

Dental Condition of the Schoolchildren in Serbia over a Century Ago

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SUMMARY

The exhibition of the legacy of Dr. Svetozar Marković (1860–1916) held at the end of 2009 in the University library "Svetozar Marković" in Belgrade, drew attention to this significant creator, school doctor, public worker and the founder of school hygiene in Serbia. He was the founder of The Association for School Hygiene and National Enlightenment (1906), the founder and the editor of the magazine *Light* (*Svetlost*) (1908–1914). This work is referring only to his findings regarding oral and dental condition of schoolchildren, gathered during systematic examinations the students of the Third Belgrade (Pancic's) High School (from I to VIII), in the school years 1903/1904, 1904/05 and 1907/08.

Keywords: Dr. Svetozar Marković; school hygiene; oral and dental condition

INTRODUCTION

The period from the beginning of last century up to the wars (The Balkan War and The First World War) is mostly untouched by Serbian medical historiography. A recent exhibition of the legacy Dr Svetozar Markovic (end of 2009) at the University Library "Svetozar Markovic" in Belgrade, drew attention to this important, almost forgotten creator, school doctor (a while), social worker and the founder of the school hygiene in Serbia [1]. Born in the village Zupanjac (1860), county Kolubara, Svetozar attended high school in Belgrade, against his father wish, on his bread and butter, serving in the houses and suffering. Later, as an excellent student, he got state scholarship. After he had graduated from The School of Medicine in Paris (1894), he spent two years specializing women's diseases and obstetrics and working in private practice. When he had returned to Serbia he was employed as a school doctor in Belgrade. He passed away in 1916 from urosepsis.

In 1901, he was one of the founders of The Society Sobriety, whose head was Dr Jovan Danic, the first Serbian psychiatrist, a longtime editor of the Serbian archives, the right hand of Dr Vladan Djordjevic [2]. Also, Milos Dj. Popovic was the founder of the first military dental station in Belgrade (1904), the author of the first ideas of enlightenment in the Serbian language about dentistry ("Dental Care", with images 1904; and "The artificial teeth" with images 1906). Dr Milos Dj. Popovic will later become the founder of Scout Movement in Serbia and after The Great War life, honorary president of the "Izvidnik and planinka" of the Kingdom of SHS, later the Kingdom of Yugoslavia [3]. Svetozar Markovic will become Head of The Society for School Hygiene and National Education (1906) and then establish a magazine *Light* (1908). The establishment of The Society for School Hygiene and

National Education, and the magazine *Light* were to a large extent - forced, considering that the annual medical reports given by Dr Svetozar Markovic, about the terrifying state of health and hygiene of the schoolchildren, the relevant ministries did not even look. Therefore, Markovic was forced to print two reports at its own expense - for the academic school year 1903/04 and 1904/05 - while the third - for the 1906/07 school year - was printed at the expense of The Society.

DATA ABOUT STATE OF THE TEETH IN SCHOOLCHILDREN, YEAR 1903–1906

The information concerning the status of the mouth and teeth in examined schoolchildren were taken from printed medical reports of Dr Svetozar Markovic, years 1903/04, 1904/05 and 1906/07 [4, 5, 6]. Although the data about diseases in schoolchildren during the year Markovic did not consider reliable because the diagnosis was given by some other doctors as well as (uneducated) parents in order to justify students' absence, rather than a school doctor, he sorted them by systems (nerve diseases, respiratory, heart and blood vessels, digestive tract, etc). Diagnoses were given in French. In the column Bones and muscles, for the 1903/04 school year, three cases of dentoalveolar abscess (*Absces alveolo-dentaire*) were recorded, the same number was in the next school year (1904/05), while in the 1906/07 school year, only one case was documented. The Cleanliness of the Body was evaluated on the basis of clean nails. In the 366 examined schoolchildren from Third Belgrade High School in 1903/04, 54.37% was found with dirty fingernails. The situation was not significantly improved in the coming generations. Poor personal hygiene was expressed as the state of teeth (Table 1).

Table 1. State of the teeth of the schoolchildren in the Third Belgrade (Panic) High School.**Tabela 1.** Stanje zuba đaka Treće beogradske (Pančićeve) gimnazije.

