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Medical auxiliaries from the physician's viewpoint in Ancient, Medieval and Renaissance medical texts: codifying professional skills or establishing a hierarchy?<sup>1</sup>

Ancient, Medieval and Renaissance medical treatises written by physicians contain information pertaining to various categories of people involved in healthcare. In the case of specific patients, women and children, female assistance by midwives and nurses is indispensable; female auxiliaries often replace the physician in crucial moments such as birth or swaddling. When specific technical skills or professional activities regarding medicinal substances are concerned, druggists step on stage.

Female 'paramedics' are not academics or learned persons like physicians. Physicians or surgeons (the latter in treatises which include references to specific obstetric experience) provide comprehensive descriptions of their assistants' mission and practice in their treatises.

The situation for druggists is more complex: they could be learned botanists or simple merchants; whatever their learning and training may be, their social position differs from the physician's.

Hippocrates (460-370 B.C.), Galen (129-210 A.D.), and Soranos of Ephesus (ca. 98-138 A.D.)<sup>2</sup> refer to female 'paramedics'. Razes († 925), as well as Avicenna (980-1037), two physicians<sup>3</sup>, and Ibn al-Quff (1233-1286), a surgeon, underline the instrumental role of nurses in child nutrition and development and provide detailed descriptions of the ideal nurse. The Renaissance commentators of Galen François Valleriole (1504-1580) and Leonhart Fuchs (1501-1566) insist on the competence and morality of midwives and nurses. The French Renaissance physicians and surgeons Simon de Vallambert († 1558), Jacques and Charles Guillemeau (respectively 1550-1613 and 1588-1656) refer to Galen (but not to Soranos) as well as to the Oriental Medieval physicians, mainly Avicenna and Razes, in order to emphasize good practices and prevent errors of female 'paramedics'<sup>4</sup>.

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<sup>1</sup> This paper is a revised version of a talk first presented at the international conference *Scientiae: disciplines of knowing in the Early Modern World*, held in Padua, April 19-22 2017. We would like to thank the organizers of this conference for giving us this opportunity, as well as the participants for their helpful remarks. We would also like to thank Sarah Pech-Pelletier for her proposal to include this work in the current issue of this journal, as well as the reviewers for their careful reading of our English text.

<sup>2</sup> Concerning the ancient Greek and Roman world, we limit our study to those three physicians whose work includes 'gynecology'/midwifery/woman and infant care. The Hippocratic and Galenic corpora are abundantly cited in the Renaissance treatises on these topics, and are regarded as major references providing standards and guidelines.

<sup>3</sup> Although Razes' reputation as an alchemist and a learned man goes hand in hand with his contribution as a medical practitioner, for the purpose of the present study we will mainly focus on the latter. As for Avicenna's work, we will mainly discuss its medical content, putting aside its important philosophical interest.

<sup>4</sup> This omission of any reference to Soranos, despite the fact that the specialized content of his treatise perfectly fits the subject in question, seems quite strange. It could probably be explained by the limited circulation in the medical Renaissance milieu of the Latin 'simplified version' (actually an adaptation), *Gynaecia Muscionis*, of his treatise by Mustio/Muscio (6<sup>th</sup> cent. A.D.). On Soranos' life and work, as well as on the reception of his treatise, see Soranos, *Maladies des femmes*, texte établi et trad. par GOUREVITCH,

Our aim is to focus on midwives and nurses in order to examine a gendered medical practice by people who did not study it in an academic context: how and by whom are they to be educated? How do physicians establish the hierarchical limits between them and their assistants? What is the status of paramedical knowledge: amateur or professional, although not officially included in the academic medical curricula?

Concerning the comparison between male and female paramedics, we will only open the debate here with a working hypothesis, as our study is still a work in progress.

The characters of the story and their context

We propose to classify the characters of our story in two categories, according to the target audience: on the one hand, the Hippocratic and Galenic corpora, and the Renaissance commentators of Galen, whose readers are not female, because their aim is to transmit a learned ancient Greek knowledge to students of medicine or physicians in an academic context; Valleriolo was also a practicing physician in the city of Arles, but when he refers to midwives and nurses there is no reference to personal experiences<sup>5</sup>.

On the other hand, Soranos of Ephesus, whose treatise *Gynaecia (On the diseases of women)*, an invaluable source of information about the imperial Roman 'gynecology', written in Greek, includes a detailed section on midwives, explicitly addressing a female audience: the excellent midwives who will recognize themselves in Soranos' words, and the ἀρτιμαθεῖς, literally those who have just finished learning, the beginners, the former being the models for the latter<sup>6</sup>. The Renaissance physicians and surgeons Simon de Vallambert, Jacques and Charles Guillemeau, expect to be read by a female audience, in order to educate them. This is one of the main reasons for the use of French in Vallambert's *Five books about the way to feed and take care of the children* (Poitiers 1565): the target audience is not physicians but "the French women" (Book 2, p. 30). Any serious medical education is to be provided in "the languages of the ancient physicians" (Book 2, p. 30). This is the reason why Vallambert criticizes those who

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Danielle, BURGUIÈRE, Paul, MALINAS, Yves, Paris, Collection des universités de France, 1990 (p. XXIII-XXXII and XLVII-LI respectively) . Our references to the Soranic text follow this edition. On Mustio/Muscio, see: MAIRE, Brigitte, "Apport de Mustio à la représentation de la femme antique", in *Body, disease and treatment in a changing world: Latin texts and contexts in ancient and medieval medicine: proceedings of the ninth international conference "Ancient Latin medical texts", Hulme hall, university of Manchester, 5<sup>th</sup>-8<sup>th</sup> September 2007*, ed. by David LANGSLOW and Brigitte MAIRE, Lausanne, 2010, 49-59; and PRENNER, Antonella, *Mustione "traduttore" di Sorano di Efeso: l'ostetrica, la donna, la gestazione*, Napoli, 2012.

