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## The history of childbirth: Women and doctors in the lying-in hospital of Göttingen University, eighteenth – nineteenth century

In early modern Europe, childbirth was a matter for women. When a woman was giving birth, several other women, usually relatives and neighbours, helped her, by supporting her physically, preparing hot water, taking care of the newborn baby etc. Generally, the husband was not present in the birthing room, although he did important other tasks, like calling the women for help and heating the room. The most experienced woman directed the birthing process and was called 'midwife'. In many German regions, the midwife was elected by the married women of the village (which usually was the only 'political' right of women). The midwife was paid for her help, unlike the other women.[1]

In large cities, there were tendencies towards a professionalization and education of midwives, starting already in the fifteenth century. In several cities, midwives were organized as an 'office', although they did not have a self-governing corporation comparable to the artisans' guilds. There was a more or less informal type of apprenticeship, however, and in many places, midwives received a small salary. Above all, cities tried to regulate the tasks of midwives by ordinances. Midwives were to be examined and controlled, sometimes by a committee of married women from the upper classes, often by medical men.[2]

According to the midwives' ordinances, surgeons or doctors were supposed to control midwives and to help in especially difficult cases. Well into the eighteenth century, however, they were called only rarely in cases of childbirth. One reason for this was that there were few medical doctors. More importantly, medical doctors and surgeons knew very little about practical midwifery. Usually, a surgeon was called only, when the life of the child and/or of the mother was threatened, or when the midwife and other helping women had given up any hope.

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[1] Eva LABOUVIE, *Andere Umstände. Eine Kulturgeschichte der Geburt*, Köln 1998; Jacques GÉLIS, *L'arbre et le fruit. La naissance dans l'Occident moderne XVIe-XIXe siècle*, Paris 1984.

[2] Sibylle FLÜGGE, *Hebammen und heilkundige Frauen. Recht und Rechtswirklichkeit im 15. und 16. Jahrhundert*, Frankfurt am Main – Basel 1998.

In 1751, the University of Göttingen (which had been founded in 1733/1737 in the spirit of the Enlightenment) started a lying-in hospital. At the same time, Johann Georg Roederer (1726-1763) was called to Göttingen, as a professor of obstetrics and director of the maternity hospital. In his inaugural lecture, delivered in Latin as usual, he talked about "*The Excellence of Midwifery, Which is Absolutely Decent for, nay Requires, a Learned Man*". He drew an extremely gloomy picture of the present state of midwifery and of midwives' character: "*Up to the present day, the position of midwives has been very low. They have been reputed as heroines of ignorance, slaves of the most foolish superstitions, born from the basest rabble, distressed by hunger and thirst, embodiment of vices, knowledgeable of poison and every kind of crime. Women flattered them and increased their salary in order to calm them down and prevent them from doing harm – as a foolish nation in India worships the devil in order not to suffer from his maliciousness.*" According to Roederer, it was necessary to change personnel, if things were to be improved. "Learned men", i. e. university trained doctors, were to take over midwifery. In this way midwifery, an art which had been guided by experience and was transmitted personally from woman to woman, was to be turned into a branch of medical science. According to the men of the Enlightenment, only males were apt to develop science, with extremely rare exceptions (which probably became even rarer in the course of the nineteenth century). In Roederer's view, the enlightened male obstetrician was the perfect contrast to the picture which he had drawn of midwives: the medical doctor would ban ignorance and superstition by his scientific knowledge; he belonged to the upper class of university trained persons hoping for an appropriate and safe income; he felt motivated, however, primarily by humanitarian and charitable considerations; he hoped to be accepted willingly by female clients. The big promise that doctors gave to them and to the enlightened public was that they would save the lives of mothers and children.

