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Zdravstveni centar "Dr Gere Istvan" Senta¹
Istorijski arhiv Senta²

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VAKCINACIJA PROTIV VELIKIH BOGINJA NA TERITORIJI SENTE POČETKOM XIX VEKA

SMALLPOX VACCINATION IN SENTA COUNTY IN THE EARLY 19TH CENTURY

Milorad ĆURČIĆ¹ i Laslo TARI²

Sažetak - Cilj rada je bio da iznese podatke o vakcinaciji protiv velikih boginja, koji su pronađeni u dokumentaciji Istorijskog arhiva u Senti a odnose se na prve decenije XIX veka. Navedena su najznačajnija dokumenta koja su regulisala vakcinaciju protiv velikih boginja kao i način kontrole njenog sprovođenja. Kao jedan od najvažnijih dokumenata prikazan je plakat iz 1798. godine kojim je stanovništvo pozivano da vakciniše decu protiv velikih boginja. Takođe je pronađen i dokument iz 1817. godine koji sa sigurnošću potvrđuje da je tada (ili od tada) vršena redovna vakcinacija protiv velikih boginja na teritoriji Sente. Autori smatraju da su pronađena, navedena dokumenta od izuzetne važnosti i da predstavljaju dokumente kojima se obogaćuje istorija medicine u našim krajevima.

KLjučne reči: Velike boginje, vakcinacija, XIX vek

Summary - The objective of this paper was to report data on vaccination against smallpox in the first decades of the 19th century in the documentation of the historical archives of Senta. The most important documents regulating smallpox vaccination, its control and way of conducting it are presented in complete. One of the most important documents is a poster proclamation from 1814 by which vaccination of children against smallpox was requested. Another document from 1817 was found and it certifies, with great certainty that at that time (or since that time) vaccination against smallpox was present at the territory of Senta. Authors consider that these documents are of utmost importance and that they represent documents enriching history of medicine in our regions.

Key words: Smallpox + diagnosis + epidemiology + history + mortality + therapy; Smallpox vaccine + administration and dosage + history + therapeutic use; History of medicine, 19th cent

Uvod

Velike boginje, teško, akutno i veoma zarazno oboljenje izazvano virusom variole (*Poxvirus variolae*), poznato je još i pod imenima variola vera, variola maior, crne boginje, arapske boginje. Bolest izbija u epidemijama, prenosi se veoma lako kapljičnim putem, ređe prašinom i inokulacijom.

Variola je jedna od najstarijih poznatih zaraznih bolesti. Prema opisima Gregorijusa iz Tura (1581), izgleda da se variola iz žarišta u Indiji i Kini, poznatih davno pre naše ere, širila do Evrope u više navrata, još od VI veka. Počevši od srednjeg veka variola se redovno javljala u Evropi u obliku većih ili manjih epidemija. Krstaški ratovi su doprineli pojavi variole i njenom širenju po Evropi. U svom prvom naletu pogađala bi sve dobne grupe i uništavala gotovo trećinu stanovništva pojedinih država. Kako su oni koji su preživeli bolest sticali imunitet, variola postaje kasnije pretežno bolest dece koja još nisu stekla imunitet, pa je sve do Dženerovog (Edward Jenner) otkrića vakcine (1796) variola bila jedan od najčešćih uzroka smrti dece do pete godine života.

Introduction

Smallpox is a severe, acute and highly contagious disease caused by a poxvirus (*poxvirus variolae*) known as variola vera, variola major, black pox, Arabic pox. The disease generally occurs in epidemics and is easily spread by respiratory route via droplet nuclei, rarely by dust and inoculation.

Variola is one of the oldest known contagious diseases. According to the descriptions of Gregorius from Tours (1581) it seems that the foci of variola infection had been in India and China, known long before new era, and it spread to Europe on several occasions since 6th century. Since the Middle Ages variola regularly spread over Europe in form of great or small epidemics. Crusades were responsible for its occurrence and spreading over Europe a great deal.

On the occasion of its first outbreak it affected all age groups, in some countries with fatal outcome almost for the third of the whole population. As those who survived the illness gained immunity, variola later predominantly affected children who were not

Nakon uvođenja vakcinacije variola nestaje kao endemska bolest iz Evrope kao i iz mnogih zemalja na drugim kontinentima.

Vakcinacija je bila poznata i pre Jennerovog pronalaska, naročito na Bliskom istoku - Indiji i Kini. U Kini su, na primer, velike boginje lečili na taj način da su se deci stavljale u nos izmrvljene kraste, ostaci osušenog plika boginja obolelog lica, ali ove vrste lečenja nisu prodrle u Evropu. Izuzetak je bio slučaj početkom 18. veka kada je supruga engleskog ambasadora u Istanbulu vakcinisala svoju decu po metodi koju su koristili meštani. Kasnije je to uradila i sa svojom ćerkom u Londonu, pa se vest o uspešnom cepljenju brzo širila i više hiljada ljudi je bilo vakcinisano. Mnogi su poznati lekari toga doba bili protiv vakcinacije tako da je ovaj prvi pokušaj brzo pao u zaborav [1].