<sup>5</sup> Leonhart Fuchs is well known as a botanist, an anatomist, and a professor of medicine at the university of Tübingen, his native city, where he spent almost all his life. More information about his life and career, including a related bibliography: BACALEXI, Dina, "Trois traducteurs de Galien au XVI<sup>e</sup> siècle: Niccolò Leonicensi, Guillaume Cop, Leonhart Fuchs", in Véronique BOUDON-MILLOT and Guy COBOLET *Lire les médecins grecs à la Renaissance: aux origines de l'édition médicale. Actes du colloque international de Paris (19-20 septembre 2003)*, Paris, BIUM, 2004, 247-269. Unlike Fuchs, who comments on his own Latin translation of Galen, Valleriolo comments on the translation of Guillaume Cop (1450-1532). Valleriolo was born in Montpellier, where he studied medicine. He spent almost all his life as a practicing physician and became a professor of medicine in Torino at the age of 70.

<sup>6</sup> Soranos, *Gyn.* 1, 3.

translate Galen's or Dioscorides's treatises into French in order to make them available to uneducated and ignorant people (Book 2, p. 30)<sup>7</sup>. Charles Guillemeau, in the two-page preface to the edition of his father Jacques's treatise *On the pregnancy and delivery* (1621), specifies that it would be "a good occasion [for midwives] to acknowledge many failings concerning the dexterity during deliveries or the care provided to new mothers"; ladies can learn how to take care of themselves if they do not want to resort to a (male) surgeon, "because of their sense of decency"; "young inexperienced surgeons or those who might work scattered here and there or away from towns" would "go through the labyrinth of instructions", in order to preserve their "reputation" as well as the health of their women patients<sup>8</sup>.

The Arabic Medieval treatises, although not explicitly intended for a female audience, are closer to the second category, because of their educational purpose not being limited to an academic milieu, and of the importance given to practical knowledge concerning female paramedics and child care: Razes wrote a treatise on infant care (*De curis puerorum*) and was one of the earliest to put forward the specificities concerning children in the treatise *On smallpox and measles*<sup>9</sup>. Avicenna, despite his reputation as a philosopher, is cited in Vallambert and Guillemeau as a provider of irrefutable practical knowledge on health care and remedies. We should remember that his *Canon of medicine* was part of university medical curricula in Western Europe for centuries

We will also refer to Ibn al-Quff, a famous surgeon and hygiene specialist, who devoted the first seven chapters of his sixty-chapter treatise *The complete book on how to preserve health and struggle against diseases* of the embryo, the pregnant woman, the new mother and the young child. Important though this treatise may be, it is not cited by the Renaissance physicians dealing with midwifery and infant care, as it was not

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<sup>7</sup> A brief biography of Vallambert, followed by a review of the treatise under discussion in this article, can be found in LANSSELLE, M., "Un puériculteur oublié: Simon de Vallambert" *Bulletin de la Société française d'histoire de la médecine*, n° 27, 1933, 243-251. The original French title of Vallambert's treatise is: *Cinq livres de la manière de nourrir et gouverner les enfants dès leur naissance*. A digitized copy of this book can be found in open access in Gallica, the digital library of the French National Library: <http://gallica.bnf.fr/ark:/12148/bpt6k53994c?rk=85837;2>). In the dedicatory epistle, he explicitly addresses "those who would value the French language" of this treatise; and in the 4<sup>th</sup> page of the preface, he insists on its "style, clearer and easier to read, compared to all the others". From now on in this article, we will refer to this treatise as *Five books about the way to feed and take care of the children*. The English translation of the French citations is ours.

<sup>8</sup> The original French title of this treatise was written by the father, Jacques, and edited by the son, Charles, who added his own treatise on sterility: *De la grossesse et accouchement des femmes... augmenté de ... plusieurs maladies secrètes, avec un traité des abus qui se commettent sur... l'impuissance des hommes et des femmes*, Paris 1621. The preface is explicitly addressed to the lector: *Au lecteur, salut*.

<sup>9</sup> For the first treatise cited, see Al-Rāzī, *On the treatment of small children (De curis puerorum): the Latin and Hebrew translations*, ed. and transl. by Gerrit BOS, Michael McVAUGH, Leiden/Boston, 2015. For the second one, see KATOUZIAN-SAFADI, Mehrnaz et BONMATIN, Jean-Marc, "Du diagnostic différentiel aux thérapies prudentes : le traité de la rougeole et de la variole de Rāzī", in Dimitrios MICHAELIDES (dir.), *Medicine and Healing in the Ancient Mediterranean World*, Oxford/Philadelphia, 2014, p. 334-349.

translated into Latin.

However, numerous medical works written in Arabic before the 12<sup>th</sup> century were translated into Latin.<sup>10</sup> This significant activity thrived until that century, but declined afterwards. This is the reason why there are no Latin translations of the treatises of Ibn al-Quff, who died in 1286.