Traditional historiography of medicine has favoured a narrative that is very similar to Roederer's rhetoric: From the eighteenth to the twentieth century midwifery became more and more scientific. As doctors were trained in obstetrics and as these doctors in turn trained midwives, midwifery became more and more efficient, and perinatal mortality as well as maternal mortality decreased dramatically.[3] This narrative of progress has been contested during the last thirty years. Feminists and critiques of modern medicine discovered the positive aspects of 'traditional' childbirth, as a sphere of female autonomy. According to the critical view, this autonomy was first diminished, and then progressively abolished by scientific obstetrics, dominated by males. Parturient women were more and more controlled by medical men, and finally, in the birth clinic, have been subjected to an almost complete control of their behaviour.[4]

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[3] Heinrich FASBENDER, *Geschichte der Geburtshülfe*, Jena 1906.

[4] Jean DONNISON, *Midwives and medical men. A history of inter-professional rivalries and women's rights*, London 1977; Marita METZ-BECKER, *Der verwaltete Körper. Die Medikalisierung*

These two narratives are opposed in their value judgments. They agree, however, to a large extent in the way how they stylise the historical process. In this paper, by turning to a concrete case, I should like to examine whether or to what extent these master narratives give an accurate account of what happened in the late eighteenth and early nineteenth centuries.

1. Organisation and purpose of the lying-in hospital of Göttingen University

Since childbirth had been a matter for women from times immemorial, the main problem for medical men willing to turn to midwifery was how to get access to practical experience. Roederer had learnt midwifery in France, the Netherlands and in London, where doctors and surgeons had started to turn to midwifery in the late seventeenth or early eighteenth century.[5] In addition to his formal male teachers, he had paid a midwife for allowing him to attend births together with her. Founding a lying-in hospital at Göttingen University, was an attempt to give access to childbirth to medical men. Incidentally, this was the first maternity hospital which was a university institution. Therefore it was paid for by the state, the Electorate of Hanover.[6]

Its main purpose was to give practical training to medical students. In addition, it offered courses to women who wanted to become midwives. The beginnings of the university lying-in hospital, however, were very modest. It consisted of just two rooms, located in a late medieval 'hospital' for poor elderly persons. During the first years, Roederer and his students delivered about ten to thirty women annually. In the 1780s, the government had the old building pulled down, and replaced it with a new, spacious and fairly elegant one, at considerable expense. The new structure housed only the maternity hospital. It had eight rooms

*schwangerer Frauen in den Gebärhäusern des frühen 19. Jahrhunderts*, Frankfurt/Main 1997; cf. Michel FOUCAULT, *Naissance de la clinique. Une archéologie du regard médical*, Paris 1963.

[5] For the rise of medical men in the field of midwifery in France, see Jacques GÉLIS, *La sage-femme ou le médecin. Une nouvelle conception de la vie*, Paris 1988; in England: Adrian WILSON, *The making of man-midwifery. Childbirth in England, 1660-1770*, London 1995; in Germany: Hans-Christoph SEIDEL, *Eine neue "Kultur des Gebärens". Die Medikalisierung von Geburt im 18. und 19. Jahrhundert in Deutschland*, Stuttgart 1998.

[6] For more details about the maternity hospital of Göttingen University see Jürgen SCHLUMBOHM, *„Verheiratete und Unverheiratete, Inländerin und Ausländerin, Christin und Jüdin, Weiße und Negerin". Die Patientinnen des Entbindungshospitals der Universität Göttingen um 1800*, in: Hans-Jürgen Gerhard (ed.), Struktur und Dimension. Festschrift für Karl Heinrich Kaufhold zum 65. Geburtstag, 2 vols, Stuttgart 1997, vol. 1, pp. 324-343; Jürgen SCHLUMBOHM, *„Die edelste und nützlichste unter den Wissenschaften". Praxis der Geburtshilfe als Grundlegung der Wissenschaft, ca. 1750-1820*, in: Hans Erich Bödeker – Peter H. Reill – Jürgen Schlumbohm (eds.), Wissenschaft als kulturelle Praxis, 1750-1900. Göttingen 1999, pp. 275-297; Jürgen SCHLUMBOHM, *"The pregnant women are here for the sake of the teaching institution". The lying-in hospital of Göttingen University, 1751 to c. 1830*, in: Social history of medicine, vol. 14, 2001, pp. 59-78; Jürgen SCHLUMBOHM, *The practice of practical education. Male students and female apprentices in the lying-in hospital of Göttingen University, 1792-1815*, in: Medical history, vol. 51, 2007, pp. 3-36.

