

Medieval Midwifery in Treatises on Obstetrics: Hungary and the Western World

Who assisted at childbirths in medieval Western Europe? What functions did midwives carry out, and what obstetric treatises were available for physicians and, indirectly, midwives? What interventions were made possible by the scientific knowledge of that era? What were the standards of child care in the medieval period? What beliefs and religious-magical rituals governed childbirth? My paper addresses these questions and attempts to enrich the findings published in international literature with some examples from Hungary.

1. Assisting women in labor

In the early medieval period, it was almost exclusively women who assisted at childbirths. For centuries, male physicians stayed away from normal delivery and the treatment of gynecological diseases (this was basically the case up to the modern era, heralding a new age in obstetrics¹). The women assisting at childbirths (*mulieres*) were mostly female family members and neighbors,² although the function of midwives certainly existed even before its twelfth-century professionalization, albeit with no formal training or education. In the absence of systematic education, qualifications or scientific knowledge, which were the privilege of very few people, the knowledge of assisting with childbirth was based on non-theoretical, oral sources of experience-based information, mixed with science, religion, and magic. Male physicians, surgeons or barbers intervened only in cases of problematic delivery or complications. Such cases included the removal of the dead fetus from the mother's body or caesarean section on a dead mother. Women's gynecological examinations, however, were exclusively carried out by women (mainly midwives, or in legal proceedings often matrons).

¹ See Wilson, A.: *The making of man-midwifery: childbirth in England 1660-1770*. London, 1995 (Wilson 1995). Green, M. H.: *Making Women's Medicine Masculine: The Rise of Male Authority in Pre-Modern Gynaecology*. Oxford, 2008 (Green 2008).

² Foscati, A.: La scena del parto. Nascita del corpo e salvezza dell'anima tra religione, medicina e "magia" nell'alto medioevo. In: *La presenza dei bambini nelle Religioni del Mediterraneo Antico. La vita e la morte, i rituali e i culti tra Archeologia, Antropologia e Storia delle Religioni*. Ed. C. Terranova. Roma 2014 (311–337), 311 (Foscati 2014).

The presence of the midwife was indispensable even when a medical-surgical intervention had to take place, as evidenced by the *Chirurgias* (surgical textbooks) and the miniatures in chronicles.

One male, however, may have appeared around a woman in labor: a church representative. His presence was justified by the need to quickly baptize the child in danger, to administer extreme unction for the dying mother or to assist in reading the prayers for facilitating childbirth, or in some other religious-magical procedure.

Legal documents from the twelfth through fourteenth centuries reveal some of the tasks of midwives (they were commissioned, for example, under the rules of Stephen III and Andrew II of Hungary, to carry out forensic virginity examinations) as well as the regulation of their activities. In fourteenth-century German cities such as Nuremberg and Konstanz, the city also employed midwives. In the fifteenth century, sworn and non-sworn midwives were distinguished,³ and such distinction clearly indicates regular midwife training. The first European city to officially regulate the functions of midwives was Brussels, in 1424. There, the priest of Saint Gudula church, together with the city's physician, appointed five chief midwives who then selected suitable candidates for the task. A decree in 1424 threatened to impose strict punishment for the unlawful use of the title and office of the city's midwife, and it defined her official salary.⁴ In Hungary, the first permanent position for a midwife (*Stathebam*) was appointed in Kassa in the sixteenth century. In 1557, her salary amounted to 4 cubes (that is, 4 times ca. 65 litres) of grain, and in 1580 it amounted to 25 *denarii*. The example of Kassa was followed by Besztercebánya in 1585, and Sopron in 1598.⁵ In the sixteenth century, it was frequent to hire midwives from afar: prior to the defeat in the battle of Mohács, Hungarian nobility and royalty frequently called midwives from Italy, whereas later they were mainly invited from German-speaking areas.

2. Treatises on obstetrics, and "textbooks" for training midwives

³ Korbuly, Gy.: A magyar szülészet bölcsőköre [The dawn of Hungarian obstetrics]. *Orvosképzés* 26 (1936) 169 (Korbuly 1936). Greilsammer published his English translation to the oaths taken by midwives in Brussels. These oaths served as a pattern for other cities in the Low Countries. Midwives, by this oath, swore to practice and fulfil their profession and help every woman in need without refusing anyone. Greilsammer M.: The Midwife, the Priest, and the Physician: The Subjugation of Midwives in the Low Countries at the End of the Middle Ages. *The Journal of Medieval and Renaissance Studies* 21 (1991) 285–329, 298 (Greilsammer 1991).

⁴ Greilsammer 1991 (f.n. 3) 302.

⁵ Szállási, Á.: A magyar szülészet története 1912-ig [History of Hungarian obstetrics until 1912]. In Lampé L.: *A magyar szülészet-nőgyógyászat története [History of Hungarian obstetrics and gynecology]*. Budapest 2009 (19–43), 23 (Szállási 2009).

The two influential textbooks aimed specifically at training midwives were the second-century treatise by Soranus of Ephesus, entitled *Gynaikeia*, and Eucharius Rösslin's 1513 work, *Der Rosengarten*. During the more than 1300 years between the two works, many gynecological and obstetric treatises were written (mostly based on each other), which, however, did not address midwives as their target audience but males who could read Latin (surgeons, physicians, (healing) monks); yet they mentioned midwives here and there as a secondary audience⁶ (mainly as passive illiterate listeners).