Although their purpose is clearly to educate mainly through practical knowledge, Vallambert and Guillemeau abundantly refer to the ancient and medieval medical authorities, citing Hippocrates, Galen, Razes, Avicenna and others, as if they wanted to prompt the female readership to read those treatises. While for Valleriole and Fuchs the authorities of the past were used as educational material intended for students and scholars who would actually have access to the texts and would be able to consult them, for Vallambert or Guillemeau the *medical* authorities legitimized *paramedical* knowledge, which thus acquires a higher status. Nevertheless, it is important to note here that the authors of the treatises, ancient and modern, unlike the female readers, master both learned (or theoretical) and practical (or technical) knowledge.

Midwives: a high skill, but a limited power<sup>11</sup>

In the Hippocratic corpus, there are specific terms (ἀκεστρίς, midwife, an alternative term to the usual μαῖα; ὀμφαλητόμος, the one who cuts the umbilical cord) for women who assist their cognates during delivery and can also perform some “medical acts” (ἰητρεύουσα). Although it is more likely that the majority of women gave birth without any assistance, women paramedics were regarded as able to diagnose some female diseases thanks to vaginal examination and a good knowledge of a body which is also their own. Technical skill is needed but there are no explicit references to a systematic apprenticeship.

Soranos (*Gyn.* I, 2) provides a description of the main qualities and skills required of a midwife: she must be literate, able to learn and memorize lessons; discreet, able to share family secrets; well trained; showing “a manly perseverance”; “having long and thin fingers”. He thus suggests that her work combines intellectual capacities and technical skill.

Galen’s midwives proceed with the delivery, receive the baby and model it in the very first moments of its life: they facilitate delivery “imitating nature” (*De usu partium*, K. 4, 234-235); they know how to handle the woman in each step preceding delivery, and how to “encourage” her to push the baby out (*De naturalibus facultatibus*, K. 2, 151-152); they must prevent malformations of the baby by receiving it correctly (*De morborum causis* K. 7, 27). Their skill is recognized by the physician, who trusts their diagnosis even in cases such as exhibited in the well known narrative about Boethus’s wife (*De praenotione ad Epigenem* K. 14, 641-647), where they are unable to heal the patient

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<sup>10</sup> JACQUART, Danielle, « Les manuscrits des traductions de Gérard de Crémone : quelques caractéristiques formelles », ins Jacqueline JAMESSE (dir.) *Les traducteurs au travail, leurs manuscrits et leur méthode (Moyen Âge – Renaissance)*, Turnhout, Brepols, 2003, p. 207-220.

<sup>11</sup> For a first approach of the topic on midwives and nurses, including a detailed examination of the Greek and Latin sources, but not of the Medieval Oriental ones, see BACALEXI, Dina, “Responsabilités féminines: sages-femmes, nourrices et mères chez quelques médecins de l’Antiquité et de la Renaissance”, *Gesnerus* 62 (2005), 5-32.

despite their qualifications (“the best midwives in town”)<sup>12</sup>.

There are neither significant elements about midwives’ skill or competence in the Renaissance commentators of Galen, Valleriole and Fuchs, nor caveats or sharp criticism, even in Fuchs’s highly polemic treatise *Paradoxa medicinae* (1535)<sup>13</sup>. This might be because midwives did not study at university, so they are not in contact with curricula full of “erroneous” Arabic medical learning or with physicians who favor such sources instead of the Greek ones.

In the specialized works of Vallambert and Guillemeau (father and son), particular attention is given to the midwife’s education.

Vallambert is the personal physician of the Duchess of Savoie and Berry and, as specified in the title page of the treatise studied in the present article, “a short time since, of the duke of Orléans” (1558). He is a learned man who knows the Greek and Arabic medical texts, Galen, Avicenna, and Razes fairly well. The treatise is dedicated to Queen Catherine de Medici. His intention is “to teach” and make knowledge available in French<sup>14</sup>. Although learned medicine ought to be written in Latin, Vallambert is popularizing it, adding some rare case studies from his personal experience, which is richer concerning nurses than midwives, because his main interest is infant care.

Jacques Guillemeau and his son Charles, as practicing surgeons, make some references to ancient sources (Hippocrates and in some cases Avicenna on the diseases of women, Galen on delivery etc.), and direct many caveats or sharp criticism towards midwives, illustrated by a lot of personal experience narratives which would serve as examples to “young surgeons” too. J. Guillemeau’s description of the “good midwife” (*On happy delivery* Book 2, chap. 4, “How a midwife must be”) is based in Galen, and corresponds to that of Soranos (who is never cited). J. Guillemeau refers to “sanctions” against bad midwives<sup>15</sup>: this promotion of a professional and codified knowledge can be regarded as

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<sup>12</sup> For more information about this case, see MATTERN, Susan P., *Galen and the rhetoric of healing*, Baltimore, Johns Hopkins University Press, 2008, 73-75, 123 and 152-153 (case n°280 in the Appendix B). Mattern underlines the fact that Galen does not compete with midwives, because his actual rivals are his fellow physicians.