for pregnant or lying-in women, with two patients to a room, and a single bed for every woman. In addition, there were rooms for the midwives who took their course in the hospital, as well as for the staff which consisted of a maid-servant, a midwife, a manager, and the director. Much room was left for corridors and staircases: light and, above all, fresh air was believed to help prevent miasmata (i.e. bad air) and, thus, the spread of disease. In the new building, the annual number of deliveries rose to between 80 and 100. Still, this was a modest figure compared to the lying-in hospitals of Dublin, Paris, or Vienna, each of which registered more than a thousand births per year around 1800.

In 1792, a year after the new building was finished, a new director and professor of obstetrics, Friedrich Benjamin Osiander (1759-1822), was called to Göttingen. He held this position for thirty years. He took advantage of the modest size of 'his' hospital. Living with his family in the director's apartment on the top floor, he was able to oversee the institution closely. And he was determined to shape it exactly according to his views. The manager, who was not a medical man, was responsible for all economic and administrative tasks. The hospital midwife was responsible for the „*subordinate supervision of pregnant women and women who had recently given birth*" as well as „*for order and cleanliness in the living and sleeping quarters*". She was in charge of most of the everyday contact with the patients, did easy surgical jobs like administering clysters, assisted the director in deliveries, and took care of the new-born infants. She was clearly subordinated to the director. The patients were of course supposed to obey the director, the manager and the midwife.

That this distribution of power between obstetrician and midwife was not necessarily inherent to the institution becomes evident by a comparison with the maternity hospital of Port-Royal in Paris, founded in the 1790s. There it was the chief midwife, and not the *accoucheur-en-chef* (i.e. the chief obstetrician), who actually ran the hospital, well into the nineteenth century. The professors of the medical faculty of the University of Paris strove in vain to gain access to Port-Royal and have their students admitted as pupils. The hospital trained only female midwife apprentices.[7]

All this was quite different at the University of Göttingen hospital. According to Osiander, it had three purposes that he ranked hierarchically: „*The lying-in hospital at Göttingen has, above all, the aim of forming skilful obstetricians, worthy of the name Geburtshelfer* [the German equivalent of accoucheur, obstetrician]. *A second purpose is the training of midwives, especially midwives who distinguish themselves by their knowledge and their skills, as compared to ordinary midwives. Finally, a third purpose is to provide a safe shelter for poor pregnant women, married or not, during the period of childbirth, and grant them*

[7] Scarlett BEAUVALET-BOUTOUYRIE, *Naître à l'hôpital au XIXe siècle*, Paris 1999; Scarlett BEAUVALET-BOUTOUYRIE, *Die Chef-Hebamme. Herz und Seele des Pariser Entbindungshospitals von Port-Royal im 19. Jahrhundert*, in: Jürgen Schlumbohm – Barbara Duden – Jacques Gélis – Patrice Veit (eds.), Rituale der Geburt. Eine Kulturgeschichte, München 1998, pp. 221-241.

*every support and help that might be required to maintain them and their children.*“

2. Who were the patients, and why did they come to the hospital?

At times, Osiander was even more explicit about the patients' place: „*It is by no means true that this hospital exists for the sake of unmarried pregnant women. Not at all! Pregnant women, be they married or not, are here for the sake of the teaching institution.*“ The hospital was not a welfare institution, but a scientific and educational one. That is why its doors were flung wide open: „*Every pregnant woman can be admitted to this institution, be she married or not, native or foreign, Christian or Jewish, white or negro.*“ This lack of prejudice strikingly contrasts the principles prevalent in poor relief. There, usually all non-natives were to be excluded, and only members of the community to be admitted. The very fact that, in the maternity hospital, patients were treated as teaching material actually made such a liberal admission policy possible.

