

Syphilis and Scherlievo in Dalmatia

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SUMMARY The authors describe the emergence of syphilis in Dalmatia, the coastal part of Croatia, at the very end of the 15th and the beginning of the 16th century, its presence up to the 20th century, making reference to the most important physicians that tried to cure the new disease. The archives of Dalmatian towns, their statutes, some literary works, travel writers, physician books, and articles by historians of medicine contain data on syphilis in Dalmatia. Syphilis was first observed in Zadar (1500), Trogir (1501) and Dubrovnik (1502). Among the first physicians who treated patients in Dubrovnik were Mariano Santo and Amatus Lusitanus. The latter was the first to make prosthesis for the palate defect to cure tertiary syphilis lesions. According to the statutes of Dalmatia towns, each had one or more paid physicians and pharmacists. The Ottoman travel writer Evlija Celebi gave an account of syphilis in Dalmatia in the 17th century. At the end of the 18th century and during the 19th century, endemic syphilis known as *morbus de Scherlievo* and *morbus Brenensis* appeared in Dalmatia. Because of the numerous cases observed in the region, new hospitals were opened in Dalmatian towns and the patients were hospitalized. Among the physicians who were engaged in the fight against syphilis in the 19th century, mention should be made of Giovanni Battista Cambieri, Nikola Selak and Božo Peričić. They all treated the affected patients and described syphilis and 'Scherlievo disease' in Croatian as well as in other languages. Syphilis was present in Dalmatia towns during the 15th-20th century, remaining a challenge and arousing the interest of current dermatovenereologists as well as other specialists.

KEY WORDS: syphilis, Scherlievo, Dalmatia

INTRODUCTION

Today's Dalmatia, rich in natural beauties and history, is part of Croatia on the eastern Adriatic coast. Among the first inhabitants in antique Dalmatia were the Illyrics, then the Greeks, mostly on the islands. The Roman invasion of Dalmatia began in the first centuries BC. After a short presence of the Goths, the Slavs settled in Dalmatia in the 7th century AD. At first, they lived in the rural hinterland, then penetrated the coastal towns

of Ragusa (Dubrovnik), Jadera (Zadar), Aspalatos (Split), Tragantium (Trogir), and others. In the Middle Ages, these towns were municipal institutions, had a communal administration and a well documented culture, especially in Dubrovnik. After Charlemagne, the rule was divided between the Venetian Republic, Byzantium, the Croatian-Hungarian government, and Turkey with permanent changes. During the 15th-18th centuries, the towns

gained some autonomy, and Dubrovnik became a maritime Republic; the nobility and the wealthy class riches spoke Latin, Croatian and Italian. These circumstances remained unchanged until the fall of Venice (1797), the occupation of Dalmatia by the French and annexation to Austria-Hungary Monarchy (Kingdom of Dalmatia) at the beginning of the 19th century (1,2).

During their long and complex history, the people in Dalmatia had been troubled by various diseases, especially malaria and bubonic plague (3). The subject of this paper is the history of syphilis in Dalmatia from the 15th to up to the 20th century, i.e. the authors attempt to outline the first cases observed along the coast, the course of the disease during these centuries, the political, economic and social circumstances during the period, and the achievement of the physicians engaged in the cure.

Syphilis appeared in Europe at the end of the 15th century, possibly imported from America by the Columbus's sailors (there also were two Dalmatians among the crew), but some authors believe to be a myth (4). The disease soon expanded to many countries after the French army of Carl VIII, consisting largely of mercenaries of different nations, had conquered Naples, followed by rape and pillages. The first observed cases were among soldiers after the battle of Fornovo (1495), described by the Italian military physicians Marcello Cumano and Alessandro Benedetti (5-7). Some physicians thought the disease had appeared perhaps earlier in Barcelona (8), while others considered it was a punishment sent by God for human sins or due to astrological influences. The disease seemed to be new and had a severe course, but after a few decades its severity waned. The soldiers, prostitutes, merchants, and seamen spread the malady called 'French disease', while the French called it 'Neapolitan disease', throughout Europe, and cases of syphilis were soon reported in Dalmatia, especially along the coast, while it appeared later in other parts of Croatia.

HISTORY OF SYPHILIS IN DALMATIA UNTIL THE 18TH CENTURY

Data on the presence of syphilis in Dalmatia at the very end of the 15th and during the 16th century can be found in the archives of Dubrovnik, Zadar, Split, but also in the works of some literary men, travel writers, and most of all in the works of the physicians that treated patients with this disease in Dalmatian towns.

In 1496, Giorgio Summaripa, a cultured Venetian poet (known for his verses on the battle of

Fornovo) mentioned that the new disease '*fatto ha in Dalmacia e Grecia gran spavento*', i.e. caused great panic in Dalmatia and Greece (9,10). The disease was first noticed in a soldier in Zadar (1500), as told by the Venetian chronicler Marino Sanuda in his voluminous Diaries from 1496 to 1533 (11); then in Trogir (1501), Dubrovnik (1502) and other parts of Dalmatia (12).