Kalemljenje gnoja iz gnojnica boginjavih zdravima radi predohrane spada u našu narodnu medicinu, i to je njena najznačajnija tekovina. Kalemljenje su u našu zemlju preneli, svakako, turski hećimi sa Istoka, i njega su prihvatili naši narodni lekari - samouci, naročito žene. U "Beleškama" Mladena Žujovića iznosi se da je 1818-1820. u Borču, srez gruzanski, Žujovićeve strina Ašanka (rodom iz šiptarskog sela Aš) znala kalemiti boginje, i to srebrnom iglom sa dečijih krasta, a Vuk Stefanović Karadžić piše 1837. da Crnogorci umeju kalemiti boginje uzimajući gnoj iz prirodnih gnojnica, čemu ih je naučio, kako tvrde, vladika Petar I. Profesor dr Batut piše da su u staro doba sveštenici u Crnoj Gori skidali sasušene kraste s varioloznog eksantema i trli ih u prah, pa taj prah ptičjim perjem unosili u nos drugih osoba ili im ga davali da ga ušmrču. Kasnije su prenosili gnoj tankom srebrnom paricom u zagrebenu kožu drugih osoba. Jovan Hadži-Vasiljević izneo je da su u Vranju u starije vreme "vadile cvećke" (kalemile boginje) stare žene, koje su zvali "babicama", ali i "drugi ljudi, raznog zanimanja". Od 1870. to su radili gradski hećimi Naum Marković, rodom iz Trakije, i Đorđe Kristo, rodom Grk. Prema saopštenju dr Konfina Žaka, u Leskovcu su za vreme Turaka cepili neki Panajot, koga su zvali doktorom, i njegov pomoćnik Domo. U Foči na Drini kalemili su sveštenici u prvoj četvrtini prošlog veka malim kopljastim nožem od srebra, a gnoj koji su skidali iz gnojnica boginjavih donosili su u vati. Sveštenici su kalemili i decu turskih činovnika ali krijući od domaćih muslimana. Mijo Žunjić u svojoj "Narodnoj medicini u Varešu", u Bosni, pripoveda kako se "u Varešu prijašnjeg vakta" sa boginjavog raznosio gnoj na belom papiru, a skidao tankom srebrnom parom, pa se na zarezanu kožu mišice zdravog čeljadeta metao papir. "čoveku, s koga se gnoj skidao, plaćalo se po groš-dva "za jedno čage gnoja" [2].

Još od 1775. godine Jenner se počeo baviti problemom kako se boginje mogu izbeći putem prevencije. Posmatranjem seljaka i načina kako se oni bore protiv ove bolesti, došao je do poznatog otkrića, pri

immune, and up to Edward Jenner's discovery of vaccine (1796) variola used to be one of the most common causes of death in children up to 5 years of age. After introduction of vaccination against smallpox, variola disappeared as an endemic disease in Europe and many other countries on other continents.

Vaccination has already been known before Jenner's discovery, especially in the Middle East - India and China. In China, for example, smallpox was treated by putting powdered crusts into child's nose, but this kind of treatment never spread to Europe. An exception was made in the 18th century, when British Ambassador's wife in Istanbul vaccinated her children using the method used by local inhabitants. Later she did the same for her daughter in London. The news about successful vaccination spread fast and several thousands of people were vaccinated. Many wellknown physicians of that time were against vaccination, and this attempt was fast forgotten [1].

Vaccination using purulent content from the diseased for protection of the healthy also belongs to our traditional medicine, and is its most important heritage. Vaccination spread to our country from the East, most probably from Turkey and had been accepted by our self-taught physicians - especially women. In his "Notes" in 1818-1820, Mladen Žujović wrote that his aunt Ašanka (born in an Albanina village Aš) from Borč, Gruža county, knew how to vaccinate against smallpox using a silver needle and crusts of the diseased children, while in 1837 Vuk Stefanović Karadžić wrote that people of Montenegro knew about vaccination, using purulent content from smallpox pustules and they learned how to do that from bishop Petar I. Prof. Dr. Batut wrote that at that time priests in Montenegro removed dried crusts from pustular eruptions, made powder and then using bird feather put it into the nose of healthy persons or they had to snuff it. Later on the purulent content was put into scratches of healthy persons, using thin silver coins. Jovan Hadži-Vasiljević wrote about vaccination in Vranje which was performed by older women called "midwives", but also by other people of various professions. Since 1870 vaccination was done by city physicians: Naum Marković born in Trakia and Đorđe Kristo, Greek by birth. According to the writing of doctor Konfin Žak, at the time when Turks ruled these territories, Panajot who was called a doctor and his assistant Domo performed vaccination in Leskovac. In Foča, on the river Drina, priests used to vaccinate in the first quarter of the 19th century using small silver spear-like knives, transporting purulent content of the diseased in cotton wool. Priests used to vaccinate children of Turkish officials as well, but hiding it from native Muslims. In his book: "Traditional Medicine in Vareš", Mijo Žunjić wrote about vaccination in Bosnia. They used thin silver coins to take purulent content from the sick, then put it on white paper, which was then placed on a scratch on the upper arm of

čemu su ključnu ulogu odigrale kravlje boginje. Jenner je 1798. godine objavio svoje iskustvo u publikaciji "*An inquiry into the causes and effects of the cow-pox, or variolae vaccinae*" (London, 1798). U samom startu njegovom pronalasku su se mnogi suprotstavili, čak su i odbijali da mu izdaju publikaciju, ali uspeh vakcinacije mu je ubrzo doneo priznanje i ugled.

Godine 1797. Skupština bačke županije donosi Odluku, da se variolizacija mora primeniti na teritoriji cele županije. Prema sačuvanom protokolu, u Subotici je 1803. godine Siebenburg Eugen, hirur, zaposlen u logoru francuskih ratnih zarobljenika, koji je bio smešten u okolini Subotice, izvršio prvu vakcinaciju dece. Vakcinacija dece je vršena još tokom 1812. i 1840. godine [3,4].

Prema navodima prim. dr Stojana Berbera, vakcinacija protiv velikih boginja, u Somboru, započeta je 1801. godine, što je bilo dve godine ranije od navoda prve vakcinacije kod nas, u udžbeniku Dr Koste Todorovića [5].

U Velikoj Kikindi (Kikinda) dr Ferenc Kriner je bio gradski fizik koji je u XIX veku nadzirao vakcinaciju protiv variole, koju su izvodili hirurzi kod 152 deteta [6].

Prva medicinska publikacija nastala i štampana na tlu Vojvodine bila je rasprava županijskog fizika Bačko-Bodroške županije dr Mihael von Gellei (Rafaelusa) iz Sombora o variolizaciji: "*Hauptbegriffe über die Gefährliche Tödlichkeit der natürlichen und sichere Gelindigkeit der geimpften Blättern*" koja je štampana u Novom Sadu 1797. godine. Rasprava je bila štampana u malom broju primeraka, formata 18x12, na 24 stranice [7].

