

# History of Dentistry in Central Serbia

## SUMMARY

*History of dentistry in the Central Serbian District of Jagodina has been influenced by traditional medicine for centuries. Development of dentistry in the region of Jagodina was slow, the level of oral and general hygiene was low and the sanitary prevention was absent. Trained physicians started to practice medicine and dentistry in the first half of the nineteenth century and they were educated in abroad universities. However, common people used to address to these physicians only when the traditional medicine were unable to help. Until the end of the World War II, common, mostly rural people, with the urgent dental treatment need were usually referred to the barbers, healers or empirics in the nearby villages rather than the dentists. Medications used for the urgent dental treatment were balsams and solutions made of herbs. After the World War II, the dental technicians who finished special courses started to practice dentistry. In 1947 the Regional Dental Office in Jagodina was opened and in 1955 the first Doctor of Dental Medicine who graduated from the School of Dental Medicine of University of Belgrade was employed. Nowadays, the Department of Dentistry represents is an important and independent part of the Health Care Centre in Jagodina.*

**Keywords:** Health Care Centre, Community Dental Service, History Of Dentistry, Dental Care, Development

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## LITERATURE REVIEW (LR)

**Balk J Dent Med, 2016; 20:138-142**

“... A manuscript keeps all those names of our significant predecessors and contemporaries, as well as all those who have chosen dentistry and medicine to be their life's calling from oblivion...”<sup>1</sup>

## Introduction

The evolution of dental practice in Serbia has been very slow for centuries<sup>2</sup>. For long period of time, dentistry was not recognized as an independent profession, yet it was the unorganized part of the medicine<sup>3</sup>. Nevertheless, dental disorders have not been correlated to general health, so this specialty was considered to be an inferior part of medicine<sup>4</sup>.

However, favorable geographical location in central Serbia and climate in Jagodina enabled agricultural

and economic development in the early decades of the nineteenth century. Therefore, the city of Jagodina developed into the administrative centre and strategically important city of central Serbia. Along with the economic progress of the region, the oral health education and health care culture also developed.

The aim of this paper was to encompass all data regarding beginning and development of oral health care and dentistry in the district of Jagodina in central Serbia.

## Materials and Method

This study represents a descriptive research of dentistry development in Jagodina district. The observed period of time was from the medieval period until nowadays. The methods of documentation analysis

and desk research of secondary information were used. Furthermore, historical data were gathered through the interviews with the family members and analyzed.

## Status of Dental Practice in the 19<sup>th</sup> Century

Both oral and general healthcare cultures in Serbia were undeveloped until the end of the 19th century. The lack of sanitary precautions and low level of oral and general hygiene in population enabled outbreaks of various diseases with high morbidity and high mortality both in adult and pediatric population. A specific, uniform diet (pork, beef and lamb, dry bacon, cheese and nothing but dry fish during fasting) and excessive alcohol consumption had a significant effect both on the general and oral health<sup>5</sup>.

Formal healthcare services did not exist in central Serbia until the 18th century. For a long period of time, the only practitioners of medical knowledge were monks and priests through the monastery records and books<sup>6</sup>. People who practiced etnomedicine and etnopharmacy provided most of the medical treatment until the late 19th century. They used many archaic magical elements such as healing incantations, the use of herbs and ritual actions<sup>7</sup>. Dental

procedures such as repairing fractures, dislocations of jaws and tooth extraction were mainly carried out by self-taught doctors, so-called, barbers (*medicus plagarum* or *chirurgus*) in barbershops called *botego* or *statio*. They also used to perform medical interventions, autopsies and minor surgical procedures<sup>8-10</sup>. Toothache was treated by mouth rinsing with the brandy or by using compresses soaked with a warm salted brandy. Furthermore, application of incense in the tooth cavity was also usually recommended in case of toothache. Unfortunately, most of oral health services involved teeth extractions. After extraction of the tooth, the patient was advised to rinse with brandy in order to decontaminate the wound<sup>11</sup>.

The beginning of the organized medicine and growing health care culture enabled the slow penetration of dental health care. Development of dentistry was strongly correlated to the development of this discipline in the Austro-Hungarian monarchy<sup>2</sup>. The first trained physicians in Serbia who completed their medical training abroad started to practice medicine in the second decade of 19th century in Jagodina<sup>12, 13</sup>. Unfortunately, local physicians struggled with superstitions, prejudice and distrust of the community. As quackery was widespread among the community, empirics or charlatans were a common part of rural life. Although traditional methods of treatment were often ineffective, common folk asked empirics for help rather than asking physicians (Table 1).