It should be noted that Dubrovnik (Ragusa) in the Middle Ages was already an important maritime republic (from 1358 to 1797), with a flourishing commerce, cultural and scientific influences from the West and East, and with a skilled diplomacy (13). This port-city had a consistent fleet, and their vessels (argosy) are mentioned in Shakespeare's works 'The Merchant of Venice' and 'Taming the Shrew' (14). The communal statute from 1272 (the statute of Korčula is even older, from 1265, and of Split from 1240), written in Latin, did not mention any physicians, but indicated some hygienic measures such as to keep clean the streets and toilets in houses (15), while pharmacists had to use exact balances. Later statutes had additions and improvements. Official scripts from 1302 cite '*medicus physicus*' Ricardus de Cesario, and in 1305 Peter Marangius, both from the Salernitan medical school, who were town physicians (16,17). There were also surgeons, pharmacists and hospitals (18). The physicians engaged by the town by one- or two-year contracts were well paid but had to cure the citizens free of charge. The first pharmacy in Dubrovnik, and it still exists today, was opened in the Franciscan friary in 1317 (19,20), but there is a notice that in Trogir there was a pharmacy as early as in 1271 (21). This indicates that the separation of pharmacy from medicine, according to the Edict of Friedrich II, king of Naples and Sicily (1240), was quickly adopted in Dalmatian towns and this role was included in their Statutes. The first hospital of Dubrovnik was Hospitale Magnum (H. Communale) or Domus Christi (House of Christ) founded in 1347, near the St. Claire nunnery, firstly for the disabled, the old and poor, and later it enlarged to become Civic Hospital in 1540; here the communal physicians had to visit the patients twice a day. From 1540, it also had a pharmacy (22,23).

In 1377, after the plague of 1348, the Great Council of Dubrovnik was the first town in the world that issued a decree to introduce a quarantine (Lazaret) in Cavtat and on the island of Mrkan against plague and other diseases, in shanties for people that came from suspected regions by ships or caravans. Later, the lazarettos were transferred

to Mljet, Danče, Lokrum, and the greatest in Ploče on the eastern border of Dubrovnik (24-26). The oligarchic government of the town was aware that the health of the folk was of paramount importance for flourishing of their prosperity. So, there were not only processions and prayers to the patron saint against contagious diseases, but also wise administrative and health measures and physicians.

The presence of syphilis in Dubrovnik at the beginning of the 16th century is confirmed by the fact that in 1510, the surgeon Antonio Spagnolo (Antonius Hyspanicus), looking for work in this town, as a promotion of his ability said that he could treat the 'male de Franza', i.e. syphilis (15).

From 1527 to 1532, the surgeon Mariano Santo from Barletta, specialist for the extraction of bladder stones, practicing in Dubrovnik reported about patients with the 'French disease'. Critical to the therapy used by local physicians, he used ointments based on mercury, and also made a forceps for cure the stricturae urethrae. Later, he published his 'De ardore urinae et difficultate mendi' (27). Among the most famous physicians that worked in Dubrovnik there was the Portuguese Jew Amatus Lusitanus (Joao Habib Rodriguez) born in 1511 at Castel Branco and died in Thessaloniki in 1568. He graduated from the University of Salamanca in 1530. Later, because of hostility towards the Jews in the Iberian peninsula, he went to Antwerp and then to Ferrara, where he taught medicine at the local university (28,29). He was a known physician, botanist, anatomist and surgeon, and travelled to cure important patients in Rome, Florence, Ancona, and Venice. Because of the spreading of anti-Semitism, he left Italy to be engaged and practicing in Dubrovnik (Ragusa) from 1556 to 1558. He described a dozen of patients affected with the 'French disease' observed in Dubrovnik in his books 5 and 6 of 'Curationum medicinalium centuriam septem', published in 1566 (30). In each book, he described a hundred of patients. His prosthetic treatment of a patient with syphilitic destruction of the palate arch deserves special consideration. He made a 'new palate' of gold alloy that permitted the patient to speak (30). He also cured patients with a diet and introduced the use of *Buxus sempervirens* instead of *guajac* (holy wood) in the treatment of syphilis, and described a Croatian patient with deafness due to labyrinthitis syphilitica (28,31).

These data and documents of the State archives of Dubrovnik reveal that during the 16th century, there were numerous patients in the town suffering from syphilis (32), and that the physicians

cured them with plants and mercury. In 1591, Nikola Miloš opened a little hospital 'Ospedale degli incurabili', as was the use in some Italian towns.

As in other parts of Europe, promiscuity was present in Dalmatia towns, as evidenced by the founding of an orphanage for illegitimate and unwanted children with *ruota* (a turntable stone in the orphanage window, where unwed mothers could place the unwanted child, ring the bell, and disappear) in Dubrovnik in 1432. This institution was also called Ospedale della Misericordia (33,34). Similar orphanages were also opened in Zadar (1409), later in Split and other towns, but sadly, the mortality of the children was rather high.

