Birth and botanics: Obstetric knowledge among early modern physicians (Eucharius Rösslin, Damián Carbón and Francisco Delicado)¹

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Gynaecology in general and obstetrics in particular is a domain in which midwives, who traditionally treated the female body, and university-trained medical practitioners compete and increasingly come into conflict with one another in the course of the 16th century.² In early modern literary texts, the negotiation of these gender issues takes place not only in specialized treatises but also in fiction.

Especially the first decades of the 16th century are an interesting period to observe. The rediscovery of Hippocrates' gynaecological manual, published in Latin translation by Marco Fabio Calvi in Rome in 1525, certainly marked a turning point for humanist medicine for women.³ In the following, we will examine two vernacular obstetric treatises that reached a very wide readership and provide interesting insights into the early modern relationship between the sexes in general and between doctors and midwives in particular. These two manuals –Eucharius Rösslin's *Der Swangern Frauwen und hebammen Rosegarten* (1513) and the *Libro del arte de las comadres o madrinas y del regimiento de las preñadas y paridas y de los niños* (published in 1541 but already completed in parts around 1528) by Damián Carbón Malferit – are to be juxtaposed with Francisco Delicado's *La Lozana Andalza* (ca. 1528), a dialogue novel whose protagonist is a prostitute with extensive gynecological knowledge.

Under the flowery title *Rose Garden for Pregnant Women and Midwives*, Eucharius Rösslin the Elder (c.1470-c.1526) published in 1513 in Strasbourg the first midwifery manual in a vernacular language, covering obstetrics, gynecology, and pediatrics in one comprehensive volume.⁴ Although the author, a pharmacist in Freiburg, before serving as city physician in Frankfurt and Worms, most likely had no practical experience in obstetrics,⁵ his *Rosegarten* was among the most widely disseminated obstetric treatises of the 16th century, with over a hundred reprints and editions, including numerous translations into Latin and various European vernacular languages.⁶ In terms of content, Rösslin offered nothing new: he merely prepared the

¹ This research was funded by Deutsche Forschungsgemeinschaft (DFG), Project number 502502313.

² See Rosenthal 1923, Benedek 1977, Kruse 1999, King 2007, Green 2008 and Stolberg 2021, 317-347.

³ See King 2007, 18-19, Green 2008, 26 and 346.

⁴ "The first known obstetric work in print was Albertus Magnus's *Secreta Mulierum* published in 1476" (Whaley 2011, 95). The quoted scholar further remembers that, before the sixteenth century, "works on the subject of obstetrics had been published, but not midwifery manuals". As noted by Green 2008, 247, Michele Savonarola wrote a guidebook on pregnancy in the local Ferrarese dialect around 1460, making him the first author "to address midwives since late Antiquity". See the recent edition by Zuccolin 2022.

⁵ See Benedek 1977, 559. On the other hand, Kruse's 1999, 114 documentation reveals that physicians in the 15th and early 16th centuries sometimes took on active roles as obstetricians.

⁶ The Latin translation *De partu hominis* (1532, 1534, 1535, 1536, 1537, 1544, 1551, 1554, 1556, 1563) was made by Rösslin's son, Eucharius Rösslin the Younger (before 1500-c.1547), city physician in Frankfurt since 1529 and author and compiler of pharmaceutical works. Translations into vernacular languages preceded the Latin version, but the latter became highly influential and served as a model for two French versions of Rösslin's midwifery manual, *Des divers travaulx et enfantemens des femmes* (1536, anonymous, and a second translation in 1563 by Paul Bienassis), the Italian *Libro nel qual si tratta del parto del'huomo* (1538), Richard Jonas' translation *The Byrth of Mankynde* (1540) and its revised version by physician Thomas Raynalde (1545), and Francisco Núñez de Oria/Coria's *Libro intitulado del parto humano, en el cual se contienen remedios muy vtiles y vsuales para en parto difficultoso de las*

texts of a manuscript of uncertain authorship for print.⁷ He added a dedication letter, an admonition to midwives in verse, a preface, a glossary of botanical terms and a series of woodcuts illustrating, for instance, different fetal positions and a birthing chair.

The paratextual apparatus of the *Rosegarten* offers valuable insight into the physician's self-positioning and his portrayal of midwifery. The manual 'for the pregnant women and midwifes' not only serves as a promising economic resource⁸ but, more importantly, tackles an urgent social and theological imperative.⁹

The idea that 'his' midwifery manual is a long-overdue endeavor is suggested in the dedicatory letter to the Duchess Katharina von Braunschweig-Lüneburg, whom Rösslin had served in 1508. In parallel with Carbón's later and more comprehensive exposition, the letter begins with presenting women's labor pain as a divine punishment, arising from the biblical Fall. Although birthing women could alleviate their suffering significantly with effort and the aid of 'sensible and well-educated women and midwives' ("vernünfftigen gelerten frawen vnd hebammen", 1513, Aiii^V), Rösslin observes that the scenario is different: a glaring shortage of obstetric proficiency, notably among neophyte midwives, consistently compromises the safety of both mothers and children. The *Rosegarten* is presented as a response to a long withstanding request of the noble dedicatee asking for instruction for the benefit of pregnant women and midwives. The idea that learned (male) physicians can offer guidance (whether in written, oral, or both formats), regardless of their lack of practical experience, is one of the central tenets of the dedication. ¹⁰

If the social and theological urgency of a vernacular midwives' manual is already evident in the dedicatory letter, it becomes particularly pronounced in the "Admonition to pregnant women and midwives". This "rhymed prologue" (Green 2009, 169) draws attention to fatal errors arising from insufficient obstetric care. The depiction of the midwives' professional conduct and ethos is highly critical:

Ich mein die hebammen alle sampt

mugeres, con otros muchos secretos a ello pertenescientes, first published in 1580. See Whaley 2011, 95, Green 2008, 247-248 and Moulin 2018, 32.

⁷ See Green 2009, 191-192 and Moulin 2018, 322. In line with the manuscript held at the Hamburg State and University Library (Cod. med. 801), the main text of the *Rosegarten* is divided into twelve chapters: Chapters 1-11 cover gynecological-toxicological and obstetric subjects, providing information on a regimen to be followed prior to birth, the development of the fetus, difficult labors, medicines for aiding delivery, miscarriages, and nursing. Chapter 12 consists of a compilation of care instructions and remedy recipes, primarily focusing on childhood illnesses. Green 2009 has shown that the extensive gynecological and obstetrical parts of the manuscript/*Rosegarten* are largely derived from a Latin *Practica* by the Ferrarese physician Michele Savonarola (c.1385-1466). As for the pediatric instructions, Kruse 1994, 220, Keil 1998, 268-269 and Green 2009, 170 have identified Batholomäus Metlinger's 1473 *Kinderbüchlein* as the treatise's main reference. Furthermore, Kruse 1994, 233 has demonstrated that some of the passages added by Rösslin originate from Pseudo-Ortolf's *Frauenbüchlein* (c.1495). While scholars (Keil 1998, Kruse 1994, Green 2009 and Moulin 2018) emphasize Rösslin's role as editor, it is no less evident that the transition from manuscript to print brings about textual modifications as well as adaptions in the overall presentation and configuration, discussed by Moulin 2018, 331, who provides a synopsis (324-326).