The academic treatises on obstetrics available in the early Middle Ages were Latin translations and rewritings of Soranus' *Gynaikeia*, as well as Hippocrates' and Galen's gynecological works.⁷ Even in the ninth through eleventh centuries, it was typical of codices on gynecology and obstetrics to elaborate on, or reiterate details of, the treatises from Antiquity instead of communicating contemporary results in the field of obstetrics.⁸ However, the knowledge of midwives was not exclusively based on the obstetrical and gynecological treatises addressed indirectly or directly to them, nor only from personal training, but also on their intimate familiarity with herbs and herbal recipes.

In the eleventh and twelfth centuries, however, written words gradually replaced oral tradition as the means for transferring knowledge, creating a new professional community, enlarging and reforming the former, more personal, master and apprentice relationship.⁹ The high and late Middle Ages witnessed the compilation of nearly 175 texts on gynecology.¹⁰ Of course, according to medieval tradition, these texts largely depended on each other, so their authors and sources are often matters of philological inquiry. The most important works are related to the Salerno School of Medicine, whose nature was fundamentally defined and shaped by Constantinus Africanus (eleventh century) who translated Arabic medical treatises into Latin, and thus made them available in Italy.

Three treatises, which have come down to us under the title "Trotula", were extremely popular in their age (*Liber de sinthomatibus mulierum*, *De curis mulierum*, *De ornatu mulierum*). These can be associated with the Salerno School of Medicine, as they are

⁶ Green 2008 (f. n. 1) 146–147.

⁷ Beccaria, A.: *I codici di medicina del periodo presalernitano (secoli IX, X e XI)*. Roma 1956, 24 (Beccaria 1956).

⁸ See: Beccaria 1956 (f. n. 6).

⁹ Agrimi, J. – Crisciani, C.: The Science and Practice of Medicine in the Thirteenth Century according to Guglielmo da Saliceto, Italian Surgeon in: *Practical Medicine from Salerno to the Black Death*. Ed. L. G. Ballester – R. French – J. Arrizabalaga – A. Cunningham, Cambridge, 1994, 60–87 (Agrimi – Crisciani 1994).

¹⁰ Green, M. H.: *Women's Healthcare in the Medieval West. Text and Contexts*. Burlington 2000. *Appendix. Medieval gynecological texts: a handlist* (Green 2000).

attributed to an eleventh and twelfth-century female physician from Salerno, a professor of the university, by the name of Trota. The first two treatises also cover the topics of gynecology and obstetrics, but they certainly do not come from the same author. *Liber de sinthomatibus mulierum* (“Book on the Conditions of Women”) charts the fields of menstrual problems, prolapse syndrome, uterine migration, facilitating conception, infertility, pregnancy, and contraception. Mainly magical therapies are suggested as remedies for these ills. The recipe for infertility, for example, is as follows: if you wish to have a baby boy, the husband should dry the uterus and the vagina of a hare, and drink it; while the wife should do the same thing with the testicles of a hare.¹¹ If a woman does not want to conceive, however, she should wear under her dress, against her nude flesh, a goat’s uterus which has never had offspring; or to castrate a weasel, release the animal, and carry the testicles wrapped in animal skin with her in her bosom.¹² By doing so, she will prevent conception.¹³ The midwife’s duties are mentioned in connection with the preparations for childbirth¹⁴ and problematic childbirth¹⁵. The advice for women in labor is to consume herbal drinks, smell fragrant herbs and aromas (musk, oregano, mint) and wear coral suspended from the neck. One recipe suggests that the woman in labor should dissolve in water, and drink, the white material found in the excrement of a hawk.¹⁶

Unlike the *Liber de sinthomatibus mulierum*, the second treatise, genuinely attributable to Trota, *De curis mulierum*, represents a much more pragmatic knowledge and a more competent attitude. Trota mostly provides actual, medically justifiable advice based on the experience of assisting at childbirth; in other words, she offers more than a mere compilation. Solutions given to birth problems (such as perineal tear or prolapse syndrome)¹⁷ testify to a more pragmatic attitude of the author; for example, she deems it necessary to stitch the rupture.

¹¹ *De impedimento conceptionis*. In: *The Trotula: a medieval compendium of women's medicine*. Ed. M. H. Green, Philadelphia 2001, 94–95 (*The Trotula*, ed. Green 2001).

¹² *De nolentibus concipere*. In: *The Trotula*, ed. Green 2001 (f. n. 11) 96–97.

¹³ In contrast, Hippocrates and Soranus were aware that there are suitable and unsuitable periods for conception within the cycle; and their recipes contain genuinely contraceptive / abortive herbs, such as mauve, white and black wormwood, aloes, laurels, and ginger.

¹⁴ *De regimine parturientis*. In: *The Trotula*, ed. Green 2001 (f. n. 11) 104–105.

¹⁵ *De difficultate partus*. In: *The Trotula*, ed. Green 2001 (f. n. 11) 98–105.

¹⁶ This is followed by a month-by-month description of the development of the fetus, the methods to care for the new-born, and the selection of the nursing nanny – which this work takes over from Rhazes. The book draws heavily on Rhazes, especially prescriptions, which must have made it extremely difficult for readers to obtain some of the ingredients (such as gum arabic, which was discovered by European seamen as late as the fifteenth century). The activities concerning care for the new-born also stem from the Persian author.

¹⁷ *The Trotula*, ed. Green 2001 (f. n. 11) 124–127.