One must know that in Dubrovnik as a cosmopolitan town there were many foreign merchants, seamen as well as local prostitutes. The latter had to reside only in a determinate part of the town (35,36). This regulation dated from 1409, while the Statute of Split regulated it even before (37). There were also cases of homosexuality because some decrees issued in Dubrovnik at that time (Liber croceus 1474) make mention of sodomy (38). In 1667, a great part of Dubrovnik was destroyed by earthquake and was reconstructed thereafter.

As mentioned above, the first case of syphilis was seen in Zadar, at the time under Venice because the Neapolitan king Ladislav sold the town to Venice in 1409, and remained so until the fall of Venice in 1797 (1). From Middle Ages, Zadar had been an important port, there was a Forum, the streets were paved, there were aqueducts and many little old hospitals. First was the Xenodochium founded in the year 559, the oldest in Croatia (39,40); another one was founded by the Benedictines in 986, and some by other orders (40). Later, hospitals were founded and held by the rich and nobles (40). During the wars, some of them were transformed into military hospitals. It should be noted that near this Dalmatian town there were also leper hospitals. The Zadar Statute was written in Latin in 1305. Copies of contracts stipulated between patients and local curing physician going back to the 14th century can be found in the town archives of Dubrovnik, Zadar and Split (41).

At the end of the 15th century, the 'French disease' was also observed in Istria, testified by Joseph Grünpeck in an early poem (42). Later, syphilis spread to the inland parts of Croatia. In the 16th century, Paracelsus who erroneously believed syphilis and gonorrhoea to be one and the same disease, called it *Morbus venereus*. During his traveling through Europe, he visited Croatia and Dalmatia (43).

During the 15th-18th centuries, Dalmatia towns had certain autonomy but the coast was under Venice, while the inland was under the rule of Turkey. There are no traces of works on venereal diseases written in Croatian language because the physicians wrote their works in Latin, and according to the old town statutes, the physicians had to be from other regions, as was the rule in Europe. So, the majority of doctors in Dalmatia towns were foreigners, mostly Italians, but there were also Spaniards, Portuguese, and Germans.

At that time, there were no medical schools in Dalmatia and even in Croatia, nor medical books in Croatian language. Dalmatian students had to study mostly in Padua, Bologna, Salerno, and later in Vienna, Graz and Budapest. On the other hand, it should be emphasized that many capable Dalmatian physicians were professors in the leading European medical schools; in the 15th century, Domenicus de Ragusa was professor of medicine in Bologna and Siena, Frederik Grisogono (1472-1538) from Zadar was appointed professor at the Padua University, and Gjuro Baglivi (1668-1707) born in Dubrovnik was professor of medicine in Rome and member of the Royal Society of London. He described accurately syphilis and contributed to the understanding of the role of the lymphatic system in this disease. Šimun Stratico (1733-1824) from Zadar was professor of medicine in Padua and member of the Royal Society of London. Furthermore, Tomo Natalić Budislavić was physician at the court of the sultan Murat III and at the court of Poland, and Petar Bianchi at the court of the queen Maria Theresa in Vienna. They all wrote some medical books (44,45).

In the 17th century, significant advances were achieved in the science of medicine in Europe with the introduction of new instruments (microscope, thermometer), whereas in the 18th century this development was retarded in terms of theoretical and experimental activities and treatment (46). In Dalmatia, the physicians were still mostly foreigners, however, the number of Croatian physicians and surgeons increased with time. The fame of Dubrovnik's physicians was well known, so they were in great demand in neighboring countries and provided consultation in Bosnia, Turkey, Serbia, and Albania, where they brought their medicaments. The various parts of Croatia developed unequally under different governments, or the development was interrupted in a region by wars or other obstacles. As for other parts of Europe, venereal diseases were commonly treated by physicians, or by more or less educated surgeons and barbers

(47). The importance of surgeon in the treatment of syphilis is underlined by the use of cauterization of syphilitic lesions, by the prosthesis made for defective palate in a syphilitic patient introduced by the above mentioned Amatus Lusitanus, and by nose reconstruction by Gaspare Tagliacozzi in the 16th century (48).

During his travels through Bosnia and Dalmatia in the second half of the 17th century, Evlija Celebi, a Turkish polyglot and travel writer described in his 'Seyahatname' the lazaretto of Split and Dubrovnik, the presence of *freng* (syphilis) there, reporting that the physicians cured the patients with diet and bath in springs (49). Other famous travel writers were also enchanted visiting Dalmatia, to mention only A. Fortis and Richard Burton (1821-1890), who is known for his translation in English of 'Thousand and one night' and 'Kamasutra'. In the 18th century, B. A. Krčelić, a historian, reported data on diseases and syphilis in Croatia in his 'Annuae, sive historia'(50).