State of teeth Stanje zuba	School year / Školska godina		
	1903/04	1904/05	1906/07
Excellent Odlično	40	71	34
Very good Vrlo dobro	32	60	74
Good Dobro	95	79	78
Quite Prilično	96	48	77
Bad Rđavo	84	84	147
Very bad Vrlo rđavo	-	-	30
Examined Pregledano	366	342	346

Markovic classified the data into categories: teeth are excellent, very good, good, quite, bad. Ratio between excellent and bad dental condition was for 1903/04 = 10.92%: 22.92%, for 1904/05 = 20.32 %: 24.27%. For the school year 1906/07 Dr Markovic, introduced the category of very bad. The results were excellent = 7.53%, bad = 32.49%, very bad = 6.65%. Between excellent and very bad dental condition was no statistically significant difference. Cleanliness of the hands speaks about cleanliness of the body. Similar can be said for the state of the mouth and teeth, although the latter story is more complicated. The question is did the dental doctors and dentists, at least in Belgrade, exist at that time? The differences should be recalled also. Dental specialists were doctors of general medicine. Dentists have been trained in dental (special) schools, modeled according to US schools, but there was also training “on the basis of trade.” Dental technician was able to become a dentist.

According to the research of the Austrian legislation, one of the writers of these lines (Dr Aleksandar Nedok), dental specialty, which was gained in medical schools (in the then Austro-Hungary), consisted of intensive courses lasting six weeks, during the holidays. The students had the exam and gained the right to work this activity [7, 8]. On the basis of the Registry of the Ministry of Internal facts of the Kingdom of Serbia [9] – because this ministry issued licenses in dentistry – at the beginning of the XX century in Serbia, especially in Belgrade, dental offices and laboratories were opened to a great extent by the Serbians as well as foreigners. The first license (1902) was issued for V. Vidmei, a dentist from Switzerland. There was a Poland dentist, too, K. K. Stanisevski (1905), a woman dentist Toda Erhejljova Geletridi from Odessa (1906), and so on.

From 1901 to 1911, 27 persons of which 25 in Belgrade, got license. The words “office”, “labs” were not used, but “Practice”, “Lounge”, “dental Technical Institute”, “dental medical technical studio” were mostly used, from which it can be concluded that in the public, dentistry was presented as cosmetics. Therefore, it can not be said that at that time “dental doctors and dentists did not exist.” Number of available dental therapists maybe was insufficient in Belgrade, which had, at the time of the wars, about 60,000 inhabitants, but there was also a point that they did not exist in

schoolchildren parent’s sight. “... The state of the teeth and nails on the hands of the schoolchildren,” said Markovic “are in praise of their parents (especially mother) who are not ashamed that they do not take any care all the health and cleanliness of their children. This proves that the parents were also raised and nurtured in negligence ... There were parents who belonged to the elegant world and upper class of Serbia, and whose children came to school very dirty...” [6].

Therefore it is not surprising that in the first issue of *Light* an article written by Dr Milos Dj. Popovic was published [10]. “More important is to clean a mouth and teeth than a face”, Popovic was giving advice and “ordering”. “Do not forget to brush your teeth before going to sleep. Who brushes his teeth in the morning only, it is similar to covering the well that a child fell into. In addition to oral hygiene, it is important to visit a dentist several times per year. Dental calculus should be removed from the teeth regularly. Be aware of sweets and soft food. Decayed roots and remains of the tooth must be unconditionally extracted, whether they are painful or not. Young children in the first years of life should eat strong and healthy food (milk, eggs, green vegetables ...)...” [6].

It could be noted that mouth examination proposed by Markovic, especially the teeth, was not thorough because he did not use mirror and probe, he used spatula only and the time for examination was short. School had neither special room nor school clinic, even in the most primitive form. Markovic was very often forced to use the director’s office meaning that he was interrupted several times during schoolchildren systematic examination. He had difficulty with the retrieval (transferring) devices for anthropometry (scales, devices to measure the height of the body, dynamometer). It is not known his five and later six level scales (excellent condition of teeth, very good, good, quite, bad, very bad) were based exactly on. In already mentioned article, Popovic pointed out that the teeth of children in the school, in civilized countries, are examined by dental doctor. It can be assumed that the then state of teeth in school children was even worse than it is shown by Markovic because, with his way of examination, it was not possible to detect the initial cavity. However, taken as they are, results showed that from 1054 examined schoolchildren, 145 only or 13.85% had complete healthy teeth.