<sup>13</sup> The exact title of this treatise is *Paradoxorum medicinae libri tres, in quibus sane multa a nemine hactenus prodita, Arabum aetatisque nostae medicorum errata non tantum indicantur, sed et probatissimorum autorum scriptis, firmissimisque rationibus ac argumentis confutantur*. An overview of its content was presented in the Scientiae 2015 conference in Toronto, under the title: “Two readings on Galen: Rhazes (8<sup>th</sup>-9<sup>th</sup> cent.) and Leonhart Fuchs (16<sup>th</sup> cent.)” [halshs.archives-ouvertes.fr/halshs-01639756](http://halshs.archives-ouvertes.fr/halshs-01639756). Fuchs, who devoted his career to teaching at the university of Tübingen, directs his criticism firstly towards the Arabic medicine, and secondly, and most importantly, at his fellow physicians, those involved in the academic medical education, supposed to be “pro-Arabic” and neglecting Galen or Dioscorides. Neither university teachers nor physicians of the academic milieu were in contact with midwives.

<sup>14</sup> Vallambert underlines the particularity of his treatise, the first one written in French “for the public benefit, especially the one of our nation” (p. 4 of the preface). In the two-page dedicatory epistle, he uses the lexical field of teaching: *instruction, divulguer, enseigner[er] par écrit, enseignement*.

<sup>15</sup> *On happy delivery*, Book 2, chap. 3, 157: Guillemeau refers to women who “practiced medicine” in the Ancient world, and cites the Roman jurisconsult Ulpian in order to show how ancient the existence of this paramedical “profession” was: Ulpian

a serious attempt to put an end to various amateur practices, and to establish a [semi-] learned control upon women; Jacqueline Vons mentions a professional examination necessary for midwives or an apprenticeship since the second half of the 16<sup>th</sup> century, and the existence of a guild, but professional obligations were actually established at the very end of this century<sup>16</sup>.

A selection of topics concerning midwives:

#### Accurate diagnosis

Diagnosis is the result of their capacity to identify signs of pregnancy (for example by touching the vagina), as well as of female diseases. Jacques Guillemeau mentions those signs in detail in the treatise *On happy delivery* (Book 1, chap. 1), followed by three chapters on particular cases: how to tell whether the baby is a girl or a boy (chap. 2); another on whether there are twins (chap. 3); and another one on “the false pregnancy” (chap. 4). He refers to Hippocrates’ authority in the chapters about the diseases of pregnant women that midwives are supposed to diagnose (e.g. Book 1, chap. 4, 5 and Book 3, chap. 27, 28). Yet in ‘sensitive cases’ such as virginity or sterility, there is no place for a midwife’s diagnosis: “some of them pretend to be able to say if a woman is a virgin or not, but all the famous universities of Italy rejected and condemned such an opinion, and, in France, Cujas does the same: the civil law gives midwives no authority to make such a judgment”<sup>17</sup>. As sterility is a cause for divorce, impudent midwives disorient the judges who trust them as experts of male sterility, even though “the majority of them are illiterate [...]; concerning their experience, things are not better: have they ever practiced anatomy or dissection themselves or together with other persons more competent than them?”<sup>18</sup>. Ch. Guillemeau explains in medical terms what “a potent man” means, accuses midwives of not knowing what male “seminal matter” is (p. 11-14), and rejects midwives’ expertise even in female sterility (p. 16).

#### Delivery

Jacques Guillemeau focuses on the *duties* of the midwife. As Galen recommends, the midwife “imitates nature”: according to Jacques Guillemeau, “nature” teaches “not to

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already mentioned that those women received a salary, and that some sanctions were stipulated by the law against incompetent professionals.

<sup>16</sup> VONS, Jacqueline, “La parole d’une sage-femme: Louise Bourgeois 1563-1636” in V. BOUDON-MILLOT, V.DASEN et B. MAIRE (ed.), *Femmes en médecine, Actes de la journée internationale d’études organisée à l’université René-Descartes-Paris V, le 17 mars 2006, en l’honneur de Danielle Gourevitch*, Paris, BIUM De Boccard, Collection Medic@, 2008, 223-238. An updated version of this article with an additional bibliography was published online (1.05.2013) as part of the research project “La médecine à la cour de France”: <http://cour-de-france.fr/article2762.html>.

<sup>17</sup> *On happy delivery*, Book 1, chap. 3, 159.

<sup>18</sup> GUILLEMEAU, Charles, *Traité sur les abus qui se commettent sur les procédures de l’impuissance des hommes et des femmes*, Paris, 1621, 4 and 10-11. This short treatise is added by Charles at the end of his edition of his father’s treatise *On happy delivery*. The English translation of the citations is ours. Charles’ critique of the midwives’ “impudence” and “ignorance” (i.e. erroneous diagnosis) contributing to a divorce is prompted by his idea of the *Christian* marriage: a sacrament, and therefore “indissoluble”: it is absurd to believe in “those inexperienced matrons who are always talking nonsense”.

rush”, because ordinary delivery comes in time<sup>19</sup>. Ignorant midwives, or midwives eager to finish one delivery after another, can put the woman and the baby in danger. The midwife and her assistants encourage the woman, but only the midwife uses ointments in order to facilitate birth, or receives the newborn child gently: gentleness is one of the most important skills of the good midwife. For Soranos in the Roman period<sup>20</sup>, as well as for Jacques Guillemeau, difficult delivery is the surgeon’s task, because of the experience needed: “there are not many experienced midwives”, he deplores at the beginning of chap. 9, the first of a series of chapters studying difficult delivery. Although even surgeons (especially young ones) commit errors, their training and competence are superior to those of the midwives. But in the case studies narratives, he mentions a very experienced midwife (Mme [la] Charonne) who assisted him, and distinguishes such expert midwives from the others<sup>21</sup>.