Table 1. Treatment of oral diseases with prescriptions which were used from ancient times to nowadays(15)

Toothache	application of the medicament in the cavity of the tooth: incense, pine wax, bread soaked in vinegar inhalation of the tobacco steam keeping the brandy in the mouth
Mucosal impairments	rinse with water from oak stump chewing the bark of Yule tree
Pain and oral injuries	cooked salve of sage or lemon balm or yarrow, (one tablespoon) to hold in the mouth flower of calendula, cooked in lard for 3h until boiling, then cooled and placed on the sore or injured area
Swelling	linen cloths soaked with the balm made of of rosemary and basil should be cooked in the water and then cooled and held as a cold compress

The beginning of preventive trends toward tooth preservation and elimination of dental infections started in 1862. when the Serbian Military established so called "dental standards" which involved guidelines for choosing the soldiers for military service. According to these guidelines, permanent military incompetence involved loss of all incisors, canines and the first molars, even if it was only on the one side of the jaw<sup>14</sup>.

However, in order to enable building dentistry at the level of a profession, proper dental education was necessary. Dr. Aćim Medović was the first physician who had been giving lectures for surgeons-barbers in the Great School in Belgrade during the 1867. After finishing his course of lectures and passing the final exam, barbers received the working license. Later, Dr. Aćim Medović became the first president of the Serbian Medical

Society. His publication "Minor surgical interventions and immediate treatment after body injuries" was printed in 1869, and also included description of dental interventions, especially teeth extraction<sup>8</sup>.

The Serbian Government issued temporary or permanent working licenses to foreign dentists due to insufficient local educated staff.

## Status of Dental Practice in the 20<sup>th</sup> Century

At the beginning of the 20th century more dental offices started opening, especially in Belgrade. The first working license was issued for Dr. Vidmej from

Switzerland in 1902<sup>2</sup>. The first female dentist in Serbia was Dostana Moskovljević, the daughter of respectable lawyer in Jagodina. During the August of 1932 in Belgrade she became a founding member of the Action Society for health care of the teeth, mouth and throat and oral hygiene propagation. Accordingly to the main mission of Action Society – promotion of oral hygiene in the community, its tasks involved issuing the dental magazine, organization of public lectures and educational movie projections at the schools. The first dental offices in the primary schools were opened owing to the efforts of the members of this organization.

However, the predominantly rural population in the central Serbian region, usually addressed empirics for dental assistance, rather than dentists. These empirics were mainly local peasants from neighboring villages. In addition to their usual every day chores on farms they used to perform dental interventions. These practitioners were usually trained and educated by older family members, so all the necessary dental knowledge was verbally transmitted across generations without any writing system<sup>15</sup>. The most famous dental practitioners from the beginning of the 20th century were Živorad Milosavljević so called Žica Brica (Žica the Barber) from the village Duboka near Jagodina, Brana Petrović from the village Dragovo, Milan Milošević, blacksmith from the village Belic and Miloš Ignjatović from the Koča's village.

Živorad Milosavljević, so called, Žica the Barber (13.04.1923 - 23.04.2012) was born in the village Duboka. He was trained by his uncles, Milutin and Svetislav Milanovic, who were also barbers. He had been practiced dentistry until the 1980, and during that period of time he extracted over 400 teeth. According to his successors, none of the patients had any complaints after the extraction (Figure 1.)<sup>15</sup>.



Figure 1. The tools of Žica the Barber\*

\*with the kindness of Mr. Manojlo Milosavljević, the son of Živorad Milosavljević.

Nevertheless, besides numerous empirics who practiced dentistry in the villages near the city before the Second World War, in the downtown of Jagodina existed

several private dental offices. Their owners were dentists and dental physicians: Dr. Milan Putrić (Figure 2), Dr. Louis Friedlander and Dr. Milan Pantelić<sup>16</sup>.



Figure 2. Private dental office of dentist Milan Putrić (1940.)\*  
\*The Museum of Jagodina, with the kindness of custos Mr. Duška Grbovića.

The first Regional Dental Office was established in the city of Svetozarevo (Svetozarevo was the name for Jagodina during the period from 1946 to 1992) in the March of 1947<sup>17</sup>.

The Dentist Trustee Society for the central Serbian region was founded in 1949. The first licensed dentist, a member of this society who practiced dentistry in Jagodina was Branko Ćurković (1905 - 1988). He was born in Bosnia and he finished high school and school for dental technicians in Sarajevo. He has been an apprentice in the dental office of dentist Kujundžić in Sarajevo for 15 years. After the dental exam, he worked as a dentist with his mentor and independently from 1938. He came in Jagodina in 1944. He has been working in his own private dental office since 1946. Furthermore, he was the first employee in the Regional Dental Office after its opening in 1947 and his area of expertise were prothodontics and conservative rehabilitation. Alongside, he was working in his private practice until 1959 (Figure 3.)<sup>15</sup>.