Godine 1804. i 1805. već su izdati i prevodi knjiga E. Jennera, i to: u Zagrebu su se pojavila dva izdanja prevoda, sa nemačkog jezika (latinicom), na Rijeci jedno izdanje prevoda sa nemačkog jezika (latinicom), u Dubrovniku jedno izdanje sa francuskog jezika (latinicom) i u Budimu jedno izdanje prevoda sa nemačkog jezika, odnosno pretpostavlja se, da je to čak i originalno napisano delo (ćirilicom) - "Nastavljenje o kravljih ospah radi istrebljenja prirodnih ospic". Pisac ili prevodilac je bio Jos Putnik von Simond, vladika u Pakracu i Temišvaru. To je jedna od prvih medicinskih knjiga na srpskom jeziku na ovom području [8].

Naša istraživanja

Godine 1770. donet je zakon za organizovanje zdravstvene službe (*Normativum Generale in re Sanitatis*). Trideset godina nakon donošenja Zakona - na razmehi vekova poboljšanje položaja zdravstva su, u velikoj meri, kočili nedostatak obrazovanih lekara i sklonost, pretežno nepismenog stanovništva, praznoverju. U to vreme na našem prostoru delovali su isključivo ranarnici (felčeri) i berberi koji su ujedno obavljali i poslove apotekara.

healthy people. The sick person was given a coin or two for each paper with purulent content [2].

Since 1775 Jenner started dealing with the problem of smallpox prevention. Seeing how peasants fought against this disease, he discovered vaccination against smallpox, whereas cowpox played a key role in the process. In 1798 Jenner published his experiences in a publication: "*An inquiry into the causes and effects of the cowpox, or variolae vaccinae*" (London, 1798). At the very beginning there were many opposing his discovery, even rejecting to publish his work, but successful vaccination soon brought acknowledgment and respect.

In 1797 the Assembly of the Bačka region made a Decision according to which vaccination was compulsory on the whole territory. According to a record that had been preserved, Siebenburg Eugen a surgeon employed in a camp of French war prisoners nearby Subotica performed first vaccination of children in 1803. Vaccination of children was performed during 1812 and 1840 [3,4].

Doctor Stojan Berber wrote that vaccination against smallpox in Sombor started in 1801, which means that it started 2 years before the first vaccination in our county recorded in the textbook of Dr. Kosta Todorović [5].

Doctor Ferenc Kriner was a city physician in Great Kikinda (Kikinda) appointed to supervise smallpox vaccination performed by surgeons in 152 children [6].

The first medical publication printed at the territory of Vojvodina was a paper of Dr. Mihael von Gellei (Rafaelus), a physician of Bačka-Bodroš region, from Sombor dealing with variolation: "*Hauptbegriffe über die Gefährliche Tödlichkeit der natürlichen und sichere Gelindigkeit der geimpften Blättern*" printed in Novi Sad in 1797. It was a kind of a discussion printed in a small number of copies, of a format 18x12 and on 24 pages [7].

In 1804 and 1805 the first translations of E. Jenner's book were published: two issues appeared in Zagreb, translated from German (written in Latin alphabet), one issue in Rijeka translated from German (in Latin alphabet), one issue in Dubrovnik translated from French (in Latin alphabet) and in Budim one issue was translated from German; it is assumed that it was the original paper (in Cyrillic alphabet) - "Nastavljenje o kravljih ospah radi istrebljenja prirodnih ospic". The writer or translator was Josip Putnik von Simond, bishop in Pakrac and Timisoara. It is one of the first medical books in Serbian language at this territory [8].

Staranje i nadzor nad zdravstvenom službom, koja se postepeno organizovala u poslednjim decenijama XVIII veka prvenstveno je sprovodila županijska vlast i glavni lekar županije. Županiji je, sa stanovišta narodnog zdravlja, bilo bitno da neprekidno prati zdravstvenu situaciju, pa je ona, posredstvom predstojničkih naredbi, uređivala nastale probleme.

Predstojničke objave, odnosno obaveštenja i pozivi opštinama okruga s kraja XVIII i iz prvih decenija XIX veka, koje sadrže županijska uputstva koja se odnose na lečenje u našem kraju kao i podatke koji se odnose na lokalno zdravstvo, predstavljaju istinski dragocene izvore i to, ne samo sa stanovišta istorije senčanskog zdravstva, već i sa stanovišta istorije zdravstva celokupne Bačke.

U knjizi obaveštenja i poziva (od 1791. do 1806. god.) upisana je na latinskom jeziku suština odluke Bačke županije o variolizaciji (*variolarum inoculationem*) koja je datirana u Subotici (Maria Theresiopol) 24. juna 1797. godine sa potpisom Sebastijana Vojnića, glavnog sreskog načelnika [9].

Dopis od 3. januara 1801. godine, koji nosi potpis predstojnika Fabijana Vojnića posebno daje uputstva [10] o prevenciji i lečenju boginja, koje su nemilice pogadale decu (u to vreme još nije bilo primenjivano zaštitno cepljenje protiv boginja koje je otkriveno u Engleskoj). Tok bolesti bio je podeljen na tri stadijuma, a u svakom od njih su u 3-5 tačaka ukratko bile izložene informacije o bolesti. Dopis je, kao neka vrsta informativnog biltena, bio namenjen "običnom narodu" i bio obnarodovan na javnim mestima kao i mestima na kojima su se ljudi okupljali.