⁸ Kölsch-Bunzen 2002, 80 interprets Rösslin's request for his noble dedicatee to distribute the book to 'honorable and virtuous pregnant women and midwives' as suggesting that he aimed to reach literate pregnant women, specifically the financially affluent clientele of the upper bourgeois class. See on economic competition between physicians and midwives also Kruse 1999, 123.

⁹ Tilmann 1998, 388 views the religious framing of the treatise not merely as a literary convention, but ascribes significance to Rösslin's concerns, interpreting the *Rosegarten* as 'a work of Christian charity'.

¹⁰ On medieval and early modern gynecology as a male-dominated medical field and on the creation of the literate midwife, see Green 2008, 246-287.

Die do so gar kein wissen handt. Darzů durch ir hyenlessigkeit Kind verderben weit vnd breit. (Rösslin 1513, Aiv^v)

[I am referring to all midwives, who have no knowledge at all. Moreover, because of their carelessness, they cause damage to children everywhere.]

Due to their incompetence, midwives harm unborn children and even commit infanticide. Infants are deprived of both earthly and, more importantly, heavenly life if they die without being baptized on account of the midwife's 'foolishness' and 'negligence.' Rösslin intends his manual as a means of remedying this deplorable state of affairs:

Was man handlen soll mit kinden
Hab ich yn geben ein verstandt.
Den sie in disem büchlin handt
Darinn sie fynden güten bericht
Was in menschen geburt geschicht
Sie seyen natürlich oder nit. (Rösslin 1513, Bi^v)

[About what to do with children, I have given them an understanding. In this booklet they find a good explanation about what happens when people are born, in a natural way or not.]

Pulz and Morel (1996, 593-595) regard Rösslin as a paradigmatic example of how learned physicians accused midwives of ignorance in order to impose their authority on them. 11 Like his male professional peers, the author of the *Rosegarten* also denies women's obstetrical expertise, including their knowledge of herbal remedies. As Kruse is able to document, Rösslin complained in several letters to the city council of Frankfurt in 1509 about Jewish doctors, pharmacists and midwives because they were taking the liberty of giving medical advice and not only preparing but also administering medicines ("das sy mögen und fryheit haben zu raten, zu visitiren, artzny zu machen und zu geben"). 12 In this correspondence, as well as in the preface to the Rosegarten, Rösslin appeals to his academic status and places scholarly traditions above the empirical knowledge. In his "Vorred", Rösslin provides a catalog of (male) ancient and medieval authorities from which he claims to have compiled his book: Hippocrates, Galen, Rhazes, Avicenna, Averroes, Avenzoar 'and others, that need not all be mentioned' (1513, Bii^v-Biii^r). The compiler conceals the medieval sources of his work and invokes the great names of ancient and Arabic medicine in the service of his selffashioning as a learned physician. Rösslin's vision of himself as an academically educated doctor is also expressed in the Latin-German botanical glossary with which the Rosegarten ends. As Dlabačová and van Leerdam (2023, 9) rightly state, "Rösslin [...] sees language in direct connection with accessibility of knowledge". A major problem of early modern botany and today's researchers dealing with it is the lack of a

¹¹ Kölsch-Bunzen 2002, 78-81 interprets the discrediting of midwives by Rösslin as a purely strategic move, as the portrayal of midwives as in need of instruction was necessary to validate the transfer of knowledge among learned physicians.

¹² See Kruse 1999, 123 and 291, note 131. This and other letters from Rösslin were published by Feis 1919.

standardized taxonomy that enables each specimen to be clearly identified.¹³ To make matters worse, plant names were not only often modified by translations into different languages, but also had very different names in dialects and regional languages, by which they were of course known by herbalist women and midwives.¹⁴ Rösslin is well aware of the problem as exemplified by the plant known in English as wormwood:¹⁵

Item hie in disem cleinen büchlin stand vil latinischer wörter, vnd darumb das selbig latyn nit zů gůttem tütsch bringen mag, das es den frawen verstendig sy, Sollent sy zůflucht haben zü den doctores vnnd apoteckern, die werden inen gnůgsamen bescheid über yedes geben. Darzů so haben die krüter nit einen namen in allen tütschen landen, als absinthium zů latin würt zů fryburg genant wermůt, zů franckfurt wygenkrut, zů Trier alsen. Darumm so volget nach ein tafel, darinn man findet das latin vnd tütsch rc. (Rösslin 1513, Oi^r)

[There are many Latin words in this booklet. So that my Latin can be translated into good German that the women can understand, they should seek advice from the doctors and pharmacists. They will give them all the information they need. However, because the herbs in all German countries do not have just one name, the Latin name *Absinthium* is understood to mean *Wermut* in Strasbourg, *Wiegenkraut* in Frankfurt, and *Elsen* in Trier. For this reason, a table summarizing the Latin and German plant names follows.]

The problem of nomenclature, which also preoccupied the translators of Dioscorides such as Andrés Laguna, is clearly identified in the *Rosegarten* as a problem of women's lack of Latin education.¹⁶

The tension between male academic medicine and female experiential knowledge, as evidenced Rösslin's tocological compendium, is not entirely dissimilar in other cultural areas. The first midwifery handbook in a Romance language comes from Spain, more precisely from the Balearic Islands. In 1541 Damián Carbón y Malferit published his *Libro del arte de las comadres o madrinas y del regimiento de las preñadas y paridas y de los niños* in Palma de Mallorca in the printing house of Hernando de Cansoles. The author's life is only fragmentarily documented, but Contreras Mas gives precise information about the stages of his professional career: While in 1509 he was qualified as a surgeon, in 1519 he obtained the degree of "batxiller en medicina", then in 1524 the title of "licenciat en arts i medicina" and

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¹³ On the development of botanical terminology from the 16th until the 18th century, see the volume edited by De Beni 2015. For Carl von Linné (1707-1778), the inventor of the binomial nomenclature, valid to this day, see Lamendin 2012.

¹⁴ As part of the research project *LODinG*. *Linked Open Data in the humanities* financed by Research Fund Rhineland-Palatinate 2024-2028, the authors of this article are working together with Claudine Moulin and Claudia Bamberg in an interdisciplinary group on the edition and LOD-based annotation of scientific and cross-scientific and cross-scientific and cross-scientific and partial texts for the indexing of early modern botanical and pharmacological knowledge.

¹⁵ Keil 1998, 270-271 recalls that, as an apothecary, Rösslin had a particular interest in pharmacological issues.

¹⁶ Moulin 2018, 327 has shown, that this point refers to a passage in the Hamburg manuscript in which the difficulties of understanding are assigned to the common man.