#### Technical procedures performed by hand immediately after delivery

Those procedures consist in receiving the newborn child; tying and then cutting the umbilical cord; providing first care to the baby and the mother, including “modeling” of the malleable limbs of the baby. Ibn al-Quff meticulously describes the gestures of the midwife, without calling her skill into question. Despite his caveat against midwives acting “by oversight”, Vallambert appreciates their skillful intervention and approves of their “usual practice” (the French term is *communément*): this is one of the rare references to a practice not documented – though neither criticized nor rejected<sup>22</sup> – by the medical authorities. He then gives detailed instructions on the modeling of each limb of the baby’s body, according to authorities including Avicenna, Razes, and Haly Abbas (= Ali Abbas al-Magusi), and an important caveat because of the risk to harm the child if midwives are not “learned” (the French term is *savantes*), a term that would apply to education and experience. Vallambert underlines the fragility of the baby’s limbs according to Galen (*De sanitate tuenda* Book 1, ch. 7 and *Ars med.* 27 Boudon 357 = K. 1, 377)<sup>23</sup>. According to Galen, the natural form of the distorted limbs is the result of medical intervention (“reduction or bandage”) when one is still a newborn baby or

<sup>19</sup> *On happy delivery*, chap. 4 and 5.

<sup>20</sup> *Gyn.* 4, 4: “in case of difficult delivery (δυστοκία), the physician must question the midwife”, who is supposed to sit at the woman’s bedside before his arrival. Some archaeological evidence about delivery accidents causing either death or disabilities of the woman or the child are related in GOUREVITCH, Danielle, *Pour une archeologie de la médecine romaine*, Collection Pathographie 9, Paris, De Boccard, 2011, 159-161.

<sup>21</sup> Case studies are related in the treatise *On happy delivery*, p. 222-228. In one of those narratives, Jacques Guillemeau also mentions the “royal midwife” Mme Boursier, i.e. Louise Bourgeois, yet without any specific (positive or negative) assessment of her contribution. See below in this article for a brief account of her work.

<sup>22</sup> *Five books about the way to feed and take care of the children*, Book 2, chap. 1-2, 30-35.

<sup>23</sup> *Five books about the way to feed and take care of the children*, Book 2, chap. 7, 53-54. Vallambert gives the exact Galenic references, including the title of the treatise and the book where one can find the text cited in French, as if he wanted to prompt his to go back to the original Greek work or its Latin translation. This could be not only a mere conditioning of a learned physician, but also an actual attempt to provide cultural references to an allegedly uneducated audience of women paramedics and to enrich their “vocational” education.



“during growth”. So there could be a medical act performed by a physician, not only by a midwife or a nurse: Vallambert refers to these Galenic texts in order to stress a parallel between medical and paramedical care and to emphasize the importance of the act of modeling, so as to make women even more cautious/conscious of their responsibility.

### Prognosis

One of the usual tasks of the midwife (since Antiquity) is to prognosticate the viability of the newborn child. Vallambert uses the term “divination”, but actually she must *learn* how to decipher a series of signs, based on the medical authority of Avicenna. A midwife must be able to give emergency care to the baby if necessary. Emergency methods or remedies are listed there (though it is unclear if they are current popular practices or not), but the best way is to breathe strongly in the child's face<sup>24</sup>.

### Trustworthiness or ‘authenticity’

There seem to be ‘authentic’ midwives and ‘imitators’: Jacques Guillemeau mentions a young woman who died because she trusted “an assistant who imitated the midwife”. He arrived too late to save this woman, and he could only testify to the incompetence of this imitator, because a servant showed him the corpse and let him proceed with a post mortem medical examination<sup>25</sup>. Those assistants of paramedics seem not to have any skill at all, and sometimes cause death or serious disabilities.

A particular case of rivalry: Charles Guillemeau against the “master midwife” Louise Bourgeois (1563-1636), midwife at the court of France.

This case has been studied by Jacqueline Vons from the midwife's viewpoint<sup>26</sup>. We will shift the viewpoint and refer to Charles's *Remontrance à Madame Bourcier, touchant son Apologie, contre le Rapport que les Medecins ont fait, de ce qui a causé la mort deplorable de MADAME* (1627), a response to Louise's *Apoogie* published the same year, where she rejects the responsibility of the death in childbirth of Marie de Bourbon de Montpensier<sup>27</sup>. What Charles cannot stand is arguably Louise's pretention to be a learned person, not just a technician; to refer to ancient medical authorities such as Hippocrates; and to be proud to present herself as the physicians' equal. He also cannot stand the pretentious tone of Louise, who presents herself as the author of many books translated in several languages, promoting a kind of learned midwifery based on Hippocrates: according to her, the latter is the main expert in feminine diseases because he systematically consulted midwives. Louise criticizes Galen because he did not write any specific treatise about women. Charles prefers Galen to Hippocrates. He regards Louise's books as useless and untrustworthy. Yet this *is* a learned debate between equals.

Nurses: professionals or just substitutes for mothers?