Prvi deo dopisa se odnosio na prevenciju, daju se kratki saveti koji se zasnivaju na starim isprobanim metodama a koje potiču iz spisa drevnih "mudraca". Ovi kratki saveti se navode kao obični postupci kod one dece koja još nisu obolela od velikih boginja:

1. Obezbeđenje svežeg vazduha u kućama, čistoće kuće i postelja, sipanje borovog semena, tamjana ili nekog sredstva sa prijatnim mirisom na ugljeni žar, odnosno polivanje sirćeta na vruću ciglu i najzad otvaranje prozora pri tihom i lepom vremenu;

2. Kupanje male dece toplom i čistom vodom, kako bi se otvorile pore na koži i tako lakše izlazio otrovni materijal iz boginja;

3. Čišćenje stomaka i ostalih unutrašnjih organa, naročito od glista, koje otežavaju stanje deteta, i uzrokuju im veliku muku ako obole od boginja;

4. Zabrana posećivanja onih kuća u kojima su se pojavile boginje, odnosno zabrana dolaska u kuću onih lica koja su obolela od boginja;

5. Roditelji, ako primete prve znakove boginja kod onih sa kojima su njihova deca prethodno bila u kontaktu, pod punom odgovornošću obavezni su da se jave diplomiranom hirurgu, odnosno ako to nije moguće, edukovanoj babici, delimično i zato da bi se narod odučio od nekorisne praznoverice, a delimično

Our investigations

In 1770 Law for Organization of Health Care was passed (*Normativum Generale in re Sanitatis*). Thirty years after the Law had been passed, at the beginning of a new century, improvement of health care was a great deal obstructed by lack of physicians, and affinity to superstition, mostly by illiterate population. At that time only healers and barbers healed at this territory and they were pharmacists as well.

Public health service was gradually established in the last decades of the 18th century and the county authorities and the head district physician took care about it and supervised its work. It was of utmost importance for the county, from the aspect of public health, to continually follow-up the health status and by head physician's orders it used to manage current problems.

These announcements, information or summons to the regional communities from the end of the 18th and first decades of the 19th century, consisting of instructions on healing at our territory as well as data on local public health, represent really valuable sources, not only from the history of health care in Senta, but also from the point of view of health care of entire Bačka.

The book of announcements and summons (from 1791 till 1806) contains the essential decision of Bačka region on variolation - smallpox vaccination (*variolarum inoculationem*) dated in Subotica (Maria Theresiopol) June 24, 1797, signed by Sebastijan Vojnić, chief of the district [9]. A report dated January 3, 1801, signed by chief, Fabijan Vojnić, executive officer, gives instructions [10] on prevention and treatment of smallpox, affecting children with no mercy (at the time vaccination against smallpox, discovered in England, had not been administered yet). The course of the disease was divided into three stages, each containing short information on the disease in 3 - 5 items. This report, as a sort of information bulletin, was intended for "common people" and was proclaimed at public places where people used to gather.

The first part of the report considered prevention of smallpox with short, knowledgeable advice based on old, tested methods originating from ancient times. These short advices were to be followed by children not affected by smallpox:

- 1) Houses should be airy, well-ventilated, clean and with clean bed linen; pine tree seed or incense should be put on live coals for pleasant odor or vinegar poured on a hot brick and windows should be kept open in nice weather;

- 2) Bathe small children in hot, clean water to help open pores and make it easier for eruptions to appear.

i zato da bi tako prosvetljeni narod učestvovao u otklanjanju toka ove opasne epidemije.

Mere koje treba preduzeti podeljene su u tri grupe prema stadijumu bolesti:

I Stadijum kada boginje "otimaju" dete. Nakon trećeg dana bolesti a pre izbijanja bubuljica na koži, preporučuje se sledeće:

1. Ako se kod dece primeti da imaju gliste treba im dati prašak, gore ili dole, da bi se oslobodili od parazita;

2. Fizički jaku decu treba okupati u toploj vodi ako je lepo vreme, kako bi bubuljice lakše izašle;

3. Piti napitake za pročišćavanje kao što je sok od bazgenog cveća, voda u kojoj je kuvan ječam ili mešavinu vode i prirodnog toplog mleka;

4. Zabranjuje se davati deci opojna pića kao što su vino i rakija, što roditelji često rade. Ovo deluje isto kao kad bi na vatru sipali ulje i samo umnožava tužne slučajeve.

II Stadijum kada se pojavljuju mehurovi i počnu da sazrevaju - preporučuje se:

1. Sve one nekorisnosti koje se odnose na stare običaje, koji žive u narodu, kao što je mazanje i slično ne treba primenjivati;

2. Pridržavati se neprekidno svih preporuka iz prvog stadijuma, a naročito u odnosu na piće;

3. Temperatura u sobi treba da bude srednje jačine, neprekidno, i ne preporučuje se da se deca uvijaju u previše pokrivača kako bi boginje, po nekim mišljenjima, lakše izbile;

4. Ako se mehuri kod slabije dece ne pojave na koži, ili ako se pojave i počnu se povlačiti, takvim bolesnicima se može dati vino pomešano sa vodom da bi im se snaga vratila;

5. Najzad, kada mehuri sazru i u njima dugo stoji sakupljeni materijal - da ne bi kasnije ostao ružan trag - sa malim makazama treba prorezati veće i zrele mehure a mesto mehura treba brisati i pritiskivati sunderom koji je umočen u mleko.

III Stadijum kada se mehuri osuše - savetuje se:

1. Korišćenje već poznatih pića, obezbeđenje čistog vazduha i sve ostalo što je preporučeno u prethodna dva stadijuma;

2. Telo deteta na kome su sasušeni mehuri treba oprati (okupati) čistom vodom;

3. Najzad, ako deca boluju od neke bolesti stomaka ili unutrašnjih organa, da ne bi došlo do neželjenih komplikacija treba im dati neko piće za čišćenje.

Navedeni kratki saveti su samo onda korisni ako ih se i pridržavamo.