Medieval Western Europe came to know numerous Arabic and Greek scientific treatises in the Latin translations of the Italian-born Gherardo da Cremona who was mainly active in Toledo (twelfth century). A Latin copy of Albucasis' *Chirurgia*, translated by Gherardo da Cremona, is held at the ELTE University Library in Budapest (Cod. Lat. 15).¹⁸ Judging from the miniatures of the codex, it was probably produced in Bologna in the 1280s.¹⁹ The obstetrical–gynecological significance of the Albucasis Codex is due to its discussions on improper fetal positions (PICT1) along with its suggestions to midwives for manual or tool-assisted solutions (Cod. Lat. 15, 24 v: *Capitulum septuagesimum quintum ad docendum obstetrices*). The miniatures of the codex provide a unique insight into the medical practices of the age; it also includes illustrations on 225 medical devices. Rösslin's *Der Rosengarten* (1513) is regarded as the first vernacular textbook in Europe for training midwives. However, the two works on obstetrics and gynecology of the mid-fifteenth-century, Ferrara-based physician Michele Savonarola were important sources for Rösslin.²⁰ Out of his works based on Galen, Rhazes and Avicenna, the relevant chapter of the *Practica maior* was written in Latin for students of medicine, whereas the other, *De regimine pregnantium*, was intended for women in Ferrara, and was written in Italian. Savonarola, taking into account the different expectations of his two target audiences, treated the topics of pregnancy, childbirth, and neonatal care rather differently: he did not burden the Ferrara noble ladies with gynecological pathography or details of medical interventions, yet he wrote in detail about the age in which it is recommended to bear children, and the diet women should follow if they want a baby boy. The work directly addresses midwives too; for example, instructions for treating new-born babies are meant directly for them (tract. III. I: *Come havere se debbe la obstettrice circa il fanzuoletto novamente nato*).

3. Applied practices: the tasks of midwives and obstetric interventions

3.1 The tasks of midwives

¹⁸ The codex, together with 34 other Corvinae, was returned to the academic community of Budapest by Sultan Abdul Hamid II in 1877. The volumes were brought to the Ottoman Empire after the 16th century Ottoman occupation of Buda. It is not certain however that the Albucasis Codex in fact belonged to the library of King Matthias. The author wishes to thank the University Library of Budapest for allowing the publication of the images.

¹⁹ Berkovits, I.: A budapesti Egyetemi Könyvtár Albucasis-kódexe [The Albucasis codex of the ELTE Library in Budapest]. *Magyar Könyvszemle* 61 (1937) 229–240, 229 (Berkovits 1937).

²⁰ See Green M. H.: The Sources of Eucharius Rösslin's 'Rosegarden for Pregnant Women and Midwives (1513) in *Medical History* 53 (2009) 167–192 (Green 2009).

In medieval Christian Western Europe, childbirth was not regarded as a series of interventions in line with medical prescription and under medical supervision, but as a natural process under the surveillance of a midwife and her assistants, as well as close female friends and acquaintances. At that time, the ways to conduct a trouble-free delivery were not different from the methods described by Soranus. This can be attributed to the *translatio studii*, the transmission of ancient theoretical knowledge (Soranus' teachings were transmitted by Muscio's and Caelius Aurelianus' translations, summaries, and spread by many medieval treatises mainly based of Muscio's texts), just as well as it was due to the fact that birth as a physiological process has remained unchanged over the course of millennia: a woman in labor and a new-born infant have basically needed the same help and care.

Let us consider now some of the typically medieval features, procedures, and interventions for assisting childbirth. In the Middle Ages, midwives did not only assist in the care in childbirth: women turned to them with all their problems related to gynecology, pediatric disorders, breastfeeding difficulties, and cosmetic issues. The midwife offered advice and recipes to those wishing to have a baby or to avoid having a baby. Trota proposes various baths, herbs, and nourishment²¹ depending on the body-frame and type, while the author of the *Liber de Sinthomatibus Mulierum* proposes *theodoricon euporiston* as well as a vaginal suppository made from *trifera magna* and musk if the conception is impeded by the fault of the woman.²² It was the midwife to care for and provide advice to pregnant women on all issues related to their condition, with particular regard to antidotes against spontaneous abortion. In addition, women also asked for their help with abortion given that an unwanted child, especially a child born out of wedlock, could result in a total social isolation and existential failure for a medieval woman.²³ Following St. Ambrose and St. Augustine, abortion was considered murder from the moment the fetus took up human form (*formatus*).²⁴ The Augustinian concept held that God gives the fetus its immortal soul at a certain stage of the fetal intrauterine development (while its body is being formed); that is to say, it then becomes a human being. In the Middle Ages, many theologians, philosophers, and legal authorities further developed this concept. As a result of this process, the Christian doctrine

²¹ *De Curis Mulierum*, In: *The Trotula*, ed. Green 2001 (f. n. 11) 120–123.

²² *The Trotula*, ed. Green 2001 (f. n. 11) 112–115.

²³ See Shahar S.: *A negyedik rend. Nők a középkorban [The Fourth Estate: A History of Women in the Middle Ages]*. Budapest 2004, 165–167 (Shahar 2004).