Feeding the baby is of paramount importance in the ancient and medieval medical sources. Maternal breast-feeding is preferable, but not an absolute obligation. Galen and Soranos (see for instance *Gyn.* 2, 6a and 12) refer to the nurse's task to model the baby during bath or swaddling, hence the question of the different swaddling of girls and

<sup>24</sup> *Five books...*, Book 2, chap. 3, 35-36.

<sup>25</sup> *On happy delivery...*, 234-235.

<sup>26</sup> Cf. n. 13 above.

<sup>27</sup> Louise BOURGEOIS dite BOURCIER, *Apologie de L. B. dite Bourcier sage femme de la Roynne Mere du Roy & de feu Madame. Contre le rapport des Medecins*, Paris 1627.

boys, and the nurse's responsibility to ensure the child's mental and physical well-being (Galen *De sanitate tuenda* Book 1)<sup>28</sup>. According to Ibn al-Quff, melodious songs calm down babies and young children. One can find the same idea in Galen and Jacques Guillemeau (who invokes the Galenic authority). The detailed instructions on the evaluation of the good quality of the nurse's milk or on the strict observance of some rules concerning her way of life during the breast-feeding period indicate the importance of the nurse's task. All those recommendations are the result of the physicians' experience (Ibn al-Quff), but they can also be regarded as attempts to 'professionalize' a 'natural' female function<sup>29</sup>.

The Renaissance commentators of Galen either oppose the biological mother to the nurse, or mix moral reproaches to nurses with criteria pertaining to their competence, citing indiscriminately medical and non-medical authorities. They also shift to some topics without a direct link to the nurses' technical skill or honesty, such as female beauty.

Valleriole is based on a medical idea, the continuum between intra- and extra-uterine life, but above all on the plea of the philosopher Phavorinus of Arles for maternal breast-feeding and on his own conviction that there is no better nurse than the mother. Despite his description of the good nurse's physical and moral qualities, whose interdependence is supported by the authority of Galen, *Quod animi mores corporis temperamenta sequantur* (*That the faculties of the mind follow the temperament of the body*), the mother always wins when in competition with the nurse. When Valleriole comments on the Galenic caveat intended for nurses who should swaddle "in a balanced way" (ἰσορρόπως)<sup>30</sup>, he uses Christian authorities (Prudentius, Jerome, Augustine) and a poem by Propertius, all of them without any link with the nurse's task, to make a plea for natural beauty.

Fuchs's concern is esthetic: swaddling is supposed to make girls more attractive (*venustiores*,) while in Galen the term "balanced" is a part of the critique addressed to nurses who must not cause malformations to girls. According to Fuchs, the nurses' imbalanced way of swaddling, whose alleged objective is to make girls beautiful, leads to a ridiculous form of their adult body, lacking any femininity. Is femininity a characteristic of good health? Galen makes no explicit reference to it, while Soranos refers to beauty as a concern of the midwives who model the girl's body (εὐπρεπέστερον σχῆμα, a better-looking form *Gyn.* 2, 6a, 135-140): the different ways of handling girls and boys seem to be a part of professional skill in Soranos, while Fuchs is only based on literary references (Roman comedy, Terence) underlying ugliness<sup>31</sup>.

Is the learned readership of Valleriole and Fuchs less concerned with detailed descriptions of the good nurse than with theoretical principles about female morality

<sup>28</sup> More details in the article mentioned in n. 9.

<sup>29</sup> IBN AL-QUFF AL-KARAKĪ, *Gāmi' al-ġaraḍ fī ḥifẓ al-ṣiḥḥa wa daḥ al-marad* (*The book on how to preserve health and discard disease*), ed. Samī ḤAMĀRNIH, Ammān (Jordan), 1989, chap. 5, p. 153. More information about this treatise in KATOUZIAN-SAFADI Mehrnaz, BENSAD, Meyssa, IZARD, Jean-Philippe, "Soigner l'enfant dans les textes médicaux arabes et persans du Moyen Âge", *Annales de Bretagne et des Pays de l'Ouest*, T. 124, N° 3, 2017, p. 203-227, especially p. 211.

<sup>30</sup> *De morborum causis* 7, K. 7, 28-29

<sup>31</sup> Archaeological and palaeopathological evidence about accidents occurring: GOUREVITCH, *Pour une archéologie...*, 161-163.

that guarantees the child's good health? Jacques Guillemeau, whose readership is mixed, repeats, without citing the treatise of Galen *Quod animi mores*, that the soul follows the body's temperaments, and the humors resemble the morals, so there is "no comparison" between the mother and a nurse. Yet this is a mere preliminary statement in the dedicatory epistle of a long treatise *On how to feed and govern children since their birth*, the main character of which is the nurse<sup>32</sup>.

Razes' criteria for the good nurse include physiognomony: external signs such as her appearance or the sex of her own child can determine her character and the quality of her milk. Her diet and way of life can of course have an influence on this quality. Yet, if physiognomony is important, is there room for the improvement of the nurse's professional level?<sup>33</sup>

Vallambert wants to "teach infant care", to re-examine this sensitive topic, taking into account the ancient medical authorities, Greek and Arabic, without copying them, but on the contrary, by adding new experience which stems from his personal practice "and invention", as he mentions in the preface of his treatise. He is proud to "make such knowledge available" in French. Without calling the nurses' experience or ability into question, he presents a "learning curriculum" and gives the physician the role of the teacher<sup>34</sup>. Topics include the physical condition, as well as the skill of the healthy nurse. Let us examine a selection of these topics:

#### Breast-feeding

Undoubtedly, maternal breast-feeding is the best way to feed the baby. Galen (*De sanitate tuenda*), Haly Abbas and Avicenna prefer maternal milk, because of its similarity to the blood feeding the embryo. Yet, if the mother is weak or affected by some debilitating cause, the (good) nurse is to be preferred (Galen, Oribasius, Paulus of Aegina, Haly Abbas, Razi, and Avicenna)<sup>35</sup>.