Borba protiv boginja "narodne bolesti" tadašnjeg doba, je dobila potpuno novi zamah u drugoj deceniji XIX veka nakon Dženerovog otkrića zaštitnog cepljenja u Engleskoj 1796. godine. Naročito su dragoceni spisi, koji se odnose na zaštitno cepljenje u našim krajevima, a koji, potiču iz druge decenije XIX veka, sa potpunom pouzdanošću svedoče o zaštitnom cepljenju dece. U prvoj polovini XIX veka zakon nije propisivao eksplicitnu obavezu zaštitnog cepljenja

3) Purgative procedures clean children's stomachs and other internal organs especially from parasites which aggravate their condition and cause nausea in children affected with smallpox;

4) It is forbidden to make visits to houses with infected children;

5) Parents who notice first signs of smallpox in those children with whom their children had been previously in contact, are obliged to call for a graduated surgeon and if not possible, educated midwife partly to break superstition and partly to take part in prevention of a dangerous epidemic.

According to the stage of the disease measures that should be undertaken are divided into three groups:

I In the first stage smallpox "attack" the child. After the third day, but before eruptions appear on the skin, the following is recommended:

1) If children are affected with intestinal parasites, they must first be managed in regard to parasites;

2) If it is nice weather, physically strong children should bathe in hot water to fasten the course of the disease;

3) Children should drink a lot of liquid, like juices, water in which barley was boiled or a mixture of water and hot milk;

4) Wine and brandy are forbidden for children, although parents often give them such drinks. Hard liquor affects children like adding fuel to the flames and it only multiplies bad outcome;

II The second stage of the disease is characterized by development of papular eruptions. It is necessary to:

1) Avoid all the unuseful measures associated with ancient customs, still present with people, such as application of creams etc.

2) Continue with all recommended procedures from the first stage, especially those concerning hard liquor.

3) The room temperature should be moderate all the time, whereas children should not be kept too warm in order to help eruptions to develop, as some think;

4) If pustules do not appear in weaker children or if they appear and then start disappearing, they should be given wine mixed with water to gain strength;

5) Finally, when pustules and their content are present for a longer period of time, and in order to avoid ugly marks, little scissors should be used to cut large eruptions, wiping and pressing them with a sponge dipped in milk.

III Stage three starts when pustules dry and the following is recommended:

1) Consume aforementioned drinks, take care of fresh air and all the rest that has been recommended in previous stages;

(to je učinio tek 1876. godine) tako da je njeno eventualno nalaaganje zavisilo od uvidavnosti viših organa uprave.

Prva beleška, koja se odnosi na cepljenje protiv boginja predstavlja poziv [11] upućen roditeljima a govori o otkriću i potrebi vakcinacije. Njega je u Senti 4. X 1814. potpisao okružni predstojnik Stevan Radišić. Tekst glasi:

"Dobri roditelji" !

Svemoćni tvorac sveta koji vas je decom blagoslovio, ujedno vam je kao svetu dužnost odredio da im živote njihove od raznoraznih opasnosti branite.

Među opasnosti ine koje porod vaš od samoga rođenja opsedaju odista spadaju i ospice koje grozno besne među nevinom decom, svake godine više hiljada njih ubijajući, te nagrđujući mnoge hiljade njih koji su se od smrtonosnoga mača njihovoga spasili, slepima, gluvima, nemima i uzetima za sav život čineći ih.

Ko bi među vama toliki nečovek, toliki krvnik bio da svoje potomstvo spasiti želeo ne bi. Najlepši poklon neba, razum ljudski je jedno silno i sigurno sredstvo izumeo, posredstvom kojega vi porod vaš savršeno od grdnih ospica spasiti možete i ujedno dobročinitelji sveukupnog naroda ljudskog, sve za potpuno istrebljenje najsmrtonosnije bolesti učinivši možete biti, a najkorisniji izum prošloga veka za tu namenu spasonosne ili kravlje boginje jesu. Ucepljenjem ovih se niti lepota ljudska nagrđuje niti se pak zdravlje ljudsko šteti, dok se od opasnih ospica pak spašavaju. Zbog toga je i ucepljenje istih već više godina u svom prosvetljenom svetu rasprostranjeno".

Najverovatnije da je nakon ovoga poziva počelo vakcinisanje dece jer su tri godine nakon ovog poziva - 14. aprila 1817. - stoljuće vlasti, koje su zasedale u Somboru, prestonici Županije, opštinskim predstojnicima razaslale sledeće obaveštenje[12]:

"1041. Nadzorna deputacija za cepljenje protivu boginja, predočavajući da bi seoski ranari i berberi protivu boginja cepiti želeli bez toga da na višem mestu zapovedene zapisničke knjige drže, stoga traži da se istima takovo cepljenje zabrani.

Gospodi predstojnicima u srezu stoga nalažu da svima onima koji bi bez znanja milostive deputacije cepiti hteli, cepljenje zabrane".

Iz ovoga dopisa možemo zaključiti da su cepljenja protiv boginja (o kojima je trebalo voditi zapisnike) otpočela u Bačkoj županiji, pa tako sasvim sigurno i u Senti.

Maja 1824, glavni lekar županije, dr Karolj Bula žali se da ranarnici, koji obavljaju vakcinaciju dece, dobijaju potrebnu pomoć od mesnih predstojnika sa velikim zakašnjenjem, i traži uklanjanje navedenih smetnji. Nadalje, zahteva i to: da naselja sreskim ranarnicima šalju spiskove imena nevakinisanih odnosno novorođenih lica i da ranarnicima pri vakcinaciji pruže svu potrebnu pomoć [13].

2) Children with dry smallpox pustules should bathe in clean water;

3) Finally, if children are infected with any stomach or intestinal parasites, they should be treated to avoid unfavorable complications.

These short recommendations are useful only if one observes them. The struggle against smallpox - "public disease" of that time, has completely changed in the second decade of the 19th century after Jenner's discovery of vaccination in England in 1796. Documents concerning preventive vaccination in our regions are of special value originating from the second decade of the 19th century and are fully reliable sources about preventive vaccination in children. In the first half of the 19th century there were no explicit law regulations in regard to preventive vaccination (the law was issued in 1876) although vaccination could have been prescribed depending on consideration of high administrative authorities.