SYPHILIS IN DALMATIA IN THE 19TH CENTURY

The region was a continuous battlefield, so limiting the development. At the beginning of the 19th century, health services were rather poor, with few and little hospitals. Endemic syphilis appeared in some regions. During the first Austrian occupation (1797-1805), health institutions in Split were in pitiful conditions. In 1797, St. Lazarus Hospital was built thanks to the noble Ergovac family, where many women with syphilis were recovered. Unfortunately, soon thereafter the Austrian rule used it as a military hospital (51), then the French did it too. The hospital returned to be civil only in 1817, while military hospital was moved to the nearby St. Arnira convent.

Luka Stulli (1737-1828) was a famous physician from Dubrovnik who not only described *Mal de Meleda (mljetska bolest)*, i.e. keratoderma palmoplantaris hereditaria (52), but introduced Jenner's vaccination in Dubrovnik in 1800. From his reports we also know that at the time, surgeons in Dubrovnik had to control local prostitutes (*donne pubbliche*) for possible infection with some venereal disease (15).

At the end of the 18th century and at the beginning of the 19th century, Dubrovnik still had a respectable fleet of about 400 ships, with 5200 seamen mostly engaged in commercial navigation and fishery not only in the Adriatic and Mediterranean Sea, but also in the Atlantic Ocean. The Rector and the Senate paid due attention to seamen

health, issuing decrees for food, hygienic circumstances and drugs on sailing vessels (53). Syphilis was among the diseases that affected seamen. To better comprehend the difficulties encountered by the Dalmatian and Croatian physicians during the past times, we will report briefly some of the most important problems and achievements in venereology (syphilology). During this period, as well as in the first half of the 19th century, the majority of physicians remained under the grip of tradition, the theory of the humors (54), and the belief that gonorrhea and syphilis were the same disease entity. This belief was strengthened after John Hunter's unlucky experiments with the disease inoculation into animals and himself (A Treatise on the Venereal Disease, London, 1786).

Bell and Hernandez demonstrated the contrary and around the middle of the 19th century, after lively debates, Philippe Ricord (1800-1889), a surgeon, definitely separated syphilis from gonorrhea through numerous experimental inoculations in syphilitics (55). Internists treated skin disease, while surgeons commonly treated venereal diseases (47).

At the very end of the 18th century and at the beginning of the 19th century, an alarming epidemic occurred in the vicinity of Rijeka. In 1800, the protomedicus Leopold Masich first made a detailed report in Latin to local authorities on the disease that he named *Morbus venereoscabiosus* (56). Subsequently, the patients were studied and treated by Giovanni Battista Cambieri (1754-1838), a protomedicus of Rijeka, who believed erroneously that it was a *morbus sui generis* and called it *Morbus Scherlievo*, named after a village near the town. The disease was also called *Morbus Fluminensis* (Mb. of Rijeka), or even *Mb. Croaticum*. It was probably endemic syphilis and was treated with mercury topically, by fumigations, systemically, and with plants. In the region of Rijeka, four hospitals were opened to cure patients suffering from *Morbus Scherlievo*; the greatest hospital was in the Castle of Frankopans in Kraljevica (56). This hospital was visited by Ferdinand von Hebra, by Karl Ludwig Sigmund, and later by Gustav von Pernhoffer, the greatest Vienna specialists for syphilis; from 1818 to 1859, when it was closed, 19,000 patients were treated there (57). Interestingly, a famous Hungarian writer Mor Jokay wrote a novel 'Ein Spieler der gewinnt', based on the Scherlievo disease (58), and more recently a Croatian writer Srećko Cuculić has mentioned Scherlievo disease in one of his books (59). Today, some authors believe the number of cases of Scherlievo disease around Rijeka, as well as the

number described in Dalmatia to be too great, due to the problem of recognizing other skin diseases, possible simulation to avoid mobilization in various armies, and sometimes to use a 'fashionable diagnosis' (60).

Cambieri and Facchinetti, surgeons employed in the Hospital of Kraljevica, tried to demonstrate by inoculations whether the disease was contagious only in its early stage or in the later stage as well, and if it was possible, to cure the patients with syphilization (61). This was a terrible mistake and an unethical experiment, but similar experiments were also performed in other European countries (62). Interestingly, in 1843, a Dalmatian doctor J. Dešković published in German in Vienna his dissertation on physician's duties, which was the first manuscript on medical ethics in Croatia and among the oldest in Europe (63). Later, the disease was studied by Dr. Fabris, and Antonio F. Giacich (1813-1887). Giacich was an excellent internist and surgeon employed at the Civic Hospital of Rijeka. He wrote articles about Škrljevo disease in Italian and Hungarian (64), and dealt with venereal diseases in a treatise for seamen entitled 'Medical Lessons for Seamen', used throughout the monarchy. It was believed that 'Scherlievo' disease was transferred to Dalmatia (*Morbus Brenensis*), but it is more probable that the epidemic came from Bosnia (see below).