¹⁷ The treatise consists of two books. The first book, completed in 1528, outlines in 56 chapters the care midwives should offer to expectant mothers during pregnancy, delivery, and the postpartum period, as well as infant care. The second book deals with procreation problems and sterility. On Carbón's ideas on 'human sexual psychopathology' see Sánchez Sánchez 1996.

finally in 1528 his doctorate at the University of Valencia. Carbon is a representative of the so-called Arabized Galenism and his work is strongly indebted to his university education. In research, the influence of the *Rosegarten* on the *Libro del arte de las comadres* is often denied. However, there are some interesting parallels between the two authors and their manuals. Like Rösslin, Carbón felt the need to instruct the midwives, as can be seen from the paratexts and the introductory chapters. It is noticeable that Carbón dedicates his work on midwifery to a man, "vn cauallero, mucho su señor" (2015, 34). The "Epistola" frames the treatise as a response to an anonymous nobleman seeking explanations for his spouse's miscarriages. Carbón attributes the occurrence of such a calamity to deficiencies in contemporary obstetric practices, stemming from the prominent position held by women:

Y porque tenemos oy vna platica que las mugeres preñadas y paridas en sus necessidades y para las criaturas, a las comadres antes que a los medicos piden consejo. Y ellas, poco instruydas en su arte, no saben buenamente que hazer y ansi caen en errores, como Vuestra Merced tiene experimentado. (Carbón 2015, 35)

Curiously, it is not the expectant mother, but rather the father who is said to have experienced the midwives' mistakes. In a paternalistic manner, Carbón explains to this gentleman his intention to ameliorate this ailment in the realm of women's medicine through his 'booklet', seen as an act of charity:

Y por esso, mouido de caridad, en esta obrezica les demostrare su arte y las reglas y la forma que tienen de tener para ser sufficientes, y en buena conciencia puedan tal arte vsar y aconsejar para la salud de las preñadas, paridas y criaturas, al seruicio de Dios y de Nuestro Señor y de su Bendita Madre. (Carbón 2015, 35)

While the dedication letter ends with an invocation to the Virgin Mary,²² the "Argumento de la obra" begins with a reference to the Genesis narrative of the Fall. With a quotation from the Bible, the pain of childbirth is presented as divine punishment: "Es verdad que despues de la preuaricacion de nuestro padre Adam, dixo Dios a la muger: Yo multiplicare tus trabajos y con dolor pariras".²³ Even if the suffering is ordained by God, man may come to the aid of the pregnant woman with "algun adjutorio artificial por suplir y ayudar en lo que natura falta" (2015, 36).

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¹⁸ For details of Carbón's biography, see the entry in the biographical lexicon online of the *Real Academia de la historia* by Contreras Mas and Palmujoki 2015, 1-2.

¹⁹ See Contreras Mas: "A pesar de estar redactada en castellano, con la intención divulgativa que ello indica, es una obra de carácter universitario, apegada a la ortodoxia del galenismo arabizado, en cuyo contexto se inscribe. Refleja la sólida formación académica y la amplia erudición de su autor, mediante numerosas y precisas citas, de autores médicos clásicos, árabes y cristianos bajomedievales".

²⁰ See Gallego-Caminero 2005, 605 and Contreras Mas.

²¹ For attempts to regulate the training of midwives and midwifery examinations by the *Protomedicato*, see Ortiz 1993, 1996a, 1996b, Gallego-Caminero 2005, 603, Whaley 2011, 99, Juárez-Almendros 2018, 87 and Ruiz-Berdún 2022, 46.

²² At the end of the "Argumento", "la intercession de la Virgen Maria, Señora Nuestra" (Carbón 2015, 37) is again invoked. See on the significance of the Virgin Mary as the patron saint of parturients Dangler 2001, 31, Fernández 2007, 97 and Aichinger 2018, 403-405.

²³ "Mulieri quoque dixit: Multiplicabo aerumnas tuas, et conceptus tuos: in dolore paries filios, et sub viri potestate eris, et ipse dominabitur tui" Genesis 3: 16. The same biblical passage is taken up again in the first chapter (Carbón 2015, 41)

However, since childbirth primarily concerns women ("por ser cosas de mugeres"), it is essential to provide instruction in tocology to female healers ("instruirla en tal arte").²⁴ Carbón is particularly eager to classify obstetrics among the mechanical arts "porque es operacion manual" (2015, 36).²⁵ Even if the biblical quotation from Exodus adduced by the author himself seems to contradict this,²⁶ midwifery is clearly not classified as a (theoretical) *scientia*, but as a practical *ars*.²⁷ Hence, akin to surgeons, midwives lacking university education are also subject to the authority of academically trained physicians.²⁸ Researchers disagree as to whether Carbón had any practical experience in childbirth assistance that could substantiate this authority. The author himself claims in the second chapter that he not only observed the midwives removing the placenta, but that he also tore it open with his own hands: "Y si saliere, saldra todo junto, como yo he visto y rompido de mis manos, como si fuesse dentro vn saco" (Carbón 2015, 43).²⁹

In chapter 3 ("de las condiciones que ha de tener la comadre por ser buena y suficiente", 2015, 44-45) Carbón names three core qualities that should be the hallmarks of midwives: In addition to being clever and well-mannered, they should have extensive experience in their field ("esperta en su arte"). What is important for Carbón, however, are a whole series of other attributes that distinguish the ideal midwife from literary women healers, above all Celestina:

No sea fantastiga, no sea riñosa, sea alegre, gozosa, porque con sus palabras alegre a la que pare. Sea honrada, sea casta para dar buenos consejos y exemplos, mire que tiene honestissima arte. Sea secreta, que es la parte mas essencial. Quantas cosas les vienen en manos que no se han de comunicar por la verguença y daño que siguiria. Tenga las manos delgadas y mire las carnes que tiene que tratar. Sea ligera en tacto, que no haga lision en las carnes delicadas. Tenga temor de dios. Sea buena christiana porque todas las cosas le vengan bien. Dexe cosas de sortilegios ni supersticiones y agueros no cosas semejantes porque lo aborresce la yglesia santa. (Carbón 2015, 45).³¹

²⁴ This idea is further developed in the first chapter of the first book ("De la necessidad de la comadre y de su oficio", 2015, 40-42), where Carbón states that "el sabio collegio de los medicos" for reasons of "honestidad" decided that women were to provide assistance in handling all matters related to pregnancy and childbirth (2015, 41-42).

²⁵ See also the second chapter: "La qual, bien informada de lo que tocare a su arte, pueda bien valer a la preñada, parida o paridera, como haze el buen Cirurgiano en sus manuales operaciones" (Carbon 2015, 43).

²⁶ "Quae responderunt: Non sunt Hebreae sicut aegyptiae mulieres: ipsae enim obstetricandi habent scientiam, et priusquam veniamus ad eas, pariunt" Exodus 1: 19. Carbón (2015, 43) repeats the same quote in chapter 2 and comments on it in detail.

²⁷ See Van Leerdam 2024, 48 on the "intellectual status of medicine [...] both as *scientia* (theoretical, fundamental knowledge) and as *ars* (practical knowledge, craft)".

²⁸ See Rodríguez Perales 2013, 172 and Juárez-Almendros 2018, 87 on the "discord between learned authoritative men and the practicing midwives".

²⁹ Gallego-Caminero 2005, 604 assume that this was not the case: "Lo más probable es que Carbón por cuestiones morales y tradicionales no hubiera presenciado nunca un nacimiento". See also Moral de Calatrava 2005. On the contrary, Codet 2014, 22 emphasizes that the "author evokes several times his own experience". The scholar quoted refers to the discussion of monster births in Chapter 6, where the author claims: "por lo que en diuersos auctores he leydo como aun por lo que de mis ojos humanos en el tiempo de mi platica he visto y tractado" (Carbon 2015, 50).

³⁰ See on the qualities of the midwife Gallego-Caminero 2005, 605-606 and Usunáriz 2016, 323-324. For the value of practical experience, see Ortiz 1993, 97 and Aichinger 2018, 407.

³¹ In chapter 20 of the first book, Carbón (2015, 81) relates a case of "una comadre vieja" that he has seen "por herética inquirir, y ella confessar mil errores y hechizerias".