Truthful and patriotic, almost two decades Markovic gave effort and strongly believed in science, because everything is possible to measure, but all of that was yelling at deaf ears. His medical reports were first given to the Director of the school where physical examinations were performed, who tried by all forces to moderate, beautify and polish the results. While the relevant ministries, including Ministry of major military and medical advice did not even think of it (it was not related to teeth only). Wrong tradition to ignore profession and science, remained even today.

NOTE

Oral presentation at the 14th Studenica Medical Academy “800 years of Serbian medicine”, June 2010.

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Received: 01/03/2010 • Accepted: 20/05/2010

Stanje zuba dece školskog uzrasta pre više od jednog veka u Srbiji

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KRATAK SADRŽAJ

Izložba legata dr Svetozara Markovića (1860–1916) krajem 2009. godine u Univerzitetnoj biblioteci „Svetozar Marković“ u Beogradu skrenula je pažnju na ovog značajnog stvaraoča, školskog lekara, javnog radnika i utemeljivača školske higijene u Srbiji. On je bio osnivač Društva za školsku higijenu i narodno prosvetivanje (1906) i osnivač i urednik časopisa „Svetlost“ (1908–1914). Za ovaj rad izdvojeni su samo njegovi nalazi o stanju usta i zuba dece školskog uzrasta prikupljeni tokom sistematskih pregleda đaka Treće beogradske (Pančičeve) gimnazije (od I do VIII razreda) tokom školske 1903/04, 1904/05. i 1907/08. godine.

Ključne reči: Dr Svetozar Marković; školska higijena; stanje usta i zuba

UVOD

Period od početka prošlog veka do balkanskih ratova i Prvog svetskog rata gotovo da je, kada je u pitanju zubno lekarstvo, neobrađen u srpskoj medicinskoj istoriografiji. Izložba legata dr Svetozara Markovića krajem 2009. godine u Univerzitetnoj biblioteci „Svetozar Marković“ u Beogradu skrenula je pažnju na ovog značajnog i neopravdano zaboravljenog stvaraoča, školskog lekara, javnog radnika i utemeljivača školske higijene u Srbiji [1].

Rođen je u selu Županjac, u Kolubarskom srezu, 1860. godine. Gimnaziju je učio u Beogradu, protivno želji svoga oca, o svome „ruvu i kruvu“, posluživajući po kućama i pateći se. Kasnije je kao stipendista države završio medicinu u Parizu (1894), u kojem je proveo još dve godine usavršavajući ženske bolesti i porodiljstvo, te baveći se privatnom praksom. Vrativši se u Srbiju, zaposlio se kao školski lekar u Beogradu. Umro je 1916. godine od urosepse.

Godine 1901. bio je jedan od osnivača Društva trezvenosti, na čije čelo je stao dr Jovan Danić, prvi srpski neuropsihijatar, dugogodišnji urednik časopisa „Srpski arhiv za celokupno lekarstvo“ i svojevremeno desna ruka dr Vladana Đorđevića [2]. Uz njih je bio i dr Miloš Đ. Popović, osnivač prve vojne zubne stanice u Beogradu (1904) i pisac prvih ideja (prosvetiteljskih) knjiga na srpskom jeziku o zubnom lekarstvu („Nega zuba“ sa slikama 1904. i „O veštačkim zubima“ sa slikama 1906). Dr Miloš Đ. Popović je nešto kasnije postao osnivač izviđačkog pokreta u Srbiji, a posle Velikog rata doživotni počasni predsednik Izvidnika i planinki u Kraljevini SHS, kasnije Kraljevini Jugoslaviji [3]. Godine 1906. Svetozar Marković je stao na čelo Društva za školsku higijenu i narodno prosvetivanje, a 1908. osnovao časopis „Svetlost“. Osnivanje Društva i pokretanje časopisa bilo je u znatnoj meri iznuđeno. Naime, budući da se na godišnje lekarske izveštaje dr Svetozara Markovića o zastrašujućem zdravstvenom i higijenskom stanju učenika nadležna ministarstva nisu ni osvrnula, Marković je bio prinuđen da dva takva izveštaja (za školsku 1903/04. i 1904/05. godinu) štampa o svom trošku, dok je treći izveštaj (za školsku 1906/07. godinu) štampan o trošku Društva.