In the admission books (*Aufnahmebücher*), the manager of the hospital recorded the personal data of every patient, and these books confirm that the liberal principles were followed in practice. As far as religion is concerned, 61 per cent of the patients were Lutherans, 28 per cent Calvinists, 10 per cent Catholics, and 1 per cent Jews. More foreigners than residents of the Electorate of Hanover were admitted (which is less surprising, if we take into account that all the territories of the Holy Empire considered each other as foreign). 40 per cent came from places belonging to Hanover, but 49 per cent from the state of Hesse-Kassel, – the frontier of which was about 20 km south of Göttingen. Only 12 per cent, however, had travelled a distance of more than 50 km.

Almost all patients shared one characteristic. They were *not* married. Out of the almost 3,600 women delivered at the Göttingen maternity hospital in the years 1791-1829, 2 per cent declared that they were married, and another 2 per cent that they were widowed. Thus, more than 95 per cent of the children born in the hospital were illegitimate. Similarly, in most lying-in hospitals of Continental Europe the great majority of the patients were unmarried. Married women were delivered in their homes by midwives, usually with some other experienced women, relatives or neighbours, helping.

At least 69 per cent of the patients were servants (that is 93 per cent of those for whom an occupation was given). In most parts of Germany, servants could be fired without notice when pregnant. For pregnant single women of the lower classes, the hospital was attractive because it offered free accommodation and food during the difficult time of childbirth. Thus, in winter, more women asked to be admitted than in summer. Like most German lying-in hospitals, but unlike those in Vienna, Paris and Turin (Italy), Göttingen had no foundling hospital. Mothers had to take their babies home. The only privilege of the unwed patients in Göttingen was that they were allowed to undergo the rite of church penance in the hospital’s prayer room, instead of being humiliated in their home community. Nevertheless,

only a small minority of all single mothers in the Göttingen region were delivered in the hospital.

3. The hospital and the rise of academic man-midwifery

In the maternity hospital, relations of authority between patient and doctor were reversed. Whereas a woman who delivered in her home usually had to pay for the midwife or doctor, the in-patients were indebted to the hospital for free treatment, accommodation and food. Moreover, they came alone; and according to the house rules designed by the director and tacked, in printed form, to the door of every patient's room, their contact with the outside world was strictly controlled. Patients could not go out without the director's permission, and they were allowed to have visitors only with the consent and in the presence of the hospital manager or midwife. In this way, the woman was isolated when facing the hospital director, the personnel, and the students. Some professors of medicine criticized hospitals precisely for these reasons. „*In the hospital*“, they argued, „*the sick are completely subject to the physician's orders“, and every wish of the doctor is executed „with the greatest punctuality*“. This meant that in the hospital students see „things, as they ought to be“, and only when treating patients in their homes, they become acquainted with things, „as they actually are“.

In a radical way the women in the Göttingen lying-in hospital were turned into medical cases. How this was done, can be traced in detail through the hospital ‘diaries’ (*Tagebücher*), where the director wrote down a double page on every case. The collection of cases, assembled in these diaries, represented the knowledge the director had accumulated. These hand-written medical case histories have a clear structure, defined by the obstetrician's perspective. The patients, on the other hand, have hardly left any written documents. Their experiences are filtered through the sources written by the director and the manager of the hospital.

Osiander boasted of his unfailing presence in the clinic: „*At every delivery, be it at daytime or at night, I am present from the beginning to the end, unless prevented by illness, a trip to a village or other urgent business.*“

Each semester, Osiander lectured to between 30 and 60 students on obstetrics in the lecture room of the hospital. The course included demonstrations and exercises with a manikin, i.e. a female pelvis covered by leather. The corpse of a stillborn baby that had been preserved in alcohol represented the child. Twice a year, Osiander taught a separate course of three months duration to midwife apprentices. Usually, there were between three and eight participants. They, too, practised with the dummy, but unlike the medical students, they never used instruments.

