Review

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# ABOUT THE BEGINNINGS OF ORGANISED EDUCATION IN OBSTETRICS IN RIJEKA AND THE FIRST MIDWIFE TEXTBOOK IN CROATIAN

In memory of my professors at the Medical Faculty in Rijeka (1960-1966)

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#### **SUMMARY**

At the beginning of the  $18^{th}$  century, midwives from the inland were taught and examined by local physicians and surgeons, and even some priests. Midwives from Rijeka took examinations first in Trieste and later in Rijeka. The examiner was Dr Xavier Graziani, the famous physician in Rijeka and health organizer in the second half of the  $18^{th}$  century.

In 1786, the first Midwifery School was founded in Rijeka together with the first Maternity Hospital, the oldest in Croatia. That school did not last long and was closed in 1799 after the death of Dr Jacob Cosmini who. founded the school, managed it, trained and examined the midwives.

The second part of this review includes a part of an unpublished manuscript (145 pages of text and 12 tables and drawings) of a textbook for midwives written by Dr Ivan Carrobi in 1795. Had it been published, it would have been the first illustrated medical textbook in one of the south Slavic languages. It is possible that Dr Carrobi wrote it in order to succeed Dr Jacob Cosmini in Rijeka's first Midwifery School. That attempt was not successful. Throughout the 19<sup>th</sup> century there were no training schools for midwives in Rijeka.

**Key words:** history of medicine, 18<sup>th</sup> century, midwife school, midwife books, Croatia, Rijeka

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### THE FIRST MIDWIFERY SCHOOL IN RIJEKA

The oldest known training school for midwives in Croatia was established in Rijeka in 1786 under the guidance of the town surgeon Jacob Cosmini. However, it was not a state school but a municipal one, and did not last long before it was closed. Evidence of midwife training in Rijeka and the surrounding area date back to the beginning of the 18th century. At the time, midwives received training from local physicians, surgeons and sometimes priests. After a certain time they had to take exams which at first were not mandatory, especially not in small places, whereas things were different in Rijeka. Around 1755, Rijeka midwives had to take exams in Trieste where they were examined by the city physician Filippo Gobbi. That same year The City Council of Rijeka refused to send any more midwives to Trieste for training, explaining that Rijeka itself had Professori della Medicina Eccellentissima, niente inferiori, (than those of Trieste). At that time Dr Saverio Graziani worked and organized the health service in Rijeka with such high competence and skill that he gained respect and admiration of all the citizens and spent 40 years working there. With all his duties, Dr Graziani also examined midwives and issued certificates of competence in midwifery, so there was no need to send them to Trieste any longer [1,2].

According to Viezzoli [3] in 1785, it was strictly obligatory for midwives who wanted to be admitted to civil service to pass exams in schools for midwives in Vienna or Budapest. For that purpose, Dr Matija Cerutti, a Rijeka physician, proposed that he too should enter civil service so as to be able to give the midwives lectures in obstetrics. This proposal was rejected, but on 19 July 1786, Jacob Cosmini, a surgeon at the Hospital of Holy Spirit in Rijeka assumed that position. He was also entitled to run the newly founded School for Midwives recruiting "women of Rijeka and Bakar", which was started in Rijeka in August that same year together with the first Maternity Hospital, the oldest in Croatia [1,3,4]. Unfortunately, the first School for Midwives in Rijeka and the whole of Croatia did not last long and, according to available information, it was closed down when Dr Cosmini died in 1799 [1].

During the 19<sup>th</sup> century, there was no schools for midwives in Rijeka and not even physicians of that period excelled in obstetrics and gynaecology, even though there was a ward in Rijeka hospital called a maternity ward since 1823.

## JACOB COSMINI AND IVAN CARROBI - PROMOTERS OF MODERN OBSTETRICS IN RIJEKA

Dr Jacob Cosmini was born in Rijeka in 1733 and finished surgical school in Rome. As soon as he left school, he assumed the position of a surgeon at the Hospital of Holy Spirit hospital in Rijeka. In 1768, he was appointed town surgeon and together with Dr Mašić called for an amendment that would shift the affiliation of their medical school from Vienna to Italian medical schools.

Their request was not granted. Even though he could not afford it, Dr Cosmini wanted to do a doctorate and managed to get financial aid from Rijeka municipal treasury in 1780, leave for Vienna and complete doctoral research on medical aphorisms. Having returned to Rijeka, he continued working as the town surgeon until he was appointed the first lecturer at the newly founded Midwifery School. He died in Rijeka in 1799 [4,5].