It is noteworthy that the knowledge of herbal remedies is not mentioned in this chapter.³² This is particularly significant as botanical expertise and recipes play a crucial role in the Libro del arte de las comadres. 33 In contrast to the Rosegarten, this text not only incorporates Latin plant names but also features numerous recipes entirely written in Latin. This fact reinforces the theory of some researchers that Carbón was not actually interested in instructing midwives, as they were not up to the linguistic challenges of his text.³⁴ While Rösslin is aware of this problem and addresses it with his glossary, Carbón is evidently not interested in it. Codet (2014, 19-20) has very convincingly related Carbón's view of the potential of female healers to Juan Luis Vives' ideas on women's education. In De institutione feminae christianae (1524), the humanist from Valencia asserts:

I should not wish that a woman dedicates herself to the art of medicine or has too much confidence in it. I advise her to be familiar with the remedies for frequent and everyday illnesses. [...] She can learn this skill from the experience of other prudent matrons rather than from the advice of some nearby physician, or some handbook on that subject rather than from big, detailed medical tomes. (Vives 2000, 263)

Such a condescending view of the healing arts of women in general and of midwives in particular is reflected in many early modern writings. This is also the perspective often adopted by contemporary scholars. However, it is interesting to explore whether there might also be (fictional) counter-narratives.

In recent research, birth narratives have attracted increasing interest, although mostly works from the late 16th and 17th centuries have been focussed on.³⁵ Curiously, no particular emphasis has so far been placed on the question of whether the authors of these texts were physicians and therefore approached such subjects from their professional perspective.³⁶ An interesting example is *La Lozana Andaluza*, published in Venice in 1528 by Francisco Delicado. There is little reliable evidence about the author's life.³⁷ He was born between 1475 and 1489 in the province of Córdoba. At the end of the 15th or beginning of the 16th century, he moved to Italy, first to Rome and then to Venice, where his traces were lost in the 1530s. While there is certainty regarding his ordainment as a priest, his status as a medical doctor remains uncertain. Nonetheless, the fact that he authored a treatise on guayak for the cure of syphilis, along with the notable emphasis on medical knowledge in the Lozana Andaluza, hints at the likelihood of his medical background. This dialogical novel is his only literary creation, about the life of a marginalized woman who, leveraging her Celestinesque skills, attains success in the eternal city during the period preceding the sack of Rome. The main character is a female healer who competes earnestly with academic medical

³² The administration of various medications – "xarabes, purgas y letuarios" (Carbón 2015, 42) – is assigned to the area of competence of male doctors in the previous chapter. See on the plant knowledge of medieval women Kruse 1999, 106.

³³ See Chapter "3.6.2. Sobre los medicamentos" in Palmujoki 2015, 399-408.

³⁴ See Ortiz 1996a, 157-158, Moral de Calatrava 2005 and Codet 2014, 22.

³⁵ See Aichinger 2018, García Santo Tomás 2020, Sanz Lázaro 2021 and the research project led by Wolfram Aichinger: The Interpretation of Childbirth in Early Modern Spain (FWF Project 32263-G30) https://childbirth.univie.ac.at/.

³⁶ In this context, it is interesting to consider the famous birth narratives of the physician François Rabelais, which are also of great interest in research, see recently Chavaroche 2017 and the chapter "The condemnation of midwifery by François Rabelais" in Gernert 2024, 176-180.

³⁷ I take the biographical data from the prologue of the quoted edition of Delicado, *La Lozana Andaluza*, 2013, 371-376.

professionals, relying on her orally acquired practical expertise. This also includes gynecological knowledge, as the protagonist herself emphasizes in a conversation with the 'author':

Yo sé ensalmar y encomendar y santiguar cuando alguno está aojado, que una vieja me vezó, que era saludadera y buena como yo. Sé quitar ahitos, sé para lombrices, sé encantar la terciana, sé remedio para la cuartana y para el mal de la madre. Sé cortar frenillos de bobos y no bobos, sé hacer que no duelan los riñones y sanar las renes, y sé medicar la natura de la mujer y la del hombre.³⁸

The various skills that Lozana boasts of in the form of *sui generis* self-fashioning are displayed in various episodes of the dialogue novel.

In Mamotreto XXIIII, the 'author' and his compañero witness the protagonist, laden with nappies, hurrying to a prostitute who is simulating a pregnancy in order to take the money out of a lover's pocket. Lozana provides the two men with a seemingly strange explanation: "La parida no tiene pezones, como no parió jamás, y es menester ponelle, para que le salgan, este perrico, y negociar por amor del padre. Y después, como no tiene pezones, le pagaremos". ³⁹ The episode draws on obstetric knowledge that is difficult for the modern reader (and editor) to grasp. Even the obstetric manuals of the time only very seldom provide information. 40 In a recently published book, Stolberg (2021) gives highly interesting insights into early modern medical practice. The German medical historian analyzed the personal notebooks on the medical training and practice - totaling well over 4,000 pages - of the Bohemian doctor Georg Handsch (1529-1578), who studied medicine in Padua and Ferrara. As Stolberg (2021, 342-343) highlights, obstetrics also became the subject of university teaching in the 16th century and around 1550 male doctors could be expected to have a broad knowledge of childbirth medicine. In practice, however, the women giving birth almost exclusively sought advice and help from midwives and other women (Stolberg 2021, 343). Interestingly, as Stolberg (2021,

³⁸ Delicado 2013, 215. Research into the textualisation of medical themes in *La Lozana Andaluza* has focused primarily on syphilis, a venereal disease that the author and his protagonist both suffer from. As Gutiérrez Rodilla 2015, 129 revealed, female healers also treated male patients: "La actividad de las sanadoras, a pesar de lo que algunos discursos contemporáneos han querido hacer creer, no se limitó a la atención a mujeres y niños, en el tradicional ámbito femenino de la asistencia al parto y procesos ginecológicos: veían a pacientes de ambos sexos y de todas las edades para efectuar prácticas quirúrgicas, pero también para atender cuadros de medicina general, así como para prepara remedios terapéuticos".

³⁹ Delicado 2013, 127. See note 61 and *nota complementaria* 127.61. On the attempts at explanation see also Monti 2012, 99 who speaks of "un passo poco chiaro, che gli editori interpretano in maniera differente, in cui si fa cenno anche a dettagli concreti relativi alla nascita ma quasi mai nominati nelle opere letterarie". Kuffner 2023, w. p. for her part believes that the young woman actually gave birth to a child and claims that "Lozana also reveals that she is helping the new mother in her attempts to breastfeed, stating that her nipples have not emerged, for which Lozana will give her a puppy that will suckle to bring her milk down". On the interest in the nipples as female erogenous zones in early modern medical literature see Pomata 2022, 278-280.

⁴⁰ Rösslin dedicates the eleventh chapter to breastfeeding ("wie man das kind seigen soll" 1513, Kiii^v-Li^v) without mentioning the practice in question here. Occasionally there is also written evidence of the common practice of using puppies, for example in or example in *Ein Regiment der jungen Kinder* by Bartholomäus Metlinger (*ca.* 1440-1491) city physician of Augsburg In the second chapter, Metlinger recommends that the mother's milk should only be given to the child a fortnight after birth, as it is not good for the baby in the first few days. In this context, Metlinger also advises that the child should first be breastfed by the wet nurse; the mother should have the excess milk sucked off by a puppy or removed in some other way: "doch so wer pesser die ersten vierzehen tag der kindbet das ein andre fraw das kind säuget dann sein rechte muter. wann davor ist die milch dem kind nit gesunt. uund in der weyl so sol die kintpetterin ein welfen saugen lassen oder das man sy sunst auß saug" Metlinger 1500, w. p.