Figure 3. Branko Ćurković with the patient (1958.)\*  
\*with the kindness of Mrs. Branka Ćurković, the daughter of Branko Ćurković.

Mika Vasiljević, Sima Jevremović (Figure 4.), Ksenija and Jovan Drča were also one of the first employees in the Regional Dental Office in Jagodina. In fact, they graduated from the Secondary School for Dental Technicians, but after the Second World War they finished additional course for dentist which lasted six months.

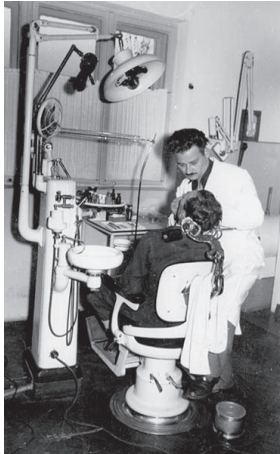


Figure 4. Sima Jevremović (1962.)\*

\*with the kindness of Mr. Zoran Jevremović, the son of Sima Jevremović.

During the early fifties dental health care in Jagodina was provided by four dentists, two dental technician and one dental nurse. The Health Care Center in central Serbia had dispensaries in Jagodina, Bresje and Bagrdan, dental, pediatric and counseling dispensary. According to statistical data from 1954, total of 362000 decayed teeth were filled, 655000 extracted and 595000 teeth had prosthetic restoration. Of these, 46837 dental interventions (3%) were provided in health care dispensaries in central Serbia<sup>18, 19</sup>.

Dental dispensary in Jagodina often provided dental interventions in the field. Five dentists and five dental nurses visited mines in Senje in 1954. During that visit 1850 children were examined, 1150 teeth were extracted in pediatric patients, 208 teeth were extracted in adult patients and dental health care providers distributed 60 toothpastes and 60 tooth brushes to the community<sup>20</sup>.

Since 1955 pediatric dental dispensary in Jagodina has employed two dentists: Bojana Grizinov and Živko Paunović. Dr. Paunović was the first Doctor of Dental Medicine (DMD) in Jagodina who graduated from the School of Dental Medicine, University of Belgrade. According to the records, this dental dispensary was effective – total of 3515 children aged 6-18 years were examined during the 1956. Of these, only 17% had completely healthy teeth. Eighty tree percent of the patients had caries lesions, 18% periodontal tissues disease, 23% orthodontic abnormalities and only 8% of all examined patients had dental restorations<sup>21</sup>.

Adult dental dispensary in Jagodina was opened in 1959. The first employee was Dr. Milan Radosavljević,

who became the first dentist with the specialty in oral surgery in 1973. When the Government of Yugoslavia prohibited private practice in dentistry, total of 31 DMDs and 15 dentists provided dental health care in District of Svetozarevo in Health Care Centre<sup>22</sup>.

Adult dental dispensary in Jagodina has been located within Health Care Centre until 1959. However, in 1959, the Department of Dentistry became independent and moved in its own compartment located in Captain Koča Street<sup>23, 24</sup>. On the July 1st, 1962 its staff consisted of 3 DMDs, 4 dentists, 8 dental technicians, 7 dental nurses and 3 administrative assistants, and became the part of Regional Medical Centre. In the 1971 Department of Dentistry moved in the new building. During the next 15 years the quality of provided dental and oral health care gradually raised as the new DMDs and specialists became members of the dental team. Department of Dentistry employed the first specialists in Oral periodontology during 1962: Dušan Brkić and Životije Lazić. Jelena Stojanović and Dragan Stojanović were also specialists in Oral Periodontology, and they were employed during 1965. The first pediatric dentist was Milena Trujić Ilić (1965). Although, Jovan Drča was one of the first dentists in Jagodina, he enrolled in part time School of Dental Medicine in Belgrade and graduated in 1966. Later, he became one of the first prosthodontists in Jagodina's Department of Dentistry.

From 1967 dental team included Milanka Krstić, Miloš Milosavljević, Miodrag Đorđević and Ljiljana Đorđević (she was the first specialist in Orthodontics). Branislav Čulafić became the important member of dental team in 1971, and during 1972. few more members were added – Dušica Milentijević Jeremić (the first specialist in General Dentistry), Ljiljana Staletović and Milosav Jovanović.

The Department of Pediatric, Preventive Dentistry and Orthopedics was important part of the School Dispensary in Jagodina. However, it was merged with the Department for Adult Dentistry in 2008. Currently, the Department of Dentistry is a part of the Health Centre in Jagodina and it employs total of 47 operators: 18 DMDs, 20 dental nurses, eight technicians and one administrative assistant. There are also 12 private dental offices registered in the municipality of Jagodina.