Surgeon Ivan Carrobi was originally from Senj and held the position of an army physician in Karlobag. Although he was not from Rijeka, he was connected with the town through a book he wrote, but which has never been published. Although little is known about his life and work, the story has it that he finished the Josephinum in Vienna and became physician with the Austrian navy and later municipal surgeon in Karlobag. His textbook for midwives, written in Croatian and never published, still found its place as a piece of scientific work in Kukuljević's bibliography [6,7]. It is believed that Carrobi wrote it to establish himself as Cosmini's successor at Rijeka Maternity hospital and as professor at the Midwifery School. Sadly enough, neither happened because the Midwifery School ceased to exist after Dr Cosmini's death [1,3,4].

### THE FIRST TEXT BOOK FOR MIDWIVES IN CROATIAN

CSAST OBNASSAN BABI PUPKORIZNIZI HORVATINKI ijlli Kratka navucsenja dostojna babu pupukoriznizu od szellih horvatzkih, slovinskih, ij Dalnato Liburniacskih, nek znade, kako u potribi imade pmochi i koliko josz churvatisze neuzrokovati teska, trudna,ij od pogibel rodjenja, svojim domorodnim rodjenizam sakupljena, ij tomacsena, u ovome jaziku horvatskomu iz knjigah pripuschanih diachkih, ij Talijanskih, od Gospodina Bar-De Van-Swit i koliko josz od Gosp. Augiera Dufot - Proszvitelna i prilikami nikoje, razglaszeod Gospodina Lorenca Heiser, ij Gospodina Raphaela Ivana Staidelle - Obcsinski Mudroznanczi, ij Navuchiteli od rodjenjah u Bechu - Sloxena po

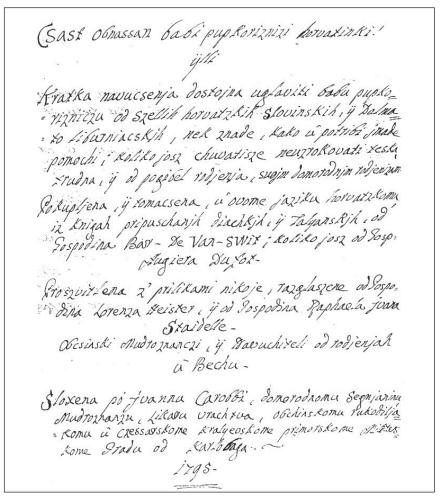


Figure 1 The titlepage of the manuscript of Carrobi's textbook

Ivannu Carrobi domorodnomu Segnianinu, Mudroznanzu, Likaru vrachtva, obchinskomu rikodiljakomu u czessarskomu kralyevskome primorskome Militarskome Gradu od Karlobaga - 1795.

The textbook was written in old Croatian and, according to Bazala, the title very loosely translates to "Knowledge or a short instruction for midwives from Croatian, Slavic and coastal districts, so as to be able to help women in labour and save them from hard, difficult and deadly childbirth" [8]. The writing of this book was motivated by numerous

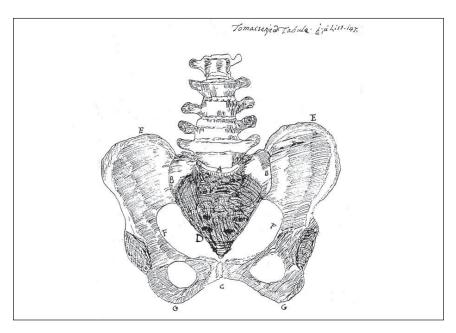


Figure 2 Carrobi's drawing of the osseous part of the birth channel

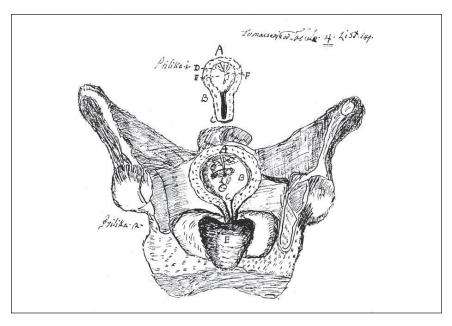


Figure 3 Carrobi's representation of the location of gravide uterus with a foetus within the pelvis

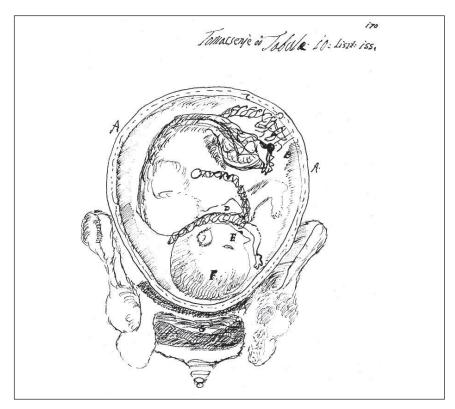


Figure 4 Normal position of the foetus in the womb at advanced pregnancy

cases of tragic deaths of women and newborn babies caused by ignorance and inexperience of unskilful 'midwives' who made even easy and normal deliveries difficult and deadly.