The crucial advantage of the lying-in hospital was of course that it gave access to practical experience. One or two times a week, groups of about eight students examined pregnant patients with their hands externally and internally. In this way, they were to learn how to determine the state of the pregnancy and the position of the foetus. The core of practical training, however, was attending

deliveries. Therefore, Osiander described in detail how he organized this crucial and delicate part of his teaching. When a woman had gone into labour and her *orificium uteri* was open four fingers wide, the students were called in by the hospital's servant – who, on this occasion, could count on a gratuity from each of them. Now the parturient woman was led from her bed to the delivery room and placed on the birth stool. The students assembled in the adjacent room, as did the apprentice midwives, if it was the season when their course took place. Osiander called some of the advanced students into the delivery room and had them examine the woman. They told him what they found out about the position of the child and the state of the birthing process. Then, the professor explained the situation to the whole audience in the adjacent room, using the dummy and an artificial head of a baby. He showed the position of the child, and indicated any impediments to the delivery as well as the indications for intervention. Then he demonstrated the course of action he had chosen. As he underlined in his publications, he always made the final decision.

If Osiander had chosen to „*leave the delivery to nature*", he asked one of the apprentice midwives to assist. If he opted for „artificial" help, he called upon one of the advanced students. Now the entire audience entered the delivery room. They found the upper half of the parturient's body hidden by a green curtain. This was to protect her not only against blinding light, but also against „*the annoying sight of many spectators*": the patient's „*shame was spared, at least as much as the circumstances allow*". She was „*naked up to her genitals so that all the audience could observe the procedure and kind of assistance offered*". The hospital's midwife stood at her side and „*instructed her how to push skilfully during contractions*". The professor sat next to the student or apprentice whom he had invited to attend. He directed the „business", and took over himself in order to show the correct way to proceed as soon as the attendant experienced difficulties or made an error.

Friedrich Benjamin Osiander proudly declared to the scientific public that he took a specific approach to obstetrics. He insisted that the man-midwife should play an active part. Moreover, he emphasized his responsibilities as an academic instructor, and as such, he regarded it as his „*duty to train his students to be skilful* helpers *in childbirth* [Geburtshelfer] *rather than idle observers who have no other advice to give but to 'wait with animal-like resignation for nature to assist'*". Here Osiander makes use of dichotomous modes of thinking which have an explicitly gender-specific dimension. It was precisely Enlightenment science which sought to give such dichotomies a biological-medical foundation: culture and nature were understood as opposites, bound up with the polarities of man-woman, activity-passivity and reason-emotions. Osiander thus argued that „*artificial assistance in childbirth was reserved for the male sex*", while female midwives should, in principle, be limited to assisting in „natural" deliveries. Most of Osiander's colleagues in Germany shared this opinion. What was peculiar to Osiander was his firm belief that „*an operation with the forceps, when skilfully performed, is the first and foremost assistance in most protracted and difficult deliveries*".

There can be no doubt that Osiander's practice in the hospital was deeply influenced by the fact that it was a teaching clinic. Possibly, he took into consideration that, later in their practice, most of his students would probably be called more frequently to emergencies than to normal births. In addition, his view of the division of labour between male and female midwifery and his insistence on the risks inherent in the birthing process shaped his approach. He tried to control the unpredictable process of childbirth as much as possible by his obstetrical 'art'. All this made Osiander use the forceps to an extent that both his contemporaries and later obstetricians considered extreme. Under Osiander's direction the forceps were used at Göttingen maternity hospital in 40 per cent of all deliveries, and other operations were performed in 6 per cent of the cases.

The emphasis on intervention and on instruments was, however, not necessarily inherent, either in man-midwifery or in the institution of the maternity hospital. This point becomes apparent if we look at the theory and practice of Osiander's opponent Johann Lukas Boër (1751-1835), professor of obstetrics and director of the maternity hospital in Vienna. Boër developed a programme of „natural childbirth", with highly restrictive criteria for interference. He applied his principles in the large hospital of Vienna as rigorously as Osiander implemented his approach in the Göttingen clinic. The forceps rate at Boër's hospital was 0.4 per cent, 100 times lower than at Osiander's. Incidentally, the differences between the two professors echoed a hot debate that split obstetricians all over Europe, especially England and France.