It is interesting to note that during the short French occupation, there was some progress in Dalmatia: new roads were constructed, marshes drained, and the first journal in Croatian language (Kraglski Dalmatin from 1806 to 1810) was published. Most important, on the basis of a decree of the provider (overseer) for Dalmatia, Vincenzo Dandolo, a medical school was opened in Zadar, the first in Croatia, from 1806 to 1812 (65). The textbooks for students were not written in Croatian but in Italian or German. Another medical school was opened in Trogir (1806-1809), but it was soon abolished (65). Dalmatia had to wait more than 150 years to get a new medical school (1985 in Split).

Doctor Nikola Selak, born in Dubrovnik in 1862, after graduating from Graz University in 1885, worked for a time at Department of Ophthalmology in Graz (Austria), then in Jastrebarsko (Croatia). He became an esteemed physician, was appointed director of the hospital in Koprivnica, and was a very prolific writer. Doctor Selak was a pioneer in Croatian ophthalmology and neurology (66). In 1893, he wrote on *Morbus Brenensis* i.e. 'Škrljevo' around Dubrovnik, a malady that the local folk called 'Turkey disease' (67). Imported from

Bosnia, the disease raged there at the end of the 18th century and at the beginning of the 19th century. For these patients, a hospital was opened in Gruž (Hospital Sv. Križa) with 160 beds. He visited Dubrovnik hospital 60 years later, and according to hospital data from 1820-1822 (when the hospital was closed and a few patients were transferred to Domus Christi Hospital), he found that 271 patients (125 male and 146 female of all age groups) were cured from syphilis (*Morbus Brenensis*). He believed that among these patients some had probably other skin diseases such as lupus, eczema, psoriasis, and leprosy (67). He also noticed that around 1840, the Dalmatian physician Nikola Pinelli, on the island of Šipan, using the old variolization method from the pustule of a child inoculated syphilis to other children, and from them infected their parents (67). Selak wrote some papers on syphilitic gumma and on a case of tabes dorsalis in 'Liječnički vjesnik'. In 1889, he published the first Croatian manual of forensic medicine. Unfortunately, he died very young (1891), so that some articles were published posthumously (66).

By the end of the 19th century, Božo Peričić (1865-1947), a distinguished Dalmatian internist, surgeon and polyglot, wrote interesting and critical papers about Scherlievo in Dalmatia. He was born in Sukošan near Zadar, studied in Vienna, and then practiced in Šibenik, Zadar and Split (68). He took interest in dermatovenerology and went to Paris to improve his knowledge. He studied about 6000 cases of *syphilis tertiaria*, and found that many cases of *Morbus Scherlievo* in Dalmatia actually were venereal syphilis, as in case of young soldiers or seamen, or other skin diseases. Comparing data on syphilis from Šibenik Hospital (1.9%) with data from Vienna Hospital (5%) and Trieste (4.7%), he found that the number of cases was relatively lower in Dalmatia to speak of an epidemic (69). Peričić wrote numerous papers on syphilis in German, Italian and Croatian languages, and clarified the issue of Scherlievo in Dalmatia (70-72). He published a Croatian-German medical dictionary, and translated Shakespeare's 'Hamlet' to Croatian. It is worth noting that he was member of the German Society of Dermatovenerology and was nominated member of the Supreme Health Council in Vienna (73).

During the 19th century, there were few cases of syphilis on the Pelješac peninsula, and the people called it 'zla od žena' (women's evil), and a few cases were recorded in the Neretva region (74). According to Jelić, on the island of Iž syphilis was called 'francoz' (75).

Dermatovenerology as a specialty developed in Dalmatia and Croatia later than in other European countries such as France, Germany, Austria, Italy, and England. Apart from the deficiency of physicians, in particular dermatovenerologists in Croatia during the 19th century, a major problem was illiteracy of the majority of the rural population, the presence of charlatans, quacks and superstitions connected with venereal diseases. The credulous folk (76) made use of extravagant treatments to cure venereal diseases, e.g., washing the chancre with the patient's urine and then powder it with the ash of a burning cigar. Some used to push the penis into a hole in a pumpkin for gonorrhea or employed some kind of coprotherapy (drink beer laid in cow dung) (77). The folk also supposed that coitus with a virgin could cure gonorrhea (78). In the 19th century, in Croatian hospitals, these patients were commonly cured in surgery division, but in Dalmatia there was no division between medical and surgical departments, except for Šibenik thanks to Dr. N. Lalić and B. Peričić (68).

During the 19th century, movements of national self-determination started, especially in Eastern Europe, in countries under the Ottoman Empire. This first happened in Greece, then in Serbia, Bulgaria, Romania, and Montenegro (79).