The unusually long title of Carrobi's textbook refers to the works of Van Swieten, Anne Amble Augier - Dufot, Heister and Steidelle. Carrobi had probably listened to the lectures of the most prominent professor of child delivery in Vienna at the time, Dr Raphael Steidelle, although it is a little confusing that he also used the textbooks of French authors, which was not usual among obstetricians of the Habsburg Monarchy, especially because French school of obstetrics was not as appreciated as the school in Vienna, the leading institution in the field at the time. Carrobi wrote his text book in order to establish himself as Cosmini's successor at the position of professor at Midwifery School and

chief of staff of the Maternity Hospital in Rijeka. He dedicated his work to a very influential Bishop of Zagreb Maksimilian Vrhovac, expecting his support with printing and publishing of the book in return. Although never printed, the textbook is a completed manuscript, now kept at the Metropolitan Library in Zagreb [9,10]. The textbook was written in 1795; it contains 145 pages of text and 12 tables with drawings, attached to the end of the manuscript.

Like Steidelle, Carrobi wrote his book in the form of questions and answers, with a midwife asking the questions and a professor giving the answers. The whole text is represented in the form of a dialogue, which made it easy for common women with very little or no education at all to read and understand it. In addition, the text written in this form could hold the attention of the reader unaccustomed to learning from books.

Carrobi adjusted the style and vocabulary to common language, especially in respect to medical terminology. Thus he called labours "hipi", pelvis "medenicza", vagina "noxnisza", pelvic brim "prostorom od ustupljenja", uterus "maticza", uterine mouth "vuszta maticze" etc.

He divided his book into five parts, and the latter into chapters and remarks. The first part is about the anatomy of genitals, the second about pregnancy and birth, the third about proper child delivery and the fourth about improper child delivery. The fourth part is the most voluminous and describes a number of improper foetal positions during delivery and possibilities for their correction. The fifth part gives a description of the delivery itself, of extrauterine pregnancy and gives instructions on how to prepare medicines which, in Carrobi's opinion, midwife should be familiar with [9,11]. Obviously, the author himself was familiar with herbal medicine. Herbs mentioned in his manuscript are still used in pharmacotherapy as additional remedies. Some of them are the common mallow (Malva silvestris), flax (Linum usitatissimum), chamomile flower (Matricaria Chamomila), lemon balm (Melissa officinalis) senna leaves (Sennae folium), creeping thyme (Thymus serpyllum), and marjoram (Majorana Hortensis Moench) [12].

Follows the description of 12 tables with drawings placed at the end of the manuscript. Although Dr Carrobi's drawings may look a little unskilled, they are true to the facts. The first table shows pelvic bones and the lumbar backbone while the second contains three drawings, one of which represents a schematic description of the uterus and vagina, and the other two structural relations between the urinary bladder, urethra, vagina, uterus and rectum as well as a foetus tied with the umbilical cord

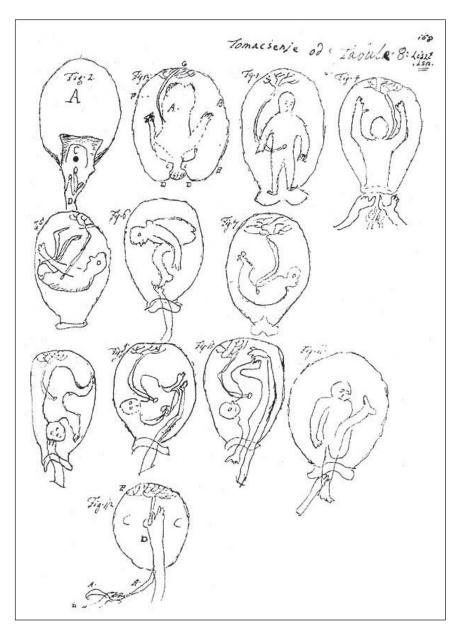


Figure 6 Various positions of the foetus in the womb according to Carrobi

to placenta. The third table shows the bony part of the pelvis viewed from a different angle and the fourth the position of the uterus in relation to pelvic bones. The fifth table shows a foetus with placenta and the sixth a fetus and placenta in the uterus. The seventh table shows the position of a foetus with the head high upright as the normal foetal position during delivery. This position was considered normal because the inner head rotation was still unknown. In table eight, 12 drawings show different positions of the foetus in uterus and the grips for its rotation and extraction. Table nine shows the diagonal position of the foetus, number ten shows the frontal position of the foetus with the umbilical cord round its neck and table eleven shows the so called "Delineatio vectis illa Ronhuysianus" used in case the foetus delivery went too slowly (abandoned long time ago).