Osiander's publications are often fascinating, because he was so outspoken and frank about the principles of midwifery and the priorities of a lying-in hospital. In particular, his statement about the patient's role in the clinic has been shocking to posterity: „*The entire aim of this institution is that students of obstetrics as well as midwives have the advantage of learning through observation and practical experience and thereby that true obstetricians* [wahre... Geburtshelfer] *and midwives are trained who are useful for humanity; a further aim is that the instructor has the opportunity of demonstrating the principles of obstetrics 'in nature'. Therefore the pregnant and delivering women who are admitted to our hospital are regarded, as it were, as living manikins, with which everything is done that is useful for the students and midwives and that facilitates the labour of childbirth (always however with the greatest protection for the health and life of the patients and their children).*"

4. The patients' reactions

There is no doubt that Osiander intended to turn pregnant and parturient women into clinical cases and to use them as practice dummies. There are, however, indications that the women concerned, despite their often desperate social and personal situations, were occasionally able to set limitations to the realization of this project, even within the maternity hospital. One third of all women asking for admission were not hospitalised immediately, but sent back home for some days or

weeks, because the date of their delivery was still some time ahead, and there were already enough pregnant women available for examination by the students. One fifth of these women never returned (that is 6 per cent of all pregnant women registered). Voting with their feet, they seem to have had enough of the hospital after the very first examination by the director. Other women left before being delivered, though they had already been hospitalised. In this case, they had to pay for their stay, usually one taler a week, a considerable sum for a servant or other poor woman – the hospital's maid hardly earned a taler in cash *per month*! It is not surprising to find just seven pregnant women leaving without being delivered and paying for their stay, during the period 1791 to 1829. But, in addition, the entry books mention 32 pregnant women who went off secretly, without paying (1 per cent of all patients).

Other women annoyed the director because they were too late in arriving at the hospital. 10 per cent of all patients were admitted on the very day of delivery. Most of these came while already in labour, some even at the last possible moment, when it was too late to call the medical students.

Making sure that the women came early enough and did not leave secretly before delivering were not the only problems of control for the director. Even with regard to the patients hospitalised, it appears that he did not always have access to all the information he would have needed as a doctor and obstetrician. This is evident in a few cases, for example, in the death of one patient. Some of these case histories make us suspect that, even in the maternity hospital, there may have been a women's sphere to which the director did not have access.

Anna Maria Ostermeyerin, a 27-year-old maidservant who gave birth for the second time in the hospital on 3 May 1800, „*kept secret*“, according to the hospital diary, „*the birth of her child until this morning at half past 4, when the head was already becoming visible. The child was born around 5 o'clock in the morning... The patient was said to have had contractions the entire night, but to have told those who were with her that they were only cramps.*“ Since two patients shared each bedroom in the hospital, it did not remain hidden from the other women that Anna Maria's condition changed. They did not, however, report her to the midwife, although the rules of the hospital explicitly required this.

Some women managed to give birth unattended. Cases like these suggest that the director was far from having absolute control over his patients, and that some of the women were able to make use of the hospital in ways which ran counter to its official purpose. It appears that this was hardly possible without at least some tacit support by their fellow patients. The ‘diaries’ of the early nineteenth century explicitly mention parturients trying to „*hide their labour*“ in 4 per cent of all deliveries. Though it was not a mass phenomenon, such „deceptions“ particularly annoyed the director. For, these women tried to withhold what they owed to the teaching hospital as a compensation for the free accommodation and food offered to them.

On the other hand, there were women who, after being delivered, came back to Göttingen maternity hospital for a second, third, or even fourth and fifth time. These were by no means rare exceptions. According to the admission books, 11 per cent of the women delivered between 1791 and 1829 had previously given birth in the institution. Interestingly, 'willing' and 'unwilling' patients cannot be viewed as two clearly distinct categories: even some of the repeaters tried to conceal their labour. This is true of Anna Maria Ostermeyerin, for example.