## Conclusions

The District of Jagodina was always important administrative and cultural part of Central Serbia. Although the development of dentistry was slow during the last centuries, during this long journey, it evolved from charlatan practice to modern oral health care service. Nowadays, dental health is considered as an important part of general health and health culture in all the Balkan



counties. The quality of dental health care became an important criterion for the measurement of the quality of life, cultural sensitivity and health care awareness.

**Acknowledgments:** This study was supported by the by the Ministry of Education, Science and Technological Development of Republic of Serbia, project No 172026.

## References

- Gavrilović V, Zagradanin D. History of Dental Section in Serbian Medical Society [book in Serbian]. Gornji Milanovac: Dečje novine; 1984.
- Dimitrijević B, Nedok A. History of Dentistry in Serbia - penetration of dentistry in Serbia. Project Rastko [Internet]. May 1st, 2012 [cited August 15th, 2014]; Available at: <http://www.rastko.rs/rastko/delo/14458>.
- Gies W. Dental education in the United States and Canada: . New York: The Carnegie Foundation; 1926.
- The history of dentistry. Namibia Dental Association [Internet] [cited May 10th, 2015] Available at: <http://www.namibiadent.com/the-history-of-dentistry.html>.
- Jovanović D, Tanić D. History of medicine in region of Jagodina from Josif Pančić to Spiridon Jeftimijades:1847 - 1860 [book in Serbian]. sv. 3 ed. Jagodina: Istorijski arhiv; 2009.
- Lalović A. Serbian medicine in medieval centuries. Medical Timočki Journal. 2004;29(suppl. 1):27-30.
- Reljin I. Medieval medicine in Serba [article in Serbian]. Project Rastko [Internet]. Februar 16th, 2011 [cited Avgust 15th, 2014.]; Available at: <http://www.rastko.rs/rastko/delo/14016>.
- Gavrilović V. History of Serbian dentistry [book in Serbian]. Belgrade: School of Dental Medicine, University of Belgrade; 1988.
- Maksimovic J. Contribution of physicians from Vojvodina to establishing health service in Serbia and founding and working of Medical Society of Serbia. Med Pregl. 2008 Mar-Apr;61(3-4):191-203.
- Živić M, Živić S, Živić M. Traditional healers [article in Serbian]. Acta medica Medianae. 2007;46(1):23-4.
- Drobnjak I. Brandy in etnomedicine [article in Serbian]. Medical Timočki Journal. 2004;9(Suppl 1):49-51.
- Jovanović D, Tanić D. History of medicine in region of Jagodina from Karlo Beloni to Josif Pančić: 1839 - 1847 [book in Serbian]. sv. 2 ed. Jagodina: Istorijski arhiv; 2005.
- Jovanović D, Tanić D, Dedić D. Practice of dr Karlo Beloni: the first physician in region of Jagodina 1839 – 1841 [book in Serbian]. sv. 1 ed. Jagodina: Istorijski arhiv; 1995.
- Dimitrijević B. New and old criterions: dentistry and culture. [article in Serbian] Project Rastko [Internet]. February 1st, 2008 [cited Avgust 15th, 2014]; Available at: <http://www.rastko.rs/rastko/delo/12089>
- Jeremić M. Interview with the study participants 2014.
- Mitić B. Health Care Centre in Čuprija – from the first physicians to nowadays. Čuprija: Health Care Centre in Čuprija 2005.
- Marinković G. Opening of Regional Dental Office in Jagodina [article in Serbian]. Novi put. 1947 29. mart;22:4.
- Nikolić M. The first results: Health Care Centre in Svetozarevo [article in Serbian]. Novi put. 1953 May 23th;4:5.
- Savić L. The need for psychologic counselling dispensary. Novi put. 1954;7(28):5.
- Jevtić M. Actions of Dental Section in Svetozarevo [article in Serbian]. Novi put. 1954;7(44):6.
- Paunović Ž. Importance of preventive dentistry [article in Serbian]. Novi put. 1956 September 1st;35:2.
- Đurić T. Everything is ready [article in Serbian]. Novi put. 1959 May 23th;20:3.
- Javorina S. Svetozarevo needs a new building for Health Care Centre [article in Serbian]. Novi put. 1955;8(6):4.
- Chatzopoulos GS. Oral Health Conditions of Older People: Focus on the Balkan Countries. Balk J Dent Med 2015; 19:59-64

**Received on July 13, 2016.**

**Revised on September 10, 2016.**

**Accepted on October 1, 2016.**

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