PODACI O STANJU ZUBA UČENIKA 1903–1906.

Iz štampanih lekarskih izveštaja dr Svetozara Markovića za godine 1903/04, 1904/05. i 1906/07. posebno su izdvojeni podaci

koji se odnose na stanje usta i zuba pregledanih učenika [4, 5, 6]. Iako podatke o tome od čega je koji učenik tokom godine bolovao Marković nije smatrao sasvim pouzdanim, jer ima dijagnoza koje nije postavio školski već neki drugi lekar, pa i (neuki) roditelj zarad pravdanja đачkih izostanaka, on ih iznosi raspoređene po sistemima (Nervne bolesti, Organi za disanje, Srce i krvi sudovi, Organi za varenje itd.). Dijagnoze su date na francuskom jeziku. U rubrici Kosti i mišići, za školsku 1903/04. godinu zabeležena su tri slučaja dentoalveolarnog apscesa (*Absces alveolo-dentaire*), u narednoj godini isto toliko, a u školskoj 1906/07. godini jedan slučaj. Čistoća tela procenjivana je na osnovu kriterijuma čistoće noktiju. Kod 366 pregledanih učenika Treće beogradske gimnazije utvrđeno je 1903/04. godine 54,37% đaka s prljavim noktima. Stanje koje se u narednim generacijama neće znatnije popraviti. Slaba lična higijena može se iskazati i stanjem zuba (Tabela 1).

Ove podatke Marković je razvrstao u kategorije: zubi su „odlični“, „vrlo dobri“, „dobri“, „prilični“, „rđavi“. Odnos odličnog i rđavog stanja zuba bio je 1903/04. godine 10,92% prema 22,92%, 1904/05. godine 20,32% prema 24,27%, dok za školsku 1906/07. Marković uvodi i kategoriju „vrlo rđavo“. Rezultati su: odlično – 7,53%, rđavo – 32,49% i vrlo rđavo – 6,65%. Između odličnog i vrlo rđavog stanja zuba statistički značajnih razlika nije bilo. Čistoća noktiju govori o čistoći ruku, a ova o čistoći tela. Slično se može reći i za stanje usta i zuba, iako je potonja priča nešto zamršenija. Postavlja se pitanje: da li je zubnih lekara i zubara, barem u Beogradu, tada bilo? Treba podsetiti i na razlike. Specijalisti zubnog lekarstva bili su doktori opšte medicine. Zubari su se obrazovali u zubarskim (posebnim) školama po ugledu na američke, ali je postojalo i usavršavanje „na bazi zanata“. Zubni tehničar je mogao postati zubar.

Prema istraživanjima austrijskog (austrougarskog) zakonodavstva dr Aleksandra Nedoka, specijalnost zubnog lekarstva, koja se sticala na medicinskim fakultetima (u tadašnjoj Austro-ugarskoj), sastojala se od šestonedeljnih intenzivnih kurseva tokom školskog raspusta. Polaznici su nakon položenog ispita sticali pravo i na ovu delatnost [7, 8]. Na osnovu Registra Ministarstva unutarnjih dela Kraljevine Srbije [9], koje je izdavalo dozvole za rad i u zubarstvu, početkom dvadesetog veka u Srbiji su, a posebno u Beogradu, otvarane zubarske ordinacije i zubotehničke laboratorije od strane srpskih i stranih podanika. Prva dozvola (1902) glasila je na V. Vidmeja, zubara iz Švajcarske. Tu su bili još i Poljak dr K. Staniševski (1905), zubarka Toda Erhejljova Geletridi iz Odese (1906) itd.