344) notes, Handsch continued to make extensive notes on obstetric issues after his studies, which today provide us with valuable insights into everyday obstetric practice at the time. He presumably wanted to be able to answer relevant questions, give advice and, if necessary, instruct midwives. Significantly, however, he drew his practical knowledge almost exclusively from what the women told him, especially those from his own family and sometimes also the midwives. This finding is of great interest for a better understanding of La Lozana Andaluza because it sheds light on how Francisco Delicado, some 20 years earlier, managed to acquire the mostly orally transmitted practical knowledge of women healers. And this consideration leads us back to the passage in question. Handsch was also interested in lactation and the problems that women after giving birth could have with breast pain and milk ejection. From his diaries we learn that sometimes dog or cat puppies were used, a method that was resorted to in the case of the wife of a certain Hans Georg Weiser. 41 Against this backdrop, it becomes clear that the women in La Lozana Andaluza use practical knowledge in a field from which men were often excluded in order to deceive them by faking pregnancy so as to exploit the alleged father.

The curious scene in which the protagonist explains to the author why she wants to buy the placenta of a woman who is about to give birth also belongs in the context of the simulated pregnancy:

Señor [...] soy venida aquí, que su nuera de esta señora está de parto, y querría hacer que, como eche las pares, me las venda, para poner aquí a la vellutera y dalle ha cualque cosa para ayuda a criar la criatura. Y la otra tiene una niña del hospital y darémosle a ganar de su amigo cien ducados, y por otra parte ganará más de trecientos, porque ha de decir que es de un gran señor que no desea otro sino hijos, y a esta señora le parece cosa estraña y no lo es. Dígaselo Vuestra Merced, por amor de mí, y rueguénselo, que yo voy arriba.⁴²

It would be unduly easy to explain this interest in the afterbirth by its supposed use for magical practices, as some scholars have suggested.⁴³ A glance at the obstetric manuals of the time – be it Rösslin or Carbón – but also at Handsch's writings, shows that it was a major problem if the placenta, the "membrana secundina", was not completely excreted after the birth.⁴⁴ It is therefore reasonable to assume that a faked pregnancy not only required a child, but also a placenta. The baby from a "hospital", i.e. an orphanage or poorhouse, is to be presented to both the woman's lover and an infertile man of high standing as her own.⁴⁵ As the room in which a child was born was reserved for women, except in medical emergencies, it is fairly easy to imagine how the man waiting outside

⁴¹ See Stolberg 2021, 147.

⁴² Delicado 2013, 123; see on this episode Gernert 2013, 233.

⁴³ This has recently been proposed with recourse to *La Celestina* by Kuffner 2023, w. p.: "Although Lozana states that she will trade the afterbirth to a silk-maker, midwives were frequently accused of making magic potions and amulets using the afterbirth, to which were attributed various powers such as bringing good fortune and helping with labor". See also Hanus 2023.

⁴⁴ See the sixth chapter in Rösslin 1513, Fii^v-Fiv^v ("wie man das büschelin das ist die nachgeburt von einer frawen bringen soll") and the corresponding 22nd chapter in Carbón 2015, 85 ("de la forma de sacar la secundina o lecho"). See also Stolberg 2021, 245.

⁴⁵ See the treatise *De subventione pauperum* (1526) by Juan Luis Vives 2002, 97: "I give the name of hospital to those places where the sick are nourished and cared for, and where a certain number of the needy are supported, and where boys and girls are brought up, and where abandoned infants are nurtured and where the mentally ill are kept and the blind!".

the door could be offered a false child and a false placenta as tangible evidence of his fatherhood.⁴⁶

In contemporary literature, faking pregnancies is one of the many ruses used by prostitutes. A comparison with Pietro Aretino's *Sei Giornate* (1534 and 1536), published only a few years after *La Lozana Andaluza*, reveals the peculiarities of Delicado's textualization of medical knowledge in this domain. Aretino's Nanna eloquently tells her daughter Pippa how she played up to one of her suitors, who was desperate to become a father, that she was pregnant. She simulated changes in emotional state, loss of appetite and other typical disorders: "capogirgli, doglie di corpo, mal di madre, ardori di reni". The supposed father-to-be who fulfils the whore's every wish is the object of laughter here. When the man has been sufficiently mocked and exploited, Nanna pretends to have an abortion:

E intertenutolo con tal ciancia un tempo, un dì mi lascio cadere alla sbardellata; e fingendo di essermi sconcia, gli faccio portare in un catino di acqua tiepida una figurina di carne di agnellino non nata che averesti detto che fosse una sconciatura: che quando la vide, cadendogli giù le lagrime, ne fece un lamento grande; e raddoppiava i gridi nel dirgli mia madre che era maschio e che gli simigliava. E spese non so quanti scudi in farlo sotterrare; e lo facemmo vestir di nero, disperandosi del battesimo che non aveva avuto. ⁴⁹

The text is revealing in that it illustrates that the faking of pregnancies in the brothel milieu was a literary topos that possibly had a correlate in historical reality. It also shows that the supposed father had to be given strong evidence of the abortion, in the form of an unborn lamb which apparently resembled a human embryo. While Aretino focuses on the derision of a man in the narrative of a prostitute, Delicado centers on a female community that is capable of deceiving males through medical knowledge.

Female knowledge and in particular the special skills of the title heroine are contrasted in the text even with the academic knowledge of male doctors. However, Lozana ultimately proves to be superior to them, as will be shown with an example. In *Mamotreto* XXIII, a courtesan complains to Lozana about the uterine pain she has been suffering from since giving birth: "Señora, como parí, la madre me anda por el cuerpo como sierpe". As Stolberg 2021, 319 has shown, the uterus played a central role in women's health. Increasingly better anatomical knowledge, however, would have cast doubt on the theory of the uterus ascending or moving through the body. In Georg Handsch's aforementioned notes, we learn of a colleague who prescribed pills "contra motum matricis" (Stolberg 2021, 331). Rösslin (1513, Gi^r) mentions a distended and swollen belly, abdominal pain and irregular womb movements as frequent

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⁴⁶ Gélis 1991, 167-168 recalls that the placenta "was buried by the father immediately after the birth, under the floor of either the house or one of the outbuildings, so that the household would benefit from its power to encourage fertility, whether in the garden or in the fields nearby". See also Kruse 1999, 217.

⁴⁷ As part of the *Edizione Nazionale delle Opere di Pietro Aretino* editorial project, a new critical edition of *Sei giornate* by Francesco Sberlati is to be published in an uncertain future. In the meantime, I quote from the critical edition by Aquilecchia, Aretino, *Sei giornate* 1969, 111.

⁴⁸ "Onde il caca-stracci, pieno di letizia, si dà al farsi dei compari, a ingabbiare capponi, a fornirsi di pezze, di fasce e di balia; né ci appariva uno uccelletto, né un frutto primaticcio, né un fiore che non carpisse suso per me acciò non la facessi segnata; e non sopportando che mi mettessi le mani alla bocca, mi imbeccava con le sue, sostenendomi nel rizzare e nel pormi a sedere. Ed era da ridere quando piangeva udendomi dire: 'Se muoio in parto, ti raccomando il nostro figliuolo'". Aretino, *Sei giornate* 1969, 112.