During the second half of the 19th century, Dalmatia was under the rule of Habsburg Monarchy, underdeveloped and without communication of the coast with the inland. Slowly, the representatives of the people became aware of the censorial and absolutist politics of C. Metternich and A. Bach, and of the need to integrate with other parts of Croatia and to open schools in Croatian language (1). In 1861, Dalmatia constituted its parliament (*Sabor*), and took care for the health of its citizens. In the last decades of the 19th century, new hospitals were founded in larger towns: Šibenik in 1883, Zadar in 1887, Dubrovnik in 1888, while the old Civil Hospital in Split, built in 1797 thanks to the Ergovac brothers, was enlarged in 1892 (80). The Dalmatian Society of Physicians was founded at the beginning of the 20th century (1903) (81). Dalmatia became part of Croatia only after World War I.

The first Department of Skin and Venereal Diseases was opened at Split Hospital in 1918, and the first head was Ivo Stalio (82). In Zadar, which remained under the rule of Italy, a Dispensary was opened in 1920 by Dr. Ivan Smirkinović at St. Nicholas Monastery. At Šibenik Hospital, Department of Dermatology was opened in 1921, and the first head was Vjekoslav Rismondi (83). Here the patients received free treatment. Later on, in

Zadar, Head Doctor Vladimir Matanić, who graduated from the Zagreb School of Medicine in 1941, headed Division of Dermatovenereology from 1952 to 1982 (84). He wrote numerous papers on syphilis, especially on its treatment with rolitetracyclin (Reverin) (85-87).

CONCLUSION

Syphilis emerged in Dalmatia towns at the beginning of the 16th century and has remained a challenge and a focus of interest to the present. The Republic of Dubrovnik was highly developed at that time and had organized legal system and wise health measures. The physicians, surgeons and pharmacists came from the best foreign medical schools. Among the most important physicians that treated and wrote about syphilis and later *M. Scherlievo* were Amatus Lusitanus, Giovanni Battista Cambieri, Nikola Selak and Božo Peričić. In the 18th and 19th centuries, Dalmatia was under the rule of Venice, Napoleon and Habsburg Monarchy, whose political interest was against the union with Croatia (*divide et impera*). So, the unfavorable social, economic and political conditions retarded the construction of new hospitals and the introduction of a new specialty like dermatovenereology.

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References

1. Novak G. Prošlost Dalmacije, Vol. 1-2. Zagreb: Tipograf;1944.
2. Črnja Z. Kulturna historija Hrvatske. Zagreb: Epoha;1964.
3. Ferri R. Glavni problemi Dalmacije od VI. do XIX. stoljeća. Lijec Vjesn 1957;79:465-73.
4. Luger A. The origin of syphilis. Clinical and epidemiologic consideration on the Columbian theory. Sex Trans Dis 1993;20:110-6.
5. Sticker G. Entwurf einer Geschichte der ansteckenden Geschlechtskrankheiten. In: Jadassohn J, ed. Handbuch der Haut und Geschlechtskrankheiten, Vol 23. Berlin: J. Springer;1931. pp 548-50.
6. Quétel C. The history of syphilis. Baltimore: Johns Hopkins University Press;1992. p 10.
7. Pazzini A. Storia dell'arte sanitaria. Rome: Minerva medica;1973. pp 832-34.
8. Diaz de Isla R. Tractado contrae el mal serentino que vulgarmente en España. Lisbon: Es llamado bubas;1539.
9. Mistruzzi V. Giorgio Sommariva rimatore veronese del secolo XV. Venezia: Archivio Veneto;1924.
10. Kogoj F. Spolne bolesti. Zagreb: JAZU;1954.
11. Marino Sanuda. I Diarii. Stefano F. Venetii, 1879-1903.
12. Glesinger L. Povijest medicine. Zagreb: Školska knjiga;1978. p 146.
13. Robin H. Dubrovnik a History. London: Saqy; 2003.
14. Figa'-Talamanca M. Le banche storiche di Ragusa. Istria e Dalmazia un viaggio nella memoria. Bologna:Scarabeo;1996.
15. Bazala V. Pregled povijesti zdravstvene kulture Dubrovačke Republike. Zagreb: Grafički zavod Hrvatske;1972.
16. Grmek MD. Salerno i Hrvatska. Lijec Vjesn 1953;75:259-65.
17. Bačić J. Stazama medicine starog Dubrovnika. Rijeka: Izdavački centar Rijeka; 1988. p 17.
18. Bačić J. Medicine in Dubrovnik until the 1667 earthquake. Croat Med J 1994;35:113-20.
19. Kesterčanek Z. Razvoj farmacije do konca 16. stoljeća. Farmaceutski glasnik 1953;9:127-35.
20. Borovečki A, Lang S. A guide to the history of medicine in old Dubrovnik. Zagreb: Grafo-mark; 2001. pp.20-1.
21. Tartalja V. Uz 700. obljetnicu spomena ljekarne u Trogiru. Saopćenja 1971;14:103-7.
22. Tartalja H. Ljekarna u Hospitalu 'Domus Christi'. Saopćenja 1967;1:49-54.
23. Jeremić R, Tadić J. Prilozi za istoriju zdravstvene kulture starog Dubrovnika, Vol. 1. Beograd: Higijenski zavod; 1939. pp.173-93.
24. Bazala V. Pomorski lazareti u starom Dubrovniku. Dubrovačko pomorstvo 1952;1:293-308.
25. Velnić V. Lazareti na istočnoj obali Jadrana. Pro Medico 1972;2/IV:77-91.
26. Grmek MD. Le concept d'infection dans l'Antiquité et au Moyen Âge, les anciennes mesures sociales contre les maladies contagieuses et la fondation de la premiere quarantaine à Dubrovnik (1377). Zagreb: JAZU;1980. pp 9-54.
27. Glesinger L. Iz dubrovačkih dana talijanskog kirurga Mariana Santa (1527.-1532.). Institut za povijest prirodnih, matematičkih i medicinskih nauka. Zagreb: JAZU;1969. pp 121-53.