The first document considering vaccination against smallpox is an invitation [11] for parents dealing with the discovery and necessity of vaccination. This document was signed by Stevan Radišić, district head officer and it says:

"Dear parents!

The Almighty creator of the world, who has blessed you with children, has also defined you to protect their lives from various dangers.

These dangers most certainly include smallpox, endangering your children's lives from their very birth, affecting innocent children with fatal outcome for several thousands of them every year; making ugly many thousands of those who survive, others going blind, deaf, mute and paralyzed for the rest of their lives.

Who, among you, would be so inhuman not to save his child? The finest gift from heavens "human intellect" had invented a powerful means for protection against smallpox. Using this useful invention, you may become benefactors of the whole nation helping eradicate this lethal disease as well as cowpox. Vaccination will neither ruin human beauty nor affect human health, whereas it protects against dangerous variola. That is the reason why vaccination has been accepted and spread in modern world for several years."

Vaccination of children started, most probably, after this proclamation had been issued, because three years later, on April 14, 1817, the authorities assembled in Sombor, the county capital, and sent out the following information [12]:

"1041. The supervisory vaccination board requests prohibition of vaccination by village healers or barbers who are not willing to keep records on administered vaccines. Accordingly, gentlemen district head officers, are requested to forbid vaccination to those who wish to do it without notifying the supervisory board".

Glavni lekar Bula, 21. juna iste godine, takođe podnosi izveštaj u vezi sa platama, koje primaju ranarnici koji vrše vakcinaciju. U tom izveštaju se nalazi i informacija o tome da zaštitno cepljenje protiv boginja nije bilo naredeno sa najvišeg mesta, već da je samo bilo preporučeno "zbog obzira prema zdravlju ljudskome". I dalje se nalaže predstojnicima da "pod pretnjom oštih kazni" obavežu ranarnike na sprovođenje vakcinacije, a o čemu je sa dotičnima prethodno bio postignut dogovor. Imućni su zaštitno cepljenje plaćali sopstvenim novcem, dok je za decu siromašnih porodica opštinska blagajna lekarima naknadno isplaćivala 15 krajcara po vakcinisanoj glavi [14].

Da je županijska vlast veliku pažnju posvećivala borbi protiv boginja, vidi se iz uputstva okružnim predstojnicima koje je županijska vlast izdala 4. jula 1826. godine [15]. Ovo uputstvo, koje se odnosilo na cepljenje protiv boginja, sastojalo se od 10 tačaka koje u obradi glase:

1. U saradnji sa komisijom nadležnom za nadziranje vakcinacije, odnosno pored nadzora vršenog od strane lekara i ranarnika, u budućnosti, shodno novim propisima, treba voditi, tzv. tabelarne zapisnike o cepljenjima.

2. Tabelarne zapisnike treba voditi tako da se iz njih jasno vidi identitet onih siromaha, čije je cepljenje podmirivano iz opštinskih blagajni (a koje je iznosilo 6 krajcara *per capita*), odnosno na koje se osobe ovo (plaćanje) treba proširiti. Obaveza je lekara i ranarnika da, na kraju svake godine, zapisnike sa podacima o vakcinisanju prikažu postavljenoj komisiji, dok iste imaju pravo da nepotpune i netačne zapisnike vrate radi ispravke, pri čemu se do otklanjanja navedenih nedostataka iz opštinske blagajne neće moći isplatiti za vakcinaciju ustanovljeni iznosi. Ispunjavanje ove odredbe je važno i zbog toga što je tabelarni zapisnik krajem januara svake godine potrebno dostaviti Mađarskom Kraljevskom Namesničkom Veću.

3. "Deputacija", koja nadzire cepljenje protiv boginja ima pravo da upozori one lekare i ranarnike koji kasne sa cepljenjem a lekare koji zanemaruju cepljenje ima pravo da kazni.

4. Svaka naseobina treba višim vlastima da prijavljuje svako eventualno registrovanje boginja.

5. Komisije, koje su obrazovane po srezovima, obavezne su da svake godine podnesu izveštaj o broju od boginja obolelih i umrlih osoba, kao i o tome koliko je lica među vakcinisanim osobama ponovo obolelo.

6. Lekari i ranarnici su obavezni da prilikom povremenih revizija - uz pomoć mesnih duhovnika i predstojnika - popišu nevakinisanu decu.

7. S obzirom na potrebu obezbeđenja uspeha vakcinacije protiv boginja, gospodi spahijama, duhovnicima i ostalim istaknutim ličnostima se predlaže da pripadajući im "narod" ubede u potrebu prihvatanja zaštitnog cepljenja i da utiču da se cepljenje najradije

This document testifies about the beginnings of smallpox vaccination in Bačka region and most certainly in Senta and about the necessity of record keeping.

In May of 1824, the district head physician Dr. Karolj Bula complained that the necessary help of regional authorities to those who performed vaccination of children was late and asked for the obstacles to be removed. Furthermore, lists of nonvaccinated, that is newborn children were requested in order to help district healers in vaccination as much as possible [13].

The same year on June 21, the district head physician Dr. Bula also submitted a report considering wages of healers who performed vaccination. That report involved an information that preventive vaccination against smallpox was not ordered by the highest authorities, but was only recommended "considering human health. "Head physicians had to oblige healers, "under threat of stern punishments" to carry out vaccination, as agreed previously. The wealthy had to pay for preventive vaccination, whereas children of poor parents did not pay for it, although healers were paid 15 kreuzers per each vaccinated child from the district funds [14].

Instructions of the district authorities issued on July 4, 1826, show that great attention had been paid to vaccination against smallpox [15]. These instructions consisted of 10 items and adapted they are as follows:

- 1) Collaboration with the supervisory vaccination board should, apart from supervision of physicians and healers, in the future, according to new regulations, keep so-called tabular vaccination records.