There are seven conditions to fulfill for quality breast-feeding: morality, age, sex of the

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<sup>32</sup> The original French title of this treatise: *De la nourriture et gouvernement des enfants dès le commencement de leur naissance et le moyen de les secourir et garantir les maladies qui leur peuvent survenir dès le ventre de leur mère et premier âge*. This treatise follows *On happy delivery* in Charle's edition of his father's work.

<sup>33</sup> RĀZĪ, *Kitāb al-Mansūrī* (*The Book of Medicine for Mansur*). This medical handbook was dedicated to Mansur b. Ishaq, the Samanid governor of Rayy (10<sup>th</sup> century). It was translated into Latin by Gerard of Cremona in the 12<sup>th</sup> century (*Liber ad Almansorem*, Milan, 1481). Concerning physiognomony, see chap. 2, *fī al-firāsa*, p. 79-107; concerning the criteria for the good nurse, chap. 4, p. 233.

<sup>34</sup> Book 3, p. 90. Only physicians know how to handle and "govern" babies; neither midwives (even if they are very experienced), nor nurses (even if they are educated and experienced too) know how to proceed, if they do not take into account the physicians' "learned" advice (i.e. stemming from the reading of the medical authorities of the past). Yet in the previous book observation and practice came first, and then medical authorities were used to confirm the results.

<sup>35</sup> Book 1, p. 2-4. The idea of a continuum between intra- and extra- uterine life, as well as that of the milk being a kind of "white blood", was still a part of the popular arguments in favor of maternal breast-feeding in the 50s and 60s rural Greece. In Vallambert's treatise, those ideas are based on the learned medical teaching, but in fact learned and popular medicine support the same opinion.

nurse's last child, form of her breast (including nipples), quality of her milk, time since her last pregnancy, disposition of her body. One must choose the best nurse, if the mother cannot breast-feed her child (Galen, Oribasius, Paulus of Aegina, Haly Abbas, Razes, and Avicenna). The detailed instructions on how to apply each criterion to the nurse to be hired could be interpreted as a set of steady rules to follow: we know that nurses were remunerated or received a stipend, so one must be cautious not to be cheated<sup>36</sup>. Jacques Guillemeau thinks that nurses who cheat "must be whipped".<sup>37</sup>

There are five criteria for the quality of the milk and some methods to test or improve it. Vallambert (p. 20-21) refers to a beverage increasing milk production recommended by Avicenna, a practice one can also find "in Flanders or Germany": 'popular' or amateur practice thus coincides with medical advice, as in the Oriental sources, namely Razes, for whom regional medicinal substances and health care methods are to be taken into account for good health. Vallambert is confident that *the physicians* will provide the appropriate recipes and methods to correct the milk.

#### Rules of behavior and way of life

Avicenna and Bernard de Gordon, but also "the common opinion" (*le commun peuple*), determine how long after her own delivery the nurse can breast-feed the baby under her charge. Galen, Haly Abbas and Aristotle recommend sexual abstinence to the nurses: Vallambert and Jacques Guillemeau support this recommendation, insisting on the alteration to the nurse's milk caused by sex or pregnancy. The incompatibility is based on exclusively medical arguments concerning the child's health. Can it be regarded as a typical male judgment on female sexual life, a kind of "scientific alibi" for some prejudice spread in society presented as a medical caveat?

For Jacques Guillemeau, as well as for Vallambert, the nurse's behavior is a part of her skill: she must be joyful and emotionally balanced; "her way of life must be the one required by the nature and habits of the child" (Jacques Guillemeau, p. 769), or, to put it differently, by the child's pleasure: a long lasting pleasure presages intelligence and good disposition towards the "liberal arts and philosophy" (Vallambert, Book 3, p. 118-121). During her walk with the baby, the "wise nurse" provides different stimuli to the baby, in order to increase pleasure. In Book 5 (infantile diseases), Vallambert mentions the child's pleasure again: administering drugs to the sick children must provide pleasure otherwise they can refuse them. We notice that the nurse's own pleasure does not seem so important: is it regarded as a mere 'professional obligation'?

#### Practical advice

The description of the nurse's expert gestures when she swaddles, bathes, cleans or puts the baby to sleep goes beyond the mere modeling of a 'humid' body: she must gently prevent *and* correct malformations (Jacques Guillemeau based on Galen; Vallambert based on Razes, Haly Abbas, Avicenna); methods of cleaning recommended by the most prominent Greek and Arabic medical authorities including Razes, Averroes, and Avenzoar "are not so widespread nowadays", Vallambert deplores (Book 2, p. 41); the

<sup>36</sup> VONS, Jacqueline, SAINT-MARTIN, Pauline, "Vie et mort de Marie-Elisabeth de France (1572-1578), fille de Charles IX et Elisabeth d'Autriche", original article published on line May 3, 2010 (<http://cour-de-france.fr/article744.html>) as a part of the research project "La Médecine à la cour de France".