⁴⁹ Aretino, Sei giornate 1969, 112.

⁵⁰ Delicado 2013, 116. See Gernert 2024.

complications after childbirth. Carbón considers uterine inflation to be a central problem: "Queda la madre después del parto abierta y vazia y muchas vezes se hinche de ventosidad y dilatase y es causa de grandes dolores. Ansi que es menester vsar de remedios" (2015, 88). The suffering of our courtesan is therefore a well-known pathology, for which Lozana has a number of remedies available:

Señora, sahumaos por abajo con lana de cabrón, y si fuere de frío o que quiere hombre, ponelle un cerote, sobre el ombligo, de gálbano y armoniaco y encienzo y simiente de ruda en una poca de grana, y esto la hace venir a su lugar, y echar por abajo y por la boca toda la ventosidad. Y mire Vuestra Merced que dicen los hombres y los médicos que no saben de qué procede aquel dolor o alteración. Metelle el padre y peor es, que si no sale aquel viento o frío que está en ella, más mal hacen hurgándola. Y con este cerote sana, y no nuez moscada y vino, que es peor. Y lo mejor es una cabeza de ajos asada y comida.⁵¹

In the seventh chapter of his *Rosegarten*, Rösslin deals with the possible complications in the puerperium and mentions very similar treatment methods.⁵² At the beginning of this chapter, Rösslin recommends fumigation of the genitals and plaster treatments of the abdomen as effective therapies. Fumigation was a common remedy for uterine problems. This application was based on the idea that the uterus would move away from malodors and be attracted to pleasant smells, thus changing its position in the body. While Lozana recommends goat's wool ("lana de cabrón"), Rösslin employs salted fish eyes and donkey hooves. Carbón, whose manual was published a little later than *La Lozana Andaluza*, only advises the use of foul-smelling fumigations in particularly serious cases, especially with burnt woolen cloth ("paño de lana quemado"), which, however, should be inhaled through the nose.⁵³

The deflating plaster treatment combined various herbal active components. The ingredients that Lozana uses can also be found in Rösslin's and Carbón's manuals, namely various gums such as galbanum (*gálbano*), ammoniacum (*armoniaco*), ⁵⁴ and the better known incense (*encienzo*) and rue seed (*simiente de ruda*) ⁵⁵. Rösslin and Carbón also recommend various plaster applications for postpartum women. The German author prescribes applying a mixture of various plants, including rue, to the genital area

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⁵¹ Delicado 2013, 116 and *Nota complementaria* 116.20: "La receta que Celestina le da a Areúsa para que se le 'vuelva la madre a su lugar', tiene una base diferente (el olor) pero cita dos ingredientes del emplasto de Lozana: 'Todo olor fuerte es bueno, así como poleo, ruda, ajensos, humo de plumas de perdiz, de romero, de moxquete, de encienso'". See on this episode Kuffner 2022, w. p.: "While Lozana is not explicitly described as a midwife, she performs tasks associated with midwifery such as healing a courtesan who has just given birth and is suffering from *mal de madre*, a blanket term referring to women's gynecological issues, in this case, postpartum complications".

⁵² Rösslin 1513, Fiv^v-Gii^r. In Carbón, chapters 23 to 31 are devoted to aftercare. In addition to uterine pain, fever and problems with the mammary glands are of particular interest.

⁵³ Carbón 2015, 173: "Y si por ventura tanta fuere la profocacion que perdiere los sentidos, haganle perfumes de cosas fetidas como asse fetida, paño de lana quemado y semejantes, y si no acordare, haganle vn humo con algodon soplando que le entre mucho dentro la nariz, que cierto la haran retornar".

⁵⁴ Both, galbanum and ammoniacum are gum resins extracted from different plants of the ferula genus; see also Dioscorides III, xci, 1555, 328-329 and III, xcii, 1555, 329.

⁵⁵ See Dioscorides III, xlviii, 1555, 298 ("Cocida en aceite y echada en clister es útil contra la ventosidad de la madre [...] Majada y aplicada con miel sobre aquel espacio que está entre la natura de la mujer y el sieso restituye así mesmas las que ahoga la madre") and 299 ("Cuando queremos hablar de una cosa notísima y familiar a todos decimos comúnmente que es tan conocida como la ruda, porque no hay ciego que a lo menos por su olor no conozca esta planta"). See on the rue in early modern literary texts Sanz-Lázaro 2022.

in a damp compress.⁵⁶ Likewise, the Spanish doctor advises applying a plaster based on galbanum on the navel ("ponerle este ceroto en el ombligo"):

Rx. galbani mollificati quantum sufficit scorie ferri preparate dracmas vj corallorum rubeorum sumach granorum mirti seminis plantaginis media dracma misceantur fiat cerotum cum aliquo de terbentina extendatur super alutam ad formam sphericam pro vmbilico.⁵⁷

For removing flatulence, Rösslin advocates other products than Delicado's Lozana, whereby it is noticeable that the consumption of wine is particularly encouraged.⁵⁸ Carbón also recommends different intakes of wine with other substances.⁵⁹ In addition, both, Rösslin and Carbón, highly appreciate Avicena's "diamarte". The former writes:

Wann aber der frawen nach der geburt zufalt das ir der leib geschwült vnd zerblasen würt, so sol sie ziser erbsen wasser vnd romisch kummel gepuluert trincken. Auch guten wein mit einer ladtwergen genant dyamarte oder mit einer genant alkakengi, von denen Auicenna schreibt am fünfften buch, als die doctores wol wissen. (Rösslin 1513, Gi^v)

[If one observes that the body of a freshly delivered woman swells and seems puffed up, give her a drink of chickpea broth with powdered Roman caraway mixed in. Similarly, I recommend good wine with an electuary called Dyamarte or an electuary called Alkakengi, about which Avicenna writes in his fifth book, as the doctors well know.]

It is extremely striking that at the very point where reference is made to Avicenna's Arab authority, the author highlights the male academic community of doctors. When Carbón (2015, 89-90) discusses in great detail the question of how this combination of active ingredients should be prepared, he also places particular emphasis on promoting himself as a particularly experienced doctor. He is the one who can show to "los aromatarios y medicos poco experimentados" (Carbón 2015, 89) how to prepare this complex recipe correctly.

As Palmujoki comments in her edition, "diamarte" is an "electuario cuya base es el macis o corteza de la nuez moscada" (Carbón 2015, 421). Against this background, it is evident that Lozana's rejection of the use of wine and nutmeg is a clear and deliberate disapproval of established male medicine and the Arab tradition based on Avicenna. She can assert very confidently that what the "men and doctors say" is simply wrong.

One of Delicado's contemporaries, Paracelsus, notoriously encouraged physicians to learn outside the universities and to acquire the knowledge of illiterate people:

 58 See for the use of wine Rösslin 1513, Gii^r: "gib den frawen zůtrincken in wyßem wein zweyer weissen körner schwer bysem".