²⁴ Elsackers, M.: The Early Medieval Latin and Vernacular Vocabulary of Abortion and Embryology, In: *Science translated. Latin and vernacular translations of scientific treatises in medieval Europe* Ed. by M. Goyens – P. De. Leemans – A. Smets., Leuven 2008, 377–414 (Elsackers 2008).

increasingly came to differ from its ancient sources, as well as from Jewish tradition, which stated that the fetus can be regarded as a human being only from the moment of birth.²⁵

From the fifteenth to the seventeenth century, fetal expulsion was a common accusation of witches, due to *Malleus maleficarum* (1487), which planted the witch–midwife correspondence in the public consciousness.²⁶ In Debrecen, a lawsuit of the year 1681 was directed against Mrs. Lukács Csonka, and ended with her burning at the stake for fetal expulsion.²⁷

It was the midwife's task to diagnose the dead fetus too (judging by the hardness of the stomach, the flattening of the breasts), and tried to expel it first by means of herbs (mainly black wormwood²⁸) or by external manipulation (by intensively rubbing the belly, or by making four strong men pull the corners of the linen sheet under the pregnant woman²⁹). The medieval *Chirurgias* treat the surgical removal of the dead fetus on the basis of Constantinus and Albucasis. Page 26r of the Albucasis Codex in Budapest contains a miniature depicting this intervention (*Cap. de extractione fetus mortui*). The miniature represents the operation in a special way: the mother, resembling a saint or a Byzantine empress, is lying on the operating table (in sharp contrast with the naturalistic representation of male patients depicted in the codex), with a pleated dress reaching beyond her ankle, with her wavy hair down to her waist. The decorative pillow under her head is being adjusted by a midwife; while at the bottom of the dress there is a physician pointing to the mother, but turning to Albucasis' figure outside the miniature with an inquisitive facial expression. (PICT2)

Certainly, the most important task of midwives was always to assist at childbirth, where – as in 1596 Scipione Mercurio states about midwifery, which for him is not so much about words but deeds – the slightest mistake may be irreparable.³⁰ Similarly to Soranus, Mercurio orders two assistants beside the midwife: one is to hold the woman in labor while the other consoles her and gives her breathing advice.³¹ According to Mercurio, the accessories to childbirth included warm sweet almond oil, white lily oil, butter, chicken fat,

²⁵ Goodman, L. E.: The Foetus as Natural Miracle: The Maimonidean View. In *The Human Embryo: Aristotle and the Arabic and European Traditions*. Ed. G. R. Dunstan, Exeter 1990, 79–94 (Goodman 1990). See also: Park, K.: Birth and Death. In *A Cultural History of the Human Body in the Medieval Age*. Ed. L. Kalof, Oxford/New York 2010 (19–37) 21 (Park 2010).

²⁶ Kramer, H. – Sprenger, J.: *Malleus maleficarum*, Spira 1490, questio XXXIV (Kramer – Sprenger 1490).

²⁷ Szállási 2009 (f. n. 5) 26.

²⁸ See, e. g., in the herbarium of Péter Melius Juhász.

²⁹ *De fetu mortuo extrahendo* (in *De Curis Mulierum*), In: *The Trotula*, ed. Green 2001 (f. n. 11) 122–123.

³⁰ Mercurio, S.: La Commare o Ricogliatrice (1596). In: *Storia dell'ostetricia*. 1-2. Ed. G. Cosmacini. Milano 1989–1990. 1, 59 (Mercurio 1989).

³¹ Mercurio 1989 (f. n. 30) 54.

fenugreek decoction, rose water, rose vinegar and mauve, plus towels, scissors, and thread.³² The midwife holds the baby being born with her hands enveloped in white cloth, and then places it on a pillow. She should never put it on the ground like barbarians do, as the cold stone causes a terrible torment for the newborn.

According to the author, the midwife should not rush to cut the umbilical cord after the child is born, but she should wait until the placenta is born too. The baby is usually bathed in warm water with wine, and then some rose and myrtle oil and a little salt is to be rubbed on its skin. They should clean its nostrils and ear with a towel, and sweet almond oil is to be rubbed on its eyelids. Scipione also provides women in childbirth with accurate instructions and dietary advice, disapproving the habit that mothers with newborn children “eat more than two porters.”³³ Therefore, this is how, according to Mercurio Scipione’s description, a smooth-course childbirth occurred; a childbirth referred to in a medieval Hungarian private correspondence as a kind of birth that “God hath given in quietude”³⁴.

The skills and experience of the midwife came to the fore in the recognition and treatment of problematic childbirths, as both Thomas of Cantimpré and Michele Savonarola emphasized. The author of the *Liber de sinthomatibus mulierum* summarizes the possible causes of problematic childbirth as follows: the orifice of the uterus is too small, the woman in labor is too fat, the fetus is dead, or the orifice is too hard, which can be affected by the cold season or a lack of help. The proposed solutions include abundant lubrication of the abdomen, hip, and vagina with rose and violet oil; stimulation to sneeze; tying pepper-grass onto the abdomen; consuming magic spells written on cheese or butter; administering cast-off snake skin to the woman in labor;³⁵ or, in case of inappropriate fetal position, the midwife needs to adjust its position with her small and soft hands.³⁶

In the field of obstetrics, great breakthroughs occurred in the sixteenth century. At that time, tools and procedures were discovered which, after the necessary improvements over centuries, enabled successful interventions in the course of difficult and dangerous childbirths. In 1537, Ambroise Paré developed the surgical method of podalic version (which was partly a re-discovery, as Soranus had already described it); William Chamberlen designed a pair of forceps to extract a live fetus, but the device was perfectly improved only 150 years later. That century witnessed the first officially recognized caesarean section (the Mantuan

³² Mercurio 1989 (f. n. 30) 54–55.