<sup>37</sup> *On how to feed and govern children...*, p. 763: "beware of the nurses who cheat and give the baby water instead of milk".

baby needs healthy air; some scents are supposed to be more suitable to babies and facilitate sleep; Avicenna and Razes discuss whether or not the baby must sleep immediately after eating. To put the baby to bed, one must “follow the nurses’ *ordinary practice*” (Vallambert, Book 3, p. 94). There is neither a medical authority cited here, nor information on how to learn this practice. But two pages below (p. 96) Vallambert refers to the instructions of Galen (*De sanitate tuenda*) on this topic: in fact, there are indeed some methods recommended by physicians, *as well as* an everyday practice by nurses: learned *as well as* ‘lay’ procedures.

#### Infantile diseases

They are not to be treated like adult ones, according to Vallambert<sup>38</sup>. He cites Hippocrates (*Aphorisms* Book 3) and the Galenic commentary *ad loc.* to specify what diseases can occur in the newborn child and what others may appear later on, when the baby has its first teeth. If the bad milk of the nurse can cause some of those diseases, Vallambert admits that there are also hereditary factors or other causes depending on particular circumstances. To answer the question of ‘who heals children’, Vallambert and Jacques Guillemeau mostly refer to the nurse not as a healer, but as a ‘passive’ medical agent as opposed to the physician, an ‘active’ one. When the baby is still breast-fed, one must give remedies to the nurse, as if she herself were ill. The nurse is regarded as a ‘living remedy’, because of her direct connection to the sick baby. But those medications, based on the ancient Greek and Arabic medical authorities, are to be administered by physicians: the nurse does not seem to have her own medical knowledge, only practical tips. Even in the case of grown up children who can tolerate mild medicines, it is the learned physician who prescribes and adapts them to each case, or the surgeon who corrects malformations or applies ointments, the recipes for which are given by Jacques Guillemeau<sup>39</sup>. Vallambert (p. 213-214) refers to the recommendations of “the practitioners” to give mild medicines to children who have weaned. Who are those practitioners? Perhaps those who know the medicinal substances well (but no explicit reference is made to druggists, although there are many substances listed there). One of them is “Guillaume de Plaisance” (from Piacenza, Italy = Gulielmus of Saliceto ca. 1210-1280), a surgeon and master of medicine in Bologna, a learned authority. The nurse can put some remedies in the baby’s eyes or ears, or help the baby teeth to come out and reduce pain: gently rub the baby’s gum with her finger, and incline the baby’s head downwards.

If the baby cannot urinate, “the women” (in French *bonnes femmes*, popular women, p. 369), Razes and “some other people” have many recipes for efficient remedies. According to Vallambert, “all those remedies are good ones”. To avoid chapped skin on the internal side of the child’s thighs, “the women of our country” “apply either ashes, or wood or other kinds of powder”: despite the fact that it is difficult to say if Vallambert refers only to French women or in general to women living in the countryside (the French word *pays* means both of them), this is evidence of the existence of amateur knowledge and practice of healing, but Vallambert does not specify how those women acquired this knowledge.

Female and male paramedics: what about druggists?

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<sup>38</sup> Book 5 of Vallambert’s treatise deals with infantile diseases.

<sup>39</sup> *On how to feed and govern children...*, chap. 18, p. 839-841.

Druggists are mentioned in Fuchs' *Paradoxa medicinae*, where the Tübingen physician, botanist and professor of medicine examines the efficiency of medicinal substances, promoting Greek medical authorities such as Dioscorides or Galen over the unreliable Arabic ones, such as Avicenna or Razes. Sometimes praised for their skill and knowledge, like the Nuremberg druggist Georg Öellinger (Georgius Ellingerus 1487-1557), but frequently criticized, their professionalism depends on the right *doctrine*, not on the strict observance of a detailed code. Fuchs urges them to *read* the right sources, undoubtedly the Greek ones.

Midwives and nurses are not supposed to go to university and be in contact with the academic milieu, so there is no risk for them to be 'contaminated' by the erroneous Arabic treatises. The competence of female paramedics is supposed to be a result of a non-academic education: as we have already noticed in the case of the controversy between Louise Bourgeois and Charles Guillemeau, being a learned person is not regarded as a good quality.

### Conclusion

Galen is not competing with female paramedics, whose contribution to female and infant care is to be improved but not called into question.

Soranos' midwife is literate, skilled, and painstaking like a man.

In the Oriental medieval treatises dealing with 'pediatrics', where learned medicine often goes side by side with regional therapeutic tradition, the female paramedics' body is a part of the continuum between the child and its milieu.

The Renaissance physicians and surgeons, through their more or less detailed advice and criticism, offer women 'vocational' education, and, at the same time, access to the ancient learned medical authorities, which are popularized thanks to the use of vernacular language.

Codification of a profession goes hand in hand with the establishment of a hierarchy: paramedics have little room for manoeuvre and can hardly improvise; firm guidance is provided in books. Although hierarchy implies superiority of learned men over semi-learned or non-learned women, the status of the knowledge available is implicitly changing: professional skill is not a mere technical ability, it is also the result of personal ethics and culture. Does it constitute a step towards bringing female *paramedical* agents closer to male *medical* ones? This debate still remains open today.

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