The last, twelfth table, contains the drawings of Calendulla and Herba felix mas. The author does not explain their use [9,11].

### **CONCLUSION**

As it had earlier been said, the manuscript has never been published. If it had been published, it would have been the first illustrated medical textbook in one of the south Slavic languages and, by all means, a worthy incentive for the development of midwifery not only in Rijeka and its surroundings, but also in a wider area. Although the author did not achieve his primary goal, the effort of medical historians from Rijeka to finally publish Carrobi's manuscript with annotations is certainly worthy of praise. Hopefully, after more than 200 years of delay, the first Croatian obstetric manual will see the light of day, not only to serve its primary purpose, but also to testify the high level of obstetric theory and practice in this area at that time.

### SOURCES AND BIBLIOGRAPHY

- Korin N. Vrbanić D. Razvoj opstetricije u Rijeci u 18 stoljeću. (Development of obstetrics in Rijeka in the 18 century). Zbornik radova Naučnog skupa Saveza naučnih društava za istoriju medicine Jugoslavije, Tuzla, 1985.
- Škrobonja A. Škrobonja Anica. Primaljska škola u Rijeci 1876 početak sestrinskog školstva u Hrvatskoj. (Midwife school in Rijeka in 1876 - the beginning of nurse education in Croatia). Izvještaj CUOKUZ "Mirko Lenac", Spomen knjiga 1627 -1987. pp. 79-80.

- Viezzoli G. Contributi alla storia di Fiume nel Settecento. "Fiume" Rivista semestrale della "Società di studi Fiumani". Fiume: Stabil. Topograf. de "La vedetta d' Italia" 1933., XII: 171.
- 4. Bazala V. Povijest rodilišta u Hrvatskoj. (History of maternity hospitals in Croatia). Zbornik radova XII Naučnog sastanka NDZIZK Jugoslavije, Beograd, 1964.
- Grmek M. D. Inauguralne disertacije hrvatskih, srpskih i slovenačkih liječnika (1660 - 1865) (*Inauguration dissertations of Croatian*, *Srebian and Slovenian physicians*). Starine, 43, Zagreb: JAZU, 1951., pp.79-258.
- 6. V. Di. Cosmini Jakob. Hrvatski biografski leksikon.(*Croatian biographical lexicon*). Zagreb: Jugoslavenski leksikogrsafski zavod, 1989., p. 709.
- 7. Kukuljević Sakcinski I. Bibliografija hrvatska (*Croatian bibliography*). Zagreb: Brzotisak D. Albrehhta, 1860.
- 8. Bazala V. Crteži u rukopisnom babičkom priručniku dr. Ivana Karobija iz 1795. godine (*Drawings in Dr. Ivan Carrobi' s 1795 midwife manuscript*). Acta hist med Pharm. Vet 1964; 4(1-2):159-70.
- 9. Carrobi I. Ars obstetricia. Csast obnassan babi pupkoriznici horvatinki... Karlobag, 1795. Manuscript in National and University library in Zagreb, Metropolitane library. Sign. MP 122.
- Tartalja H. O medicinskim rukopisima u Metropolitanskoj knjižnici u Zagrebu.
  (On medical manuscipts at the Metropolitane Library in Zagreb). Saopćenja 1970., 287-92
- 11. Maksimović J. Škole za babice i njihovi udžbenici na tlu Jugoslavije (1753-1960.), i njihov doprinos razvoju akušerske službe, doktorska disertacija, Univerzitet u Novom Sadu, Medicinski Fakultet, Novi Sad, 1993., str. 104-118. (Schools for midwives and their text books in Yugoslavia (1753-1960) and their contribution to the development of obstetric service). Doctorate dissertation, University in Novi Sad, Faculty of Medicine, Novi Sad, 1993, p.104-118.
- 12. Frković Aleksandra, Škrobonja A, Nosić M., Frković A., Tonković M. Use of phytotherapy in the 18 th century according to midwife manual of dr. Ivan Carobi. In: Škrobonja A. ed. Proceedings of International Symposium for history of medicine Thalassotheraphia '90. Crikvenica 24-26. May 1990. Rijeka; Scientific society for history of health culture, 1990, p.64.