³³ Mercurio 1989 (f. n. 30) 57.

³⁴ Szállási 2009 (f. n. 5) 23.

³⁵ *De difficultate partus*. In: *The Trotula*, ed. Green 2001 (f. n. 11) 98–103.

³⁶ *The Trotula*, ed. Green 2001 (f. n. 11) 98–103.

Cristoforo Bains executed it in 1540, though some attribute it to Nicolò de Falcon in 1491³⁷), and the first treatise on caesareans written by François Rousset in 1581, *L'hystérotomotokie ou enfantement césarien* (Paris).

The anatomical knowledge, which had not yet been available for medieval authors, was indispensable for these obstetric discoveries. Though, as revealed by Katharine Park,³⁸ autopsies did not become common until the sixteenth century; in fact, they were practiced from about 1300 onwards outside of universities, in the following occasions: funeral rituals (embalming); judicial tests on corpses; *sectio in mortua*; and when handling the relics of Christian saints.

The great advances in obstetrics were in large part the merit of Leonardo da Vinci, who observed and depicted the location of the fetus in the uterus in 1510–1512; as well as Andreas Vesalius, who came to Padua University in 1536 and began to perform autopsies on human corpses. The main work of Vesalius, the seven-volume anatomical treatise, *De Humani Corporis Fabrica*, contains the first scientific description of the uterus. His disciple, Giulio Cesare Aranzi, who taught at the University of Bologna – and was a teacher of Scipione Mercurio I often referred to in this paper – was the first to describe the pregnant uterus. Models of the human body appeared only later in education: anatomical wax models of artistic demand became widespread in the eighteenth century, including anatomical wax models of pregnant women with removable organs.³⁹

3.2 *Sectio in mortua* in the Middle Ages

The primary purpose of obstetric practice was the birth of the child and to keep it alive so at least it may be baptized. Two related doctrines of the Church go back to St. Augustine: first, Adam's descendants inherit the condition of original sin;⁴⁰ and second, baptism is necessary for spiritual rebirth.⁴¹ According to medieval theology, the soul of an unbaptized dead child

³⁷ *Enciclopedia medica italiana*. Ed. L. Vella. Firenze 1974, vol. 3, 1920. However, there are many other supposed instances of earlier successful caesarean sections, which were originally intended as *sectio mortua*, yet ended with the miraculous survival of the mother: according to a recent thesis of the Czech Antonin Parizek, this happened in 1337 in Prague when Beatrice of Bourbon (second wife of King John of Bohemia) was in labor.

³⁸ Park, K.: *Secrets of women: gender, generation, and the origins of human dissection*, New York 2006 (Park 2004).

³⁹ Among them, the most famous is the “Venerina” preserved in the Department of Obstetrics and Gynecology at the Museum of Palazzo Poggi in Bologna, produced by the Florentine Clemente Susini (1754–1814).

⁴⁰ This tenet was later confirmed by the Council of Carthage in 418.

⁴¹ Corblet, J.: *Histoire dogmatique, liturgique et archéologique du sacrement de baptême*. Paris 1881, vol I (Corblet 1881); Ed. C. De Clercq – P. Palazzini – G. Morelli: *Dizionario dei concili*. Roma 1963. Cited by: Filippini, N. M.: *La nascita straordinaria. Tra madre e figlio la rivoluzione del taglio cesareo (sec. XVIII–XIX)*. Milano 1995, 36 (Filippini 1995).

enters Limbo,⁴² and his body cannot be buried in sacred ground. The midwives performed an emergency baptism if the baby showed signs of life after childbirth, but there was some doubt that it could stay alive. The *sectio in mortua* aimed at saving the soul of a dead mother's child is defined as a religious and moral duty in *Summa Theologiae*;⁴³ while at the same time it forbade to kill the mother in order to baptize the child;⁴⁴ that is, it did not regard the caesarean section on a living mother as a cure, but clearly as murder.⁴⁵

Odon de Sully (Odo de Soliaco), bishop of Paris at the turn of the twelfth and thirteenth centuries, prescribed in the *Synodicae Constitutiones*: “Mortuae in partu scindantur, si enfans credatur, tamen si bene constiterit de orte earum.”⁴⁶ The Council of Canterbury in 1236 also ordered (as did the following one in 1280, in Cologne) to apply a *post-mortem* caesarean section along with several other birth-related instructions including the necessity for the woman to confess when birth pangs begin, or the duty of the midwife to take care of the availability of baptismal water. The Council of Trier in 1310 discusses the *sectio in mortua* in more detail: it clarifies that the pregnant woman must be operated on immediately after her death, and the child must be baptized if it gives signs of life, or it must be buried outside the cemetery if it is born dead.⁴⁷

For the first time, at the end of the thirteenth century, scientific literature (Bernard de Gordon, medical professor of Montpellier⁴⁸) discussed the *sectio in mortua*, but the first practical description was not compiled until the fourteenth century. Guy de Chauliac, in his *Chirurgia Magna*, described that the incision is to be made on the left side of the abdomen, avoiding the liver; and he also formulated the hypothesis that during the operation the mouth and the vagina of the pregnant woman are to be left open to allow the fetus to breathe.⁴⁹

As attested in the decrees, midwives also performed operations to save the fetus: a decree of 1452 in Reseburg in Bavaria prescribed that midwives were to make the caesarean immediately after the death of the mother;⁵⁰ while a Heilbronn and a Württemberg regulation

⁴² The concept of *limbus puerorum* (children's limbo) took shape by the twelfth–thirteenth centuries, and was decreed in 1234 in the *Decretalia* of Pope Gregory IX (to be abolished by Benedict XVI in 2007).