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⁵⁶ Rösslin 1513, Gii^r: "Item ein anders zů miltern die wee vnd schmertzen der gemächt nach der geburt. Nymm rauten, rot byfůß, gertwurz oder stabwurz, zerstoß die wol mitt poleyen ὅll vnn thủ es alles zůsamen vnd werme das in einem hafen vnd verwickel die ding in ein tůch vnn leg das der frawen uff ir gemecht".

⁵⁷ Carbón 2015, 166-167.

⁵⁹ See Carbon 2015, 88: "vino en el qual sean [sic] cozidas tres dragmas de squinanto y vna de calendula", and 89: "vinto tinto y agua de azar y azeyte".

Wie dies zu heilen ist kann man weder von Galen noch von Avicenna lernen [...]. Derhalbe folget aus dem, das der medicus nicht alles das er können und wissen sol, auf den hohen schulen lernet und erfaret, sonder er muss auch zu zeiten zu alten weibern, zigeineren, schwarzkünstlern, lantfarern, alten bauersleuten und dergleichen mer unachtsamen leuten in die schul gehen und von inen lernen. dan dise haben mer wissen von solchen dingen, dan alle hohe schulen.

[How to cure this can be learned neither from Galen nor from Avicenna. From which it follows that the physician cannot learn all that he should know and be able to do in the universities, but must also go to the school of old women, gypsies, necromancers, vagabonds, old peasants and other such simple folk, for they know more about these things than all the universities.]⁶⁰

In *La Lozana Andaluza*, the author in the text, *alter ego* of the doctor Delicado, adheres to Paracelso's advice:

Vitoria.—Fijo, Vitoria, enferma de la madre, y esta señora española me ha dado aqueste cerote para poner al ombligo.

Autor.—Decime, señora, ¿qué mete dentro, si vistes?

Vitoria.—Yo os lo diré, gálbano y armoniaco, que consuma la ventosidad. Y perdoname, que tengo priesa.⁶¹

He studies the protagonist practicing her profession and enquires with her patients about the details of their treatment. By integrating literary and medical discourses within a dialogical framework, Delicado constructs a (counter-)narrative that effectively sheds light on women's expertise in the field of herbal medicine.

An unprejudiced look at early modern medical literature and fictional texts written by doctors reveals not only a paternalistically patronizing attitude towards women healers in general and midwives in particular. Against the background of the growing appreciation of experiential knowledge, the insights of female herbalists are becoming increasingly recognized, mainly with those doctors who dare to break new ground.

⁶⁰ Paracelso 1922-1933, XIV, 541.

⁶¹ Delicado 2013, 219. It is certainly worth asking why the same recipe is used twice in the novel.

Works Cited

Primary literature

- Aretino, Pietro. Sei giornate, ed. Giovanni Aquilecchia. Bari: Laterza, 1969.
- Biblia sacra iuxta Vulgatam Clementinam. Madrid: BAC, 1994.
- Carbón, Damián. Libro del arte de las comadres o madrinas y del regimiento de las preñadas y paridas y de los niños, ed. Katri Palmujoki. Helsinki: Société Néophilologique, 2015.
- Delicado, Francisco. *La Lozana Andaluza*, eds. Jacques Joset and Folke Gernert. Madrid: RAE, 2013.
- Dioscórides. *Pedacio Dioscórides Anazarbeo*. *Acerca de la materia medicinal y de los venenos mortíferos*, trad. Andrés Laguna. Antwerp: Juan Latio, 1555.
- Metlinger, Bartholomäus, *Ein regiment der iungen kinder*. Augsburg: Hanns Schauren, 1500.
- Paracelsus, Sämtliche Werke, ed. Karl Sudhoff. München: Barth, 1922-1933, 15 vols.
- Rösslin, Eucharius, *Der Swangern Frauwen vnd hebañen Rosegarten*. Straßbourg: Martin Flach, 1513.
- Savonarola, Michele. *A Mother's Manual for the Women of Ferrara: a Fifteenth Century Guide to Pregnancy and Pediatrics*, ed. Gabriella Zuccolin, trans. Martin Marafioti. New York/Toronto: Iter, 2022.
- Vives, Juan Luis, *De subventione pauperum sive De humanis necessitatibus*. *Introduction, critical edition, translation and notes*, eds. Constantinus Matheeussen and Charles Fantazzi. Leiden: Brill, 2002.
- Vives, Juan Luis. *The Education of a Christian Woman. A Sixteenth-Century Manual*, ed. Charles Fantazzi. Chicago/London: The University of Chicago Press, 2000.

Secondary literature

- Aichinger, Wolfram. "Childbirth Rhythms and Childbirth Ritual in Early Modern Spain, together with some Comments on the Virtues of Midwives." *Hipogrifo* 6 (2018): 391-415.
- Benedek, Thomas G. "The Changing Relationship between Midwives and Physicians during the Renaissance." *Bulletin of the History of Medicine* 51 (1977): 550-564. Chavaroche, Ophélie. "Midwives and Spin Doctors: The Rhetoric of Authority in Early Modern French Medicine." In Stephanie M. Hilger ed. *New Directions in Literature and Medicine Studies*. London: Palgrave Macmillan, 2017. 319-332.
- Codet, Cécile. "The Influence of the Publication of Early Midwifery and Apothecary Books on the Medical Practices of Women." In Noemi Barrera, et al. eds. *Spaces of Knowledge. Four Dimensions of Medieval Thought*. Newcastle upon Tyne: Cambridge Scholars Publishing, 2014. 15-24.
- Contreras Mas, Antoni. "Carbón Malferit, Damián." In *DB~e*. Available *online* at https://dbe.rah.es/biografias/19123/damian-carbon-malferit, *last accessed* 28 February 2024.
- Dangler, Jean. Mediating Fictions. Literature, Women Healers, and the Go-between in Medieval and Early Modern Iberia. Lewisburg: Bucknell UP, 2001.
- De Beni, Matteo. De los descubrimientos a las taxonomías la botánica y la zoología en la lengua española del Renacimiento a la Ilustración. Mantova: Universitas studiorum, 2015.