- 2) Tabular vaccination records should clearly show the identity of the poor members of the community who had right to free vaccination - paid for by regional authorities (6 kreuzers per capita), as well as the identity of those who were to be included in this number. Physicians and healers are obliged to present vaccination records to appointed boards every year, whereas these boards may return incorrect and incomplete records for correction. Regional funds will not pay the established amount for vaccination until corrections are made. It is of importance to fulfill this regulation because every year at the end of January these tabular records are sent to Hungarian Royal Deputy Council.

- 3) The supervisory vaccination board has the authority to warn those physicians and healers who are late with vaccination, whereas those who neglect it may be sanctioned.

- 4) Smallpox outbreaks must be reported to authorities by each settlement.

- 5) Medical boards formed in every district are obliged to submit a report about the number of smallpox cases and number of deceased every year, as well as the number of vaccinated who got sick again.

obavi nedeljom, odnosno prazničnim danom kada se kmetovi odmaraju.

8. Dobar serum predstavlja uslov za prihvatanje neophodnosti zaštitnog cepljenja od strane roditelja. Stoga su lekari i ranarnici (pod pretnjom kazne), u ovom smislu, dužni da drže delotvoran serum.

9. Župnici i duhovnici neka u svojim propovedima podstiču narod na prihvatanje zaštitnog cepljenja, a isto tako neka učine i rabini unutar "nacionalnosti jevrejske".

10. Isplata 6 krajcara (po glavi) za cepljenje "siromašnih obveznika" i najamnine za kola će, iz opštinske blagajne, biti omogućena tek nakon odobrenja nadležne komisije.

Nadzor nad ispunjavanjem gore navedenih naredbi bio je poveren okružnim podžupanima, dok su mesne predstojnike i glavne lekare uputili na to da se (postaraju) da se ranarnici pridržavaju naredbe, čije će ispunjenje kontrolisati glavni županijski lekar Karolj Bula.

Županijske vlasti, sa sedištem u Somboru, su na svom sastanku, održanom 10. jula 1826, nakon podnetog izveštaja glavnog županijskog lekara "u zdravstvenoj stvari" donele više odluka. Od tada je, naime, opštinska blagajna pokrivala troškove vakcinisanja, ne samo "u najvećoj bedi živućeg", već svakog siromašnog deteta s tim da su župnici ili činovnici potvrdili opravdanost takve isplate.

Glavni lekar tokom septembra meseca iste godine šalje raspise sreskim predstojnicima, iz kojih proizilazi da su nadležni povremeno propuštali da prikažu sačinjene zapisnike o cepljenju dece protiv boginja i da su, eventualno, ponovo obolevanje već vakcinisane dece po pravilu prećutkivali. Županijske vlasti su tražile da se na svaki način striktno sprovede publikovana odluka od 4. jula, koja se odnosi na cepljenje protiv boginja.

Maja 1827. podneo je glavni županijski lekar Karolj Bula izveštaj o sprovođenju zaštitnog cepljenja u "prethodnoj godini", koje se odvijalo u okvirima već poznatog postupka. Napomenimo da je, u međuvremenu, leta 1831. godine u Mađarskoj harala ogromna epidemija kolere, koja je krajem jula stigla do Segedina, Subotice i Sente. Za nepuna dva meseca u Senti je od epidemije umrlo 1700 ljudi. Sedmog avgusta je, npr. izneto na Katoličko groblje 72, a na Pravoslavno 15 mrtvačkih sanduka. Zanimljivo je, da je županijski nadlekar Karolj Bula, koji se prilikom izbijanja kolere nalazio u Senti, od straha "pao u krevet", tj. pravio se da je bolestan.

Posle gušenja Revolucije 1848/49. godine, na teritoriji današnje Bačke i Banata (čiji jedan deo danas pripada Rumuniji), austrijska uprava je stvorila Srpsku Vojvodinu i Tamišku Banovinu. Nova pokrajina je podeljena na rejone, okruge i srezove. Senčanskom okrugu su, osim grada Sente, pripadali Martonoš, Stara Kanjiža i Ada. Sreski načelnik je bio Stevan Branovački.

Dobrom glasu mesne medicine doprinose i zvanični dokumenti, koji dokazuju da je već tada bila u širokom krugu primenjivana vakcinacija protiv bogi-

6) On the occasion of revisions physicians and healers are obliged to make lists of nonvaccinated children, using help of district head physicians and priests.

7) Taking into consideration the necessity to perform successful vaccination against smallpox gentlemen landowners, clergymen and other outstanding individuals should convince people to accept preventive vaccination which is best to be performed on Sundays or holidays when peasants rest.

8) Good serum is a condition to accept the necessity of preventive vaccination by parents. That is why physicians and healers (under threat of sanctions) are obliged to provide effective serum.

9) Parish priests and clergymen should preach and induce people to accept preventive vaccination, as well as rabbis within Jewish communities.

10) District authorities will not pay 6 kreuzers (per capita) for vaccination of the poor and cart rental till the authorized medical board approves it.

Supervision of aforementioned orders was done by subdistrict officers, while district head officers and head physicians were directed to take care of healers' activities supervised by district head physician Karolj Bula.

District authorities from the main office in Sombor had a meeting on July 10, 1826 and after the district head physician submitted a report, several decisions on medical issues were made. Since then vaccination was paid by the township authorities not only for the poorest members of the community, but also for each poor child, whereas parish priests and clerks had to confirm the necessity of such payment.

During September of the same year the head physician sent out announcements to district head officers, which revealed that supervision occasionally failed to present reports on smallpox vaccination and that repeated occurrences of smallpox in already vaccinated children were, as a rule, kept secret. District authorities requested strictly putting into effect the proclamation of July 4, considering smallpox vaccination.

In May 1827, district head physician Karolj Bula submitted a report on carrying out preventive vaccination in "the previous year" within a well-known procedure. We must point to the fact that in the meantime, in summer of 1831, great epidemic of cholera raged through Hungary and at the end of July it reached Szeged, Subotica and Senta. In Senta, in less than two months 1700 people died. On August 7th, 72 deceased were buried at the Catholic cemetery and 15 at the Orthodox. It is interesting that Karolj Bula, the district head physician, was in Senta during cholera epidemic and "fell ill" out of fear, playing the sick.