Od 1901. do 1911. godine 27 osoba, od čega 25 u Beogradu, dobilo je pomenute dozvole. Reči „ordinacija” i „laboratorija” se nisu koristile, već „praksa”, „salon”, „zubnotehnički zavod”, „zubnolekarski tehnički atelje”, iz čega se može jasno zaključiti da je javnosti zubno lekarstvo prikazivano kao kozmetika. Ne može se stoga reći da u to doba „zubnih lekara i zubara nije ni bilo”. Broj raspoloživih zubnih terapeuta možda nije bio dovoljan ni u Beogradu, koji je uoči ratova imao oko 60.000 stanovnika, ali stoji i to da oni nisu ni postojali u vidokrugu roditelja đaka.

„...Stanje učeničkih zuba i čistoću nokata na rukama”, piše Marković, „pripadaju u pohvalu roditeljima (naročito materama) koji se nimalo ne stide što o zdravlju i čistoći svoje dece ne vode nikakvu brigu. To dokazuje da su i sami roditelji vaspitani i odnegovani u murdarluku... Ima roditelja koji pripadaju otmenom svijetu i višem staležu Srbije, a čija djeca dolaze u školu prljavija od stublinske nazimadi...” [6] Stoga ne čudi što je već u prvom broju „Svetlosti” dr Miloš Đ. Popović objavio svoj članak [10]. „Važnije je čistiti usta i zube nego lice prati”, savetuje i naređuje Popović. „Ne zaboravi da prije spavanja zube očistiš. Ko samo ujutro zube čisti, radi kao onaj što pokrije bunar pošto je dete u njega upalo. Osim higijene valja nekoliko puta godišnje na pregled zubnom lekaru ići. Zubni kamen valja sa zuba skidati. Čuvaj se slatkiša i mekane hrane. Kvarno korenje i ostaci zuba moraju se bezuslovno povaditi bilo da bole ili ne bole. Mala deca u prvim godinama života treba da dobijaju jaku i zdravu hranu (mleko, jaja, zeleno varivo...)...” [6]

Moglo bi se možda primetiti da Markovićev pregled usne duplje, posebno zuba, nije mogao biti dovoljno temeljan već samim tim što je upotrebljavao špatulu, a ne ogledalce i sondu, a i vremena za pregled imao je malo. U školi nije postojala

posebna prostorija, ni ambulanta. Marković je bio prinuđen da koristi najčešće direktorovu kancelariju, a to je značilo da svaki čas prekida sistematski pregled đaka. Imao je teškoća i sa dobavljanjem (prenošenjem) praktikabli za antropometriju (vaga, sprava za merenje visine tela, dinamometar). Njegova petočlana, odnosno šestočlana ocenjivačka skala (stanje zuba odlično, vrlo dobro, dobro, prilično, rđavo i vrlo rđavo) ne zna se na čemu je tačno bila zasnovana. U već pomenutom članku dr Miloš Đ. Popović ističe da zube deci školskog uzrasta u civilizovanim zemljama pregleda zubni lekar. Može se pretpostaviti da je tadašnje stanje zuba učenika bilo čak i gore nego što pokazuju Markovićevi nalazi, jer pomenutim načinom pregleda nije bilo moguće otkriti početni karijes. Ipak, uzeti i ovakvi kakvi jesu, rezultati pokazuju da je od 1.054 pregledana đaka samo 145 (13,85%) imalo sasvim zdrave zube.

Istinoljubiv i rodoljubiv bezmalo dvodecenijski Markovićev napor, njegovo silno uzdanje u nauku, u činjenice (jer sve se dađe izmeriti) behu vika u gluve uši. Njegovi lekarski izveštaji morali su se prvo dati na uvid direktoru škole u kojoj je sistematski pregled izvršen, a ovaj je svim silama nastojao da ga ublaži, ulepša i dotera, dok se nadležna ministarstva, uključujući i Ministarstvo vojno i Glavni sanitetski savet, nisu ni osvrnula na sve te vapaje (koji se nisu ticali samo zuba!). Ta naopaka tradicija „nezarezivanja” struke i nauke zadržala se u izvesnoj meri i do danas.

NAPOMENA

Rad je usmeno izložen na 14. Studeničkoj medicinskoj akademiji pod nazivom „800 godina srpske medicine” u junu 2010. godine.