandy mud therapies. An operating theatre was supplied with electric Bogenlampe and its own air cleaner was in the building neighbouring the Sanatorium. On the roof a solar-air baths room was improvised. Due to financial issues the Sanatorium only worked for less than a decade. (4)

27. Russian Sanatorium-Hospital  
(King Alexander’s Russian Red Cross Sanatorium) (Figure 22)  
Address: (at present) Ulica Đure Đakovića  
Capacity: 110 beds (60 free of charge)  
Founder/owner: Firstly state-owned, later made gift to Russian Red Cross; financed by Russian Red Cross Society in Yugoslavia and the Yugoslav State Commission for Russian refugees  

With the increased number of Russian refugees in Serbia in 1920 typhus spread in the city of Pančevo, and the representatives of the “Russian colony” were offered the abandoned Austrian hospital by the Pančevo authorities. As there were many doctors among the refugees from the October revolution, the hospital building was soon transformed into a sanatorium-hospital starting with the personnel of three MDs (Bjelousov, Smirnov, Račkovski) and 4 nuns working as nurses. Over the first 10 years the sanatorium became one of the best medical institutions in the Kingdom of Yugoslavia. It had three departments – surgical, therapeutic and gynaecological, three operating theatres, delivery room, pharmacy, laboratory, well equipped cabinets for rentgenoscopy, electrical, air and physiotherapies, hydrotherapy, and even a rich library. Since the Russian refugees community were given the hospital building as a present by the Military Ministry of the Kingdom of Yugoslavia, Yugoslav service members and their families were given the curative treatments in this Sanatorium free of charge. In the 1920–1940 period there were more than 20,000 patients, of which 32% were Yugoslav citizens and non-Russian foreigners (35, 36).

The era of expansion and wide acceptance of sanatoria in Europe lasted less than a century, but only 20 years in Vojvodina. It was cut irreversibly by the World War II in the first place, and in 1948 by nationalization of all the privately owned hospitals, spas and sanatoria, which coincided with the introduction of antibiotic therapy of tuberculosis.  
Generally speaking, the physicians who founded the sanatoria in Vojvodina and provided various medical services made significant contribution to the development of the health care system and social positioning of medical professionals.  
The authors of this paper were faced with the huge problem of scarcity of data on almost all of these institutions, since the official records relating to sanatoria on the whole were destroyed or lost during the World War II. However incomplete, the data on these sanatoria shed additional light on the medical practice in Vojvodina in the period observed.

Acknowledgment  
Authors of the text have special thanks to Sladjana Djurjanovic for proof reading, constructive suggestions and active archive research at the time of preparation this pages.

Abbreviations  
n/a, not available.
**Authors remark:**

* Sanatorium, -iums or -ia are kind of hospital for sick people who are getting better and need treatment, rest, etc., esp. over a long period of time (Longman Dictionary of Contemporary English, New Edition Longman Harlow, 1987; p.926) ). It consists of medical facilities for long-term illness often associated with treatment of tuberculosis before antibiotics. Meaning “sanatorium” (a hospital) is different from “sanitarium” (a kind of hotel with health resort) which was used before the twentieth century and described various services offering comfortable, sometimes luxurious quarters and employing bathing and drinking lots of mineral water, enjoying mountain air, natural food, and a lot of rest-hours. The patients could visit the doctor-general practitioner for guests (Sanitarium, sanatorium, sanitorium. The Columbia Guide to Standard American English, 1993).

**Danube Banovina** was for 12 years an administrative province according to the Constitution of the Kingdom of Yugoslavia (03 October 1929) and consisted of regions Syrmia (Srem), Bačka, Banat, Baranja, Sumadija and Branicevo. Established in 1929 as one of the ten banovinas it disestablished in 1941 (Čorović V. Istorija Srba. Feniks Libris Zemun, 2010 p.743).


Conflict of interest

We declare no conflict of interest.

REFERENCES

10 Bećić B. Prvi ginekolog-akušer u Vojvodini – dr Aleksandar Šosberger. Jugoslovenska ginekologija i opstetinica. Zagreb 1984; br.11