After the Revolution in 1848/49 was crushed at the territory of current Bačka and Banat (nowadays partly Romania) the Austrian administration created Serbian Vojvodina and Tamiš Regional Unit. The

nja. U maju 1850. godine jedan cirkular [16], koji je potpisao sreski načelnik Stevan Branovački, upućuje opštinske rukovodioce da: "svu moguću pažnju obrate dovodenju do uspeha cepljenja protiv boginja, te na njen spasonosni cilj i korisnost za čovečanstvo, radi toga naročito se zamoljavaju gospoda sveštenici, da sa propovedaonice daju na znanje narodu - i da ih obaveste o tome - da svi oni koji budu sprečavali i smetali izvršenje tog korisnog poduhvata - prema najvišem odlučivanju, biće podvrgnuti teškoj kazni".

Više vlasti su tražile izveštaj o sprovođenju istog, a mesni načelnici su ga dostavili overivši ga pečatom i potpisima [17]. Pošto je to važan dokumenat za senčansko zdravstvo toga doba, citiraćemo ga u potpunosti:

"Dole potpisani stim potvrđujemo, ponudivši i svoje svedočenje pod zakletvom, da je okružni hirurrg, gospodin Mihajlo Živković, 1848. godine kao tadašnji gradski hirurrg, početkom aprila meseca započeo cepljenje dece, i to neprestano i redovno produžio do kraja avgusta meseca, kako se to i u ranijim godinama dešavalo. O ovome svi mi potpisani imamo znanja po tome da smo pomenute godine, kao načelnici ovog grada na osnovu svoje dužnosti, a po višim naredenijima, uticali na cepljenje dece, te o načinu sprovođenja, stekli smo detaljno obaveštenje, radi čije veće verodostojnosti šaljemo ovo pismo-uverenje. U Senti, 24. avgusta 1850. godine".

Dokument overen pečatom grada, potpisali su tadašnji sudija Mihalj Gazdag, posednici Jožef Boroš i Ferenc Sekfi, porotnici: Mihalj Bobanj i Istvan Keceli s jedne strane, kao i gradski interni lekar dr Jožef Čendič, sudija Lazar Pecarski i porotnici Vasilije Branovački i Mihalj Salai.

Možda još interesantniji dokumenat, u vezi sa cepljenjem protiv boginja, potiče iz iduće godine. [18].

"Dole potpisani birov i Veće grada Sente stim priznavajućim svedocima o tome da je u okviru našeg mesta broj dece koja se godišnje cepljenju podvrgavaju, redovno preko četiri stotine, u 845-oj godini 425, u 837-oj 458, kako to dokazuju ukoričeni zapisnici, sastavljeni pomenutih godina i čuvani u arhivi grada. O čijoj verodostojnosti dajemo naše svedočanstveno pismo, sastavljeno u overenom obliku. U Senti, 25. februara 851. godine".

Pismo overeno pečatom grada su potpisali birov Đerd Olajoš i porotnici Lazar Pecarski, Vasilije Branovački i Šandor Malešević.

Primena vakcine protiv boginja 30-40-ih godina XIX veka ne može se smatrati novinom. Vakcina protiv velikih boginja je u Engleskoj pronadena već 1796, a potom i na evropskom kontinentu upotrebljavana od 1799. godine. U Mađarskoj, u prvoj polovini prošlog veka, zakon još nije uveo obavezno cepljenje, tako da je eventualna primena zavisila od viših upravnih organa. Donošenjem zakona 1876. godine vakcinacija protiv velikih boginja postala je obavezna.

new province was divided into districts, regions and areas. Apart from the town of Senta the region of Senta consisted of Martonoš, Old Kanjiža and Ada. The district head officer was Stevan Branovački.

Official acts contributed a great deal to good reputation of the county health care and represent reliable evidence of widespread vaccination against smallpox. In May 1850, a circular announcement [16], signed by district head officer Stevan Branovački instructed township authorities to "Pay great attention to successful vaccination against smallpox considering its benefits and advantages for mankind. Priests are especially requested to inform people, when delivering sermons, that all those who interfere with accomplishing this useful undertaking will be severely sanctioned according to the decision of highest authorities."

Legal authorities requested reports on vaccination and district head officers had to deliver them signed and sealed [17]. Being of special importance for health services in Senta it is cited in complete:

"We, signed below, hereby certify, offering our testimony under oath, that in 1848 the current district surgeon, Mr. Mihajlo Živković, started vaccination of children at the beginning of April, and had done it regularly till the end of August, as well as in previous years. All of us signed below are familiar with this as district officers on the basis of our responsibilities and according to your orders considering vaccination of children, ways of conducting it and we have been informed about it in detail, sending this letter - certificate for higher credibility. In Senta, August 24, 1850."

This document had been verified by town seal and signed by judge Mihalj Gazdag, landowners Jožef Boroš and Ferenc Sekfi, jurors Mihalj Bobanj and Istvan Keceli from one side and by town internist Dr. Jožef Čendič, judge Lazar Pecarski and jurors Vasilije Branovački and Mihalj Salai.

An even more interesting document considering vaccination against smallpox originates from the following year [18].

"The policeman signed below and the City Council of Senta confirm that in our city the number of vaccinated children is regularly over four hundred: in 1845 it was 425, in 1837 it was 458 and it may be seen in records of the aforementioned years, kept in the city archives. This letter is to certify about the credibility of aforementioned. In Senta, February 25, 1851."

Vaccination against smallpox in the thirties-forties of the 19th century, cannot be considered an innovation. Vaccine against smallpox was discovered in England in 1796 and its application on European continent started in 1799. In Hungary during the first half of 19th century vaccination was not regulated by law and it mostly depended on administrative authorities. Passing the law in 1876 vaccination against smallpox became a legal obligation.

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