## Conclusion

The case of Göttingen is a clear example of how crucial the maternity hospital was in Germany, both for the emergence of man-midwifery and for turning midwifery into a 'science'. In this regard, the Göttingen case is clearly closer to the conventional wisdom about the role of lying-in hospitals than, for example, the maternity hospital of Port-Royal in Paris, which was directed by the chief-midwife and trained only female midwives. In spite of this, even the Göttingen hospital was far from being able to transform women into mere cases and objects of the emerging obstetrical science. The women who decided to deliver in the hospital tried to use this institution for their own purposes as much as they could.

With regard to the relationship between medical men and female midwives, the picture that emerges from a closer scrutiny of German sources is also more complicated than expected. Well into the twentieth century and in spite of their often wild polemics against traditional midwives, German obstetricians, including those at the University of Göttingen, did not really mean to replace them with medical doctors. The number of doctors was far too small to attend every delivery, and most families were much too poor to pay a fee adequate to a university-trained man. Doctors wanted to control and instruct midwives, not to take their place. That is why even most university lying-in hospitals trained medical students *and* midwives. Most doctors were willing to attend deliveries themselves only with well-to-do 'private' patients, and in difficult cases. The point was not so much a new division of labour between midwives and medical men, but rather a shift in the distribution of power and authoritative knowledge.

This ambivalent attitude to midwives becomes visible even in the Göttingen maternity hospital, if we carefully analyse its educational policy. Around 1800, in 78 per cent of the cases, the birth attendants were male (medical students and professor Osiander), and only in 22 per cent, the attendants were female (midwife apprentices and the hospital midwife). Furthermore, in every semester, the number of medical students trained at the hospital was five to ten times higher than that of the midwife apprentices. This confirms professor Osiander's statement that the first aim of this institution was educating medical men, and that training midwives was only second priority. Because of the much greater number of medical students, however, the opportunities for practical training *per person* were clearly fewer for medical students than for midwife apprentices. One third of all the medical students who took the course in obstetrics never participated hands-on in a deli-

very, but only watched. And the majority of those who did were in charge of only one birth. On the other hand, the majority of midwife apprentices were involved, hands-on, in several deliveries. This probably means that most of the medical students, even of those trained at the Göttingen maternity hospital, had a lot of practical skills to acquire after their university years, in their own practice.

Beginning in the late eighteenth, definitively by the second half of the nineteenth century, the directors of maternity hospitals and professors of obstetrics in Germany had achieved their goal: they were, at least in the eyes of governments and the educated male public, acknowledged as the leading experts in childbirth. The reasons why they succeeded deserve further investigation, for measured by their own aim of saving mothers' and children's lives their achievements appear to be less than convincing. Throughout Europe, the maternal mortality rate was higher in hospitals than for normal home deliveries attended by midwives. The main reason was of course puerperal fever, a highly infectious disease. It is true that the record is better for Göttingen's lying-in hospital than for its larger counterparts. But maternal mortality in hospitals worsened towards the middle of the nineteenth century. These mortality data were well-known to, and publically discussed by experts.[8] Whatever the achievements of maternity hospitals were in the eighteenth and nineteenth centuries, reducing maternal mortality was not among them, at least not for deliveries which took place within the hospital walls.

[8] Irvine LOUDON, *Death in childbirth. An international study of maternal care and maternal mortality 1800-1950*, Oxford 1992; Irvine LOUDON, *The tragedy of childbed fever*, Oxford 2000; Jürgen SCHLUMBOHM, *Did the medicalisation of childbirth reduce maternal mortality in the eighteenth and nineteenth centuries? Debates and data from several European countries*, in: William H. Hubbard et al. (eds.), Historical studies in mortality decline, Oslo 2001, pp. 96-112; German version Jürgen SCHLUMBOHM, *Hat die Medikalisierung der Geburt die Müttersterblichkeit reduziert? Debatten und Daten aus dem 18. und 19. Jahrhundert zu verschiedenen europäischen Ländern*, in: Gabriele Dorffner – Sonia Horn (eds.), Aller Anfang – Geburt, Birth, Naissance, Wien 2004, pp. 63-79.