⁴³ “Si mater mortua fuerit, vivente prole in utero, debet aperiri, ut puer baptizetur” (l. III, q. 68).

⁴⁴ “Non debet homo occidere matrem ut baptizet puerum.”

⁴⁵ Filippini 1995 (f. n. 41) 37.

⁴⁶ Blumenfeld-Kosinski, R.: *Not of Woman Born. Representation of Caesarean Birth in Medieval and Renaissance Culture*. Ithaca–London 1990, 36 (Blumenfeld-Kosinski 1990).

⁴⁷ Filippini 1995 (f. n. 41) 37.

⁴⁸ Gordon, B. de: *Practica Gordonii, dicta Lilium medicinae*, Venetiis, 1496, cap. 7.

⁴⁹ The idea that the fetus breathes through the mouth of the mother goes back to Hippocrates. This view was represented as late as in the sixteenth century by Alessandro Benedetti, who proposed to use a wooden mouth gag to make sure the mother's mouth stays open.

⁵⁰ Blumenfeld-Kosinski 1990 (f. n. 46) 103.

set the same procedure, adding that the midwife had to be granted permission from a physician to perform the operation. Finally, the Frankfurt regulation to midwives (1573) enabled them to operate alone in the absence of a surgeon.⁵¹

4. Religion and magic in assisting childbirth: prayers and magical procedures to facilitate childbirth (some examples from Hungary)

The medieval practice of assisting at childbirth became ritualized: the incantations found in ancient sources, the *verba puerpera* received new, Christian forms, and became blessings for aiding the delivery; the role of the *okytokia* was taken over by the *Agnus Dei* and relics.

According to beliefs, relics could help to conceive a child of the wished-for sex, and not only in conception in general. According to story about the wife of Louis the Great of Hungary, Elizabeth, she was so desperate to have a male heir that in 1371, on her visit to the church of Zara (Zadar), she secretly cut off the little finger from the sacred relic of St. Simon, and she hid it in her bosom⁵² so that “God would all the more certainly hear her prayer at the altar for granting her husband’s fervent desire for an heir to the throne, aided by the intercession of the saints.”⁵³ Elizabeth, though, fell immediately ill;⁵⁴ she could not even leave the church, only after she openly confessed her sin, revealed her already worm-festered breasts, and returned the relic, which was immediately reattached to its original place on the left hand of the Saint.⁵⁵ Elizabeth donated a silver coffin for Simon’s body and, when she returned, she soon became a mother for the third time... but alas, the King was left, yet again, “without the solace of a son.”⁵⁶

However, relics, thaumaturgical and religious objects (primarily the *Agnus Dei*) aimed mainly to facilitate childbirth. Hildegard of Bingen (twelfth c.) in her *Physica* (IV, 7, PL, 197, 1255) spoke of a stone called “sard” (*sardius*) that accelerates birth if placed on the genitals of

⁵¹ Filippini 1995 (f. n. 41) 39–40.

⁵² The story may have been spread by word of mouth, and is described in a document dated 1579, part of which was published by Lorenzo Fondra in 1855.

⁵³ Márki, S.: *Mária, Magyarország királynéja. 1370–1395* [*Mary, Queen of Hungary. 1370–1395*]. Budapest 1885, 10 (Márki 1885).

⁵⁴ “A secret terror occupied her entire body, she turned pale, her eyes got blurred (...) Her bosom, where she had hidden the relic, began to rot, discharging some utterly stinky pus.” Buday, F.: *Magyarország polgári históriájára való lexikon a XVI. század végéig* [*A lexicon for the civil history of Hungary until the late sixteenth century*]. Volume 1. Budapest 1866, 392–393 (Buday 1866).

⁵⁵ Fondra, L.: *Istoria della insigne reliquia di San Simeone profeta che si venera in Zara*. Zara, 1855, 102–103 (Fondra 1855).

⁵⁶ One of the recurring expressions found in Mary’s later charters.

the woman in labor. Scipione Mercurio commends the Lombardian custom of almost all Catholic churches to keep relics that can be taken to every woman in labor.

In Hungary, the girdle of St. Margaret of Antioch was primarily used to alleviate birth pains and cure diseases. The belt was guarded by nuns in Pozsony and it was often borrowed from them. In general, only noble families were allowed to use it, and they could keep it for only a very short time, as there was a constant demand to borrow it. In 1689, the dying Mrs. Ferenc Batthyány wore the belt, and her husband claimed that the holy belted the sufferings of the woman who was past recovery.⁵⁷ Assisting deliveries was part of the repertoire of St. Margaret of Antioch because, according to legend, the dragon swallowed Margaret, but she opened the dragon's side with the sign of the cross, and stepped out of it unharmed. The legend from Naples about Margaret of Hungary – where chapters 62 and 63 contain several legends related to the obstetrics – takes over the motif of the girdle aiding women in labor from the cult of her name-giver, St. Margaret of Antioch.⁵⁸

The ritual of assisting childbirth included a benediction referred to in scholarly literature as “peperit carmen,” whose text has remained in several versions. It often involved instructions; for example, the woman in labor was to consume the piece of paper containing the benediction. The text of Pseudo-Theodorus Priscianus for assisting childbirth⁵⁹ constitutes a transition between ancient “verba puerpera” (as an *okytokia*, it recommends consuming earthworms and coriander seeds) and medieval tradition: it contains a line from Virgil and evokes a biblical story of childbirth at the same time.