28. Fountoura P. Neurological practice in the Centuria of Amatus Lusitanus. *Brain* 2009;132: 296-308.
29. Dürrigl MA, Fatović-Ferenčić S. The medical practice of Amatus Lusitanus in Dubrovnik (1566-1558) – a short reminder of the 445th anniversary of his arrival. *Acta Med Port* 2002;15:37-40.
30. Bačić J, Skrobonja A, Kojić N, Polanda-Bačić G. Contribution to the history of plastic and reconstructive surgery from Dubrovnik and Split during the fourteenth to sixteenth centuries. *World J Surg* 2000;24:1009-13.
31. Grdinić V. Ilustrirana povijest ljekarništva. Zagreb: Nakladni zavod Matice hrvatske; 1997. pp 206-7.
32. Bačić J. Zapisi o Morbus Franciae iz Dubrovačkog arhiva. *Lijec Vjesn* 1976;98:332-4.
33. Selečić M. Zdravstvene prilike u Župi dubrovačkoj i Dubrovniku tijekom stoljeća. Omiš: Hrvatski liječnički zbor F. Kluz;2004. pp 43-74.
34. Savin P. Staro dubrovačko nahodište. *Dubrovački horizonti* 1981;21:206-7.
35. Bačić J. *Donnae publicae* u srednjovjekovnom Dubrovniku. *Acta Hist Med Pharm Vet* 1976;16:65-9.
36. Ravančić G. Prilog poznavanju prostitucije u Dubrovniku u kasnijem srednjem vijeku. Zagreb: Zavod za hrvatsku povijest;1988. pp 31:123-30.
37. Statut grada Splita. Lib 4, c 39.
38. Jeremić R, Tadić J. Prilozi za istoriju zdravstvene kulture starog Dubrovnika, Vol 1. Beograd: Higijenski zavod;1938. pp 122-30.
39. Bianchi CF. Zara Cristiana, Vol. I. Zadar: Tipografija;1877. p 522.
40. Jelić R. Zdravstvo u Zadru i njegovom području. Zadar: Narodni list; 1978. p 10.
41. Grmek MD. Srednjovjekovni ugovori o liječenju s hrvatskog područja. In: Tartaglia H. Spomenica 650. godišnjica ljekarne 'Male braće' u Dubrovniku. Zagreb: JAZU; 1968. pp 154-60.
42. Grünpeck J. Tractatus de pestilentiali scorsive male de Franzos: originem, remediaque eiusdem continens. Nurenberg: Hochfeder;1496.
43. Bazala V. Paracelsus in Kroatien und seine kroatischen Schüller. *Med Welt* 1942;16:581-3.
44. Belicza B. Medicina i zdravstvo. In: Golob I, ed. Hrvatska i Europa, Vol. III. Zagreb: Školska knjiga;2007. pp 379-402.
45. Grmek MD. Hrvatska medicinska bibliografija, Vol. I, II. Zagreb: JAZU;1955.
46. Mazzolini RG. I lumi della ragione: dai sistemi medici alla organologia naturalistica. In: Grmek MD, ed. Storia del pensiero medico occidentale, Vol. 2. Bari: Laterza; 1996. p 156.
47. Bagwell CE. 'Respectful image'Revenge of the Barber Surgeon. *Ann Surg* 2005;241:872-8.
48. Grmek MD. La mano strumento della conoscenza e della terapia. In: Grmek MD, ed. Storia del pensiero medico occidentale, Vol. 2. Bari: Laterza;1996. p 419.
49. Dragić M. Zdravstvena kultura naših naroda u putopisima turskog pisca Evlije Čelebije. *Med Pregl* 1975;2:135-45.
50. Grmek MD. Krčelićevi podaci o bolestima i medicini Hrvatske u XVIII. stoljeću. *Lijec Vjesn* 1959;81:213-9.
51. Fisković C. Zdravstvene prilike u Splitu krajem XVIII. i prvih godina XIX. stoljeća. In: Grmek MD, Dujmušić S, eds. Iz hrvatske medicinske prošlosti. Zagreb: Zbor liječnika Hrvatske;1954. pp 239-56.
52. Stulli L. Di una varietà cutanea. Lettera al direttore. *Antologia di Firenze*;1826. pp.71-3.
53. Luetić J. Nekoliko podataka o medicinskoj službi i zdravstvenom stanju na brodovima Dubrovačke države druge polovice 18. i početkom 19. stoljeća. *Pomorska medicina* 1975;26:119-26.
54. Arikha N. Passions and tempers. A history of the humors. New York: Harper-Collins; 2007.
55. Oriel LD. Eminent venereologists. 3. Philippe Ricord. *Genitour Med* 1989;65:388-93.
56. Gruber F. Škrljevo disease – two centuries of history. *Int J STD AIDS* 2000;11:207-11.
57. Grön K. Syphilis-Endemien. In: Jadassohn J, ed. Handbuch der Haut und Geschlechtskrankheiten, Vol. 17/3. Berlin: J. Springer;1928. pp 285-350.
58. Kosić M. Bolnica u Kraljevici od 1818. do 1859. *Lijec Vjesn* 1944;66:71-3.
59. Cuculić Srečko. Sjetnjak. Rijeka: Adamić;2002.
60. Muzur A, Škrobonja A. Škrljevo disease. Between myth and reality. *Croat Med J* 2004;45:226-9.
61. Gruber F. Cambieri ed il morbo di Scherlievo – inizio della venerologia a Fiume. *Acta Med Hist Adriat* 2007;5:221-36.