- Dlabačová, Anna and Andrea van Leerdam. "Introduction." In: Anna Dlabačová, Andrea van Leerdam and John Thompson eds. *Vernacular Books and Their Readers in the Early Age of Print (c. 1450–1600)*. Leiden: Brill, 2023. 1-33.
- Feis, Oswald. "Unbekannte Briefe von Eucharius Rößlin (Vater und Sohn)." *Archiv für Geschichte der Medizin* 22 (1929): 102-104.
- Fernández, Enrique. "Tres testimonios de control y desplazamiento de las comadronas en España (siglos XIII al XVII)." *Revista canadiense de estudios hispánicos* 32 (2007): 89-104.
- Gallego-Caminero, Gloria, et al. "Las parteras y/o comadronas del siglo XVI: el manual de Damiá Carbó." *Texto & Contexto Enfermagem* 14 (2005): 601-607.
- García Santo Tomás, Enrique. Signos vitales. Procreación e imagen en la narrativa áurea. Madrid: Vervuert, 2020.
- Gélis, Jacques. History of Childbirth. Boston: Northeastern UP, 1991.
- Gernert, Folke. "La diversión de las segregadas prácticas sociales y espacios textuales." In Mechthild Albert ed. *Sociabilidad y literatura en el Siglo de Oro*. Madrid: Vervuert, 2013. 219-238.
- Gernert, Folke. "Physician-Writers, Women Healers and the Suffering Body. Symphorien Champier, François Rabelais, Agrippa von Nettesheim and Francisco Delicado." HeLix 17 (2024): 166-189.
- Green, Monica H. Making Women's Medicine Masculine. The Rise of Male Authority in Pre-modern Gynaecology. Oxford: Oxford UP, 2008.
- Green, Monica H. "The Sources of Eucharius Rösslin's Rosegarden for Pregnant Women and Midwives (1513)." Medical History 53 (2009): 167-192.
- Gutiérrez Rodilla, Bertha M. "Las mujeres y la medicina en la Edad Media y el primer Renacimiento." *Cuadernos del CEMyR* 23 (2015): 121-135.
- Hanus, Tamara. "Nacido con mantillo. Creencias populares y testimonios literarios acerca del saco amniótico." Avisos de Viena 8 (2023): 10-25.
- Juárez-Almendros, Encarnación. Disabled Bodies in Early Modern Spanish Literature: Prostitutes, Aging Women and Saints, Oxford: Liverpool University Press, 2018.
- Keil, Gundolf. "Nachwort." In Helmut H. Hess ed. *Gynaecia Mustionis. The Midwives' Catechism of Mustio & Eucharius Rösslin's Rosegarden.* Frankfurt a.M.: Haag und Herchen, 1998. Vol. II. 263-278.
- King, Helen. Midwifery, Obstetrics and the Rise of Gynaecology. The Uses of a Sixteenth Century Compendium. Aldershot: Ashgate, 2007.
- Kölsch-Bunzen, Nina. "Die Macht der Bilder vom Ungeborenen. Von der Nutzung bildlicher Darstellungen vom Ungeborenen als Erweis der Überlegenheit akademischen ärztlichen Sehwissens gegenüber erfahrungsbasiertem Tastwissen von Schwangeren und Hebammen in der Frühen Neuzeit." *Bulletin des Zentrums für interdisziplinäre Frauenforschung der HU Berlin* 25 (2002): 74-101.
- Kruse, Britta-Juliane. "Neufund einer handschriftlichen Vorstufe von Eucharius Rößlins Hebammenlehrbuch *Der schwangeren Frauen und Hebammen Rosengarten* und des *Frauenbüchleins* Ps.-Ortolfs." *Sudhoffs Archiv* 78 (1994): 220-235.
- Kruse, Britta-Juliane. "Die Arznei ist Goldes wert" mittelalterliche Frauenrezepte. Berlin: De Gruyter, 1999.
- Kuffner, Emily. "Bawds, Midwifery, and the Evil Eye in Golden Age Spanish Literature and Medicine." *Humanities* 12 (2023): w. p.
- Lamendin, Henri. Carl von Linné. Médecin précurseur de la pharmacie moderne (1707-1778). Paris: L'Harmattan, 2012.

- Leerdam, Andrea van. Woodcuts as Reading Guides. How Images Shaped Knowledge Transmission in Medical-Astrological Books in Dutch (1500-1550). Amsterdam: Amsterdam University Press, 2024.
- Monti, Silvia. "Malattie, medicine e medici dalla *Celestina* alla *Lozana Andaluza*." In Silvia Monti ed. *Malattia e scrittura*. Verona: Cierre Grafica, 2012. 65-107.
- Moral de Calatrava, Paloma. "Damián Carbón y la Instrucción de Comadres en la España del siglo XVI." In Consuelo Flecha García, Pilar Ballarín Domingo & Simonetta Ulivieri eds. *Mujeres y educación: saberes prácticas y discursos en la historia*. Sevilla: Diputación Provincial de Sevilla, 2005. 55-64.
- Moulin, Claudine. "Textwandlungen Eucharius Rösslin, *Der Swangern Frauwen und hebammen Rosegarten* als sprachhistorische Quelle." In Luise Czajkowski, Sabrina Ulbrich-Bösch and Christina Waldvogel eds. *Sprachwandel im Deutschen*. Berlin: De Gruyter, 2018. 319-336.
- Ortiz, Teresa. "From Hegemony to Subordination: Midwives in Early Modern Spain." In Hilary Marland ed. *The Art of Midwifery: Early Modern Midwives in Europe*. London: Routledge, 1993. 95-114.
- Ortiz, Teresa. "La educación de las matronas en la Europa Moderna ¿Liberación o subordinación?" In Cristina Segura Graíño ed. *La educación de las mujeres:* ¿libertad o subordinación?. Madrid: Asociación Cultural Al-Mudayna, 1996a. 155-170.
- Ortiz, Teresa. "Protomedicato y matronas: una relación al servicio de la cirugía." *Dynamis* 16 (1996b): 109-120.
- Perry, Mary Elizabeth. Gender and Disorder in Early Modern Seville. Princeton: Princeton UP, 1990.
- Pomata, Gianna. "Le lait de Vénus. La sensualité de la lactation dans l'art et la médecine de la Renaissance." In Yasmina Foehr-Janssens, Daniela Solfaroli Camillocci et al. eds. *Allaiter de l'Antiquité à nos jours. Histoire et pratiques d'une culture en Europe*. Turnhout: Brepols, 2022. 261-304.
- Pulz, Waltraud and Marie-France Morel. "Aux origines de l'obstétrique moderne en Allemagne (XVI^e-XVIII^e siècle): accoucheurs contre matrones?" *Revue d'histoire moderne et contemporaine* 43 (1996): 593-617.
- Rodríguez Perales, Rosa María. La formación enfermera de la Orden Hospitalaria de San Juan de Dios en los siglos XVI y XVII. Una mirada desde el siglo XXI. Santander: Universidad Pontificia Comillas, 2013.
- Rosenthal, Carl Oskar. "Zur geburtshilflich-gynaekologischen Betätigung des Mannes bis zum Ausgang des 16. Jahrhunderts." *Janus* 27 (1923): 117-148 and 191-212.
- Ruiz-Berdún, Dolores. *Historia de las Matronas en España*. Madrid: Guadalmazán, 2022.
- Sánchez Sánchez, Teresa. "El atavismo médico-psicológico en la explicación renacentista de la patología sexual humana: A partir de un tratado tocoginecológico de Damián Carbón de 1541." *Revista de Historia de la Psicología* 17 (1996): 210-219.
- Sanz Lázaro, Fernando. "El nacimiento del malnacido: embarazos y partos en la novela picaresca." *Hipogrifo* 9 (2021): 745-768.
- Sanz-Lázaro, Fernando. "Más conocida que la ruda: una *planta medicinal* de uso cotidiano en su contexto." *Avisos de Viena* 8 (2022): 15-23.
- Stolberg, Michael. *Gelehrte Medizin und ärztlicher Alltag in der Renaissance*, Oldenbourg: De Gruyter, 2021.
- Tilmann, Walter. *Unkeuschheit und Werk der Liebe. Diskurse über Sexualität am Beginn der Neuzeit in Deutschland.* Berlin: De Gruyter 1998.

- Usunáriz Garayoa, Jesús María. "El *oficio de comadres* y el *arte de partear*. Algunos apuntes sobre Navarra: siglos XVI-XVIII." In Ignacio Arellano ed. *Modelos de vida y cultura en la Navarra de la modernidad temprana*. Pamplona: Instituto de Estudios Auriseculares, 2016. 319-363.
- Whaley, Leigh Ann. Women and the Practice of Medical Care in Early Modern Europe, 1400-1800. Basingstoke: Palgrave Macmillan, 2011.