⁵⁷ *Magyar Katolikus Lexikon [Hungarian Catholic Encyclopedia]*. Ed. I. Diós – J. Viczián. Budapest 1993–2010 <http://lexikon.katolikus.hu/M/Margit.html> - 16. 08. 2016.

⁵⁸ Knauz, N.: A nápolyi Margitlegenda [The legend from Naples about Margaret of Hungary]. *Magyar Sion* 6 (1868) 570: “The wife of a nobleman of Esztergom, called Banchus, got pregnant and, approaching the time of delivery, was in hard labor crying in torment for four or five weeks. The fetus was trying to get through, but the woman did not have enough strength. People all thought that without remedy the fetus would inevitably die. Therefore, one of the monks, Jordanus, in his gracious empathy with the ones in grave peril, gave her the girdle of penitence that had belonged to St. Margaret. The woman wrapped the girdle around herself, prayed to the Holy Virgin, and the laboring woman gave birth to the child. She could not even remember her peril because of her overwhelming joy, yet she humbly thanked her” (Knauz 1868).

⁵⁹ De muliere, quae tarde parit. Scribes in charta pura de uva tincta 'Casta fave, Lucina, tuus iam regnat Apollo' item. scribes in charta pura, dextro femori alligabis 'Helisabet peperit Iohannem bb. aperi te mater illa eius, quia nomen facit quae parturit, et emitte ex te pecudem de homine creatum'.item. coriandri grana XI vel XIII in linteo novo obligata puer aut puella investis ad inguinem sinistrum teneat, et dum enixa fuerit, tolles, ne intestina sequantur. ... item. ut mulier cito pariat, lumbricos desub terra III vel V ei super cerebrum pone, et cum enixa fuerit, tolle. Theodorus, Priscianus: *Theodori Prisciani Euporiston: Libri III, Cum Physicorum Fragmento et Additamentis Pseudo-Theodoreis.*, Ed. V. Rose. Leipzig 1894, 340–341. See Foscati 2014 (f. n. 2) 312.

The medical textbook referred to as “Oribasius Latinus”⁶⁰ (sixth–seventh centuries) also combines the very first structurally complete benediction⁶¹ with a line from Virgil:⁶² after the narrative “peperit” formula, there is an “exi” formula commanding the child to be born.⁶³ The later enlarged “peperit carmen” texts can be divided into these two parts, whose different text versions, have come down to us from the ninth century onwards, in particular from Germany⁶⁴ and England⁶⁵. The benediction is found in Hungarian codices too: it is found in the Pray Codex as a note added in the thirteenth century (28v):⁶⁶

I[n] no[m]i[n]e patr[is] et filii et sp[iritu]s sa[n]cti. Elisabet genuit i[o]h[ann]em baptista[m] p[re]cursore[m] d[omi]ni. Anna p[er]p[er]it maria[m]. S[an]c[t]a maria pep[er]it salvatore[m] mu[n]di, et saluator suscitav[it] lazarul[m], et dixi[t] lazare ueni foras. Adiuro te i[n]fa[n]s p[er] p[atrem] et f[iliu]m et s[piritu]m S[an]ctum siue masculus femina siue masculus femina siue uiuus siue mortuus ueni foras saluator uocat te⁶⁷, *aut exeat a te camelus, ueni foras saluator uocat te*,⁶⁸ fiat fiat fiat t[ibi] sanitas, a[men] a[men] a[men] a p[ri]ncipio, elisabet et p[er] ip[s]i[us] partu[m] adiuro part[us] u[t] n[on] c[on]ficiat[ur] a[m]pli[us] famula[m] d[omi]ni. X[ristus] vi[n]ci[t] x[ristus] i[m]p[er]at[ur] f[iat] f[iat] f[iat] a[me]n.

It is rare to name the child (the second time) as *camelus*, which is found only one other version of the benediction: the twelfth-century codex held in the Staatsbibliothek in Munich contains the form of address *Kamelle*.⁶⁹

The ELTE Library in Budapest possessed a book printed in Venice in 1512,⁷⁰ which contained a Latin note from the sixteenth century, prescribing to tie magic spells to a woman’s stomach if she is in difficult labor.⁷¹ It may well have been Balázs Szerencsi, the

⁶⁰ Oribasius’ (fourth century) nine books of excerpts on medicine were written for traveling physicians; they only survived in Latin translation.

⁶¹ Item scribis in carta: “Panditur interea domus Olimphi [repeats it three times]. Item alia scriptura: Helisabit peperit Johannem, Maria Salvatorem; aut masculus aut femina exi foras, sol te vocat.” Oribasius: Euporista. In Id. *Oeuvres d'Oribase* VI, ed. A. Molinier. Paris 1876, 622–623.

⁶² Verg. *Ecl.* 4.10.

⁶³ Elsackers, M.: In Pain You Shall Bear Children (Gen. 3:16): Medieval Prayers for a Safe Delivery, in A.-M. Korte (ed.), *Women and Miracle Stories. A Multidisciplinary Exploration*. Leiden-Boston-Köln 2001 (179–209) 182–183 (Elsackers 2001).

⁶⁴ Franz, A.: *Die kirchlichen Benediktionen im Mittelalter*, 2 Bde. Freiburg 1909: II, 198–203 (Franz 1909).