62. Thibergie G, Lacassagne J. Les inoculations experimentales de la syphilis al'homme. *Ann Dermatol Syphil* 1923;6:497-525.
63. Deškovich J. Über die Pflichten des Arztes, gegen den Staat und seine Mitmenschen. Dissertation. Wien: Mechitaristen;1843.
64. Giacich AF. Sullo Skrilievo. Padova: P. Prosperini; 1862. pp.7-31.
65. Grmek MD. Pregled povijesti zdravstvenih prilika u Zadru. *Lijec Vjesn* 1950;72:178-84.
66. Dugački V. Dr Niko Selak (1862.-1891.) pioneer of Croatian neurology. *Neurol Croat* 1991;40:193-8.
67. Selak N. Morbus Brenensis (Župska bolest) ili Škrljevo u okolici Dubrovačkoj. *Lijec Vjesn* 1893;15:33-8.
68. Perović S, Sirovica S. Dr. Božo Peričić – život i djelo. U spomen zlatnog doba hrvatske medicine. Zadar: Plantak graf;1999.
69. Peričić B. Pitanje o tzv. 'Škrljevu'. Zadar: Narodni list;1893. pp 1-16.
70. Peričić B. Zur Kenntniss der sogenannten Skerlievo. *Wien Klin Wochenschr* 1892;51-52.
71. Peričić B. Erfahrungen über die Syphilis in Dalmatien. *Wien Klin Wochenschr* 1895;45.
72. Peričić B. Slučajevi tercijarne sifilide. Zagreb, 1897.
73. Perović S, Sirovica S. Life and work of dr. Božo Peričić (1865.-1947.), genius of our medicine. *Lijec Vjesn* 2004;126:264-70.
74. Hovorka O (pl. Zderas). Narodna medicina na poluotoku Pelješcu u Dalmaciji. *Glasnik Zemaljskog muzeja* 1900:119-54.
75. Fatović-Ferenčić S. The island as a motive and inspiration in the work of Roman Jelić. *Med Jad* 2005;35(Suppl 1-2):13-5.
76. Gruber F. History of venereology in Croatia. *Acta Dermatovenerol Croat* 2009;17:247-62.
77. Hovorka O, Kronfeld A. Vergleichende Volksmedizin, II. Stuttgart: von Strecker;1909. pp 152-60.
78. Farkaš K. Nešto o etiologiji kapavca i o uzrocima njegovog raširenja. *Lijec Vjesn* 1920;42:307-10.
79. Joll J. Europe since 1870. An intentional history. London: Weidenfeld; 1973.
80. Brisky L, Fatović-Ferenčić S. From a philanthropic idea to building of Civic Hospital in Split in the light of new archival evidence. *Croat Med J* 2006;47:162-8.
81. Šimunković M. Povijest Slobodne organizacije liječnika Dalmacije. *Lijec Vjesn* 1957;79:447-57.
82. Kečkemet D. Stara Splitska bolnica (1794.-1964.). Split: Slobodna Dalmacija;1964. p 35.
83. Pasini J. Historijat bolnice u Šibeniku. *Lijec Vjesn* 1957;79:458-63.
84. Petričić B. Služba za suzbijanje i liječenje kožnih i spolnih bolesti. In: Stota obljetnica Pokrajinske bolnice u Zadru (1887.-1987.). Zadar, 1987.
85. Matanić V. Sifilis kostiju i zglobova. *Med Glas* 1956;10:270-5.
86. Matanić V. Endemische Syphilis. *Ciba Symposium*, 1958;6:63.
87. Matanić V. Die Behandlung der Lues I und II mit Reverin. *Hautarzt* 1965;16:520-2.