⁶⁵ See e. g.: Olsan, L.: Latin Charms of Medieval England: Verbal Healing in a Christian Oral Tradition. *Oral Tradition* 7 (1992) 116–142 (Olsan 1992).

⁶⁶ This page of the codex can be found here: http://mek.oszk.hu/12800/12855/html/hu_b1_mny1_0063.html

⁶⁷ Korbuly, Gy., Egészségápolás. In *Magyar Művelődéstörténet*. Vol. I. *Ósműveltség és középkori kultúra*. Domanovszky, S. – Ballanyi, Gy. – Mályusz, E.– Szentpétery, I. – Varjú, E. Budapest. <http://mek.oszk.hu/09100/09175/html/11.html> - 16. 08. 2016.

⁶⁸ This verse is transcribed only in this version: Korbuly 1936 (f. n. 3) 167.

⁶⁹ München Staatsbibliothek Clm 100, f. 40. Franz 1909 (f. n. 64) 199.

⁷⁰ Guillelmus Parisiensis: *Postilla super Epistolas et Evangelia*. Venice 1512. The book catalogued under number Vet. 12/62 has been missing from the library since 2001.

⁷¹ +Elizabet + peperit + Sanctum + Joannem + Baptistam + Anna + peperit + matrem + domini + nostri + Jesu + cristi + sine + dolore + conjuro + te + infans + per patrem + et filium + et spiritum + sanctum + ut + sive + sis +

owner of the book, who added a note right next to the benediction: “Et statim pariet sine dolore” (“and childbirth will start immediately, with no pain”).⁷²

The selection of obstetric treatises I examined does not address the care for new-born babies who are ill or in need of special care; this is why the account in the chronicles about a sixteenth-century incubator is so interesting. Louis the II of Hungary was born on July 1, 1506, and a Venetian midwife, a certain Armelina was called to assist his mother, Anne of Foix-Candale. Louis was certainly born prematurely; according to János Mihály Brutus, he was born without skin, so he was placed into a disemboweled pig that had been split into two along its spine, and kept in it until it began to cool; then they split another one – as many times as was needed for the child to completely grow his skin.⁷³

5. Conclusions

Based on Soranus’ description on the ideal midwife, scholarly literature holds that the education of midwives in Antiquity had excellent standards, while the profession of midwifery did not even exist in the Middle Ages, only female family members and neighbors assisted at childbirth. Against this supposition, my research has shown that the history of this profession was much more balanced and uninterrupted. Even in Antiquity, there were only a few centers hosting systematic and academic midwife training: the primary form of training, just like in the Middle Ages, was pursued within the family or in a master-and apprentice relationship, as witnessed in medieval sources, especially contracts, from Germany and the Low Countries.

In the more than 1300 years between the appearance of the specific textbooks for training midwives (Soranus: *Gynaikēia*, Rösslín: *Der Rosengarten*), several gynecological and obstetric treatises emerged (drawing largely from one another), which, however, do not consider midwives as their target audience, but they are mentioned in several cases as a secondary audience (mainly as students). One of the main objectives of my research was to

masculus + sive + femina + sive + sis + vivens + sive + mortuus + venias + ad lucem + xpi (Christi) -f Infans + veni + foras + locum + aperu... + et eduxit + eum.

http://epa.oszk.hu/00000/00001/00022/pdf/ITK_EPA00001_1893_01_122-125.pdf

⁷² Vegyes följegyzések [Mixed notes]. *Irodalomtörténeti Közlemények* 1893, III/1, 122. Magyary–Kossa, Gy.: *Magyar orvosi emlékek [Hungarian medical memories]*. Budapest 1929, Vol. II, 6.

⁷³ Published by Toldy, F.: *Monumenta Hungariae Historica – Magyar Történelmi Emlékek [Memories from Hungarian History]*, volume 12: *Brutus János Mihály m. kir. történetíró magyar históriája, 1490–1552*, 70. The other contemporary chronicler was János Zsámboky: *Bonfini, Antoni[us] – [Zsámboky János] Sambuc[us] Joan[nes]*: *Rerum Ungaricarum decades quatuor cum dimidia*, Basel 1568, 754. I wish to thank Gábor Farkas Kiss for the exact sources related to the birth of Louis II.

provide insights into the material covered in these works (such as the potential sources for the knowledge of midwives) and, on this basis, to show the tasks as well the rituals performed by midwives at childbirth.

As far as normal birth is concerned, the duties of midwives can be presented only based on the textbooks of Soranus and Scipione Mercurio: in the Middle Ages, Latin translations and reworks of Soranus' work were used. Midwives also played a part at problematic childbirths and at operations aimed at saving the fetus or the mother: Albucasis' *Surgery*, popular in Western Europe in a Latin translation, addressed midwives with the chapter on the types of, and solutions for, problematic childbirth; and according to German decrees, midwives even performed *sectio in mortua*.

Summary

The present study focuses on the tasks, skills and knowledge of classical and medieval midwives according to contemporary obstetrical and gynaecological treatises. The sources that shaped the image of medieval midwifery range from the literate and medically trained midwife of Soranus to the first Italian handbook for midwives, Scipione Mercurio's *La Comare o Ricoglitrice* (1596). The fact that only a handful of early medieval sources exist not only suggests that classical knowledge has survived, but its magical and ritual characteristics have also been re-shaped by Christianity (verba puerpera became peperit charms, and okytokia was replaced by Agnus Dei). My study enriches the findings published in international literature with some examples from Hungary.