

500,000 inhabitants, it should be very carefully applied only under very favourable conditions, and not carried to too great an extent."

Upward filtration can only completely remove suspended matter, but as the most polluting matters are in solution, this process may be dismissed with a very short notice. Indeed, it cannot be seriously entertained by any one who recognises the action of the air in the destruction of organic matter. Upward filtration does not allow of the re-aëration of the earth, or whatever is used as the filtering material; and therefore as soon as the original air is exhausted, the filter must of necessity cease to act except as a mechanical separator of suspended matter. Possibly Dr Frankland's experiments show this process in a more favourable light than we would expect to meet with in actual practice. He found (see No. 5, Table II.) in his best result, that half of the organic carbon was removed, and six per cent. of the organic nitrogen.

In his worst, little more than one-half per cent. (*i.e.*, 0·6) of organic carbon and 12·4 of organic nitrogen was removed. On an average, 26·3 of organic carbon and 43·7 of organic nitrogen were removed by this process. No doubt, if the experiments had been continued for a longer period with the same filtering materials, the results would have been even less satisfactory, because, as the filtering material became loaded with organic matter, its purifying power would gradually be lost.

(To be continued.)

---

*Report prepared by the Puerperal Fever Committee of the Berlin Obstetrical Society, and laid before the Prussian Minister of Public Health—Dr Falk. Translated from the Zeitschrift für Geburtshülfe und Gynäkologie, Vol. III. Part I., by Dr CHARLES E. UNDERHILL.*

BERLIN, 4th December 1877.

WE undertake in this Report to direct the attention of your Excellency to the injury which is done to the national well-being and to family happiness by the ravages of the so-called malignant puerperal fever among recently delivered women, because we are convinced that it is not in the power of even the most perfect medical skill, and conscientious performance of duty on the part of the physician, unaided, to put a check upon it, but that for that purpose it is necessary to call in the aid of ordinances and laws.

Before we pass to the consideration of the regulations which seem suitable for the lessening of childbed fever, it will be our object to show by official, and, as far as may be, trustworthy statistics, that the destruction caused by this dreadful disease is, in

point of fact, so extensive as to call for the most serious attention on the part of the Government.

Direct data relating to the mortality from puerperal fever have been published by the Statistical Bureau of the City of Berlin for the sixteen years from 1861 to 1876 inclusive.

From these figures, which are taken from the certificates of death, it appears that, in all, 2751 lying-in women died of puerperal fever in Berlin during these sixteen years. *A priori* it appears highly probable that this number falls considerably short of the reality. The probability of this rests upon the simple consideration that, while it is exceedingly unlikely that, from an error in diagnosis, a case should be registered as due to puerperal fever without good reason, it is quite certain that many deaths which ought really to have been returned as "Puerperal Fever" are concealed under the headings "Abdominal Inflammation," "Peritonitis," "Pneumonia," "Pyæmia," and such like.

That the numbers published by the City Statistical Bureau do not represent the full mortality from puerperal fever is further shown by the returns of the Royal Police Authority for the years 1869 to 1873 inclusive. Thus, there died of puerperal fever as returned from these two sources:—

	A. Statistical Bureau.	B. Royal Police Authority.
In 1869, . . . . .	99	145
„ 1870, . . . . .	119	172
„ 1871, . . . . .	261	257
„ 1872, . . . . .	280	310
„ 1873, . . . . .	231	251
	<hr/>	<hr/>
In five years, . . . . .	990	1135

That is to say, according to the Royal Police reports the deaths from this disease were, for the five years, 145 more, or at the rate of 29 per annum.

Now, in order to arrive at, at least, a minimum number representing the difference between the real mortality of puerperal fever and that published by the Statistical Bureau, we have, first of all, taken the trouble to verify for a fixed period the diagnosis of the death certificates from which the data of the Statistical Bureau are taken. For this purpose we proceeded as follows:—From the total number of death certificates we chose those, behind which cases of puerperal fever might be concealed, and wrote to the *physicians*<sup>1</sup> who had signed these certificates, asking for further particulars as to the nature of the disease. The result was that for the six months from October 1876 to March 1877 inclusive, to the 93 cases which were duly reported in the certificates as puerperal fever, there were 18 more to be added which were entered in

<sup>1</sup> The italics are in all cases in the original (Trans.)



the certificates under some other name. We have, in addition, by further inquiries among the physicians, heard of four more fatal cases of puerperal fever during the same period. Thus, we have discovered that during this period of six months, instead of 93 cases known to the Statistical Bureau, at least 115 certainly occurred.

We may fairly assume that these facts which we have proved for a fixed period of time also hold good for other periods. We are the more assured of this, because there can be no doubt that a still further number of cases of puerperal fever escaped our inquiries, so that the figure which we have arrived at in this way is only a minimum, which does not yet show the full measure of the mortality from puerperal fever, and which in all probability falls very considerably short of it.

Assuming, then, that the relation which our more accurate inquiries have shown to exist, between the actual mortality from puerperal fever and the figures contained in the public records, is the same for the above-mentioned sixteen years as in these six months, we have, instead of 2751 fatal cases, 3402, or at the average annual rate of 212.6.

Let us now consider how we can apply the results we have obtained to larger numbers.

There are no statistics about puerperal fever in the whole State of Prussia available, but from official sources, namely, the "Prussian Statistics," we obtain figures which show the mortality "in pregnancy and in childbed." We first inquire from the numbers for Berlin how many of those who died "in childbed" perished from puerperal fever. We have comparative numbers from the years 1861 to 1875 inclusive. (The returns for 1876 are not yet published.) There died (in Berlin) :—

	From Childbed Fever.	In Pregnancy and Childbed.
1861, . . . .	147	131 (— 16)
1862, . . . .	157	165 (+ 8)
1863, . . . .	131	143 (+ 12)
1864, . . . .	176	157 (— 19)
1865, . . . .	171	153 (— 18)
1866, . . . .	135	161 (+ 26)
1867, . . . .	120	141 (+ 21)
1868, . . . .	185	188 (+ 3)
1869, . . . .	99	143 (+ 44)
1870, . . . .	119	152 (+ 33)
1871, . . . .	261	280 (+ 19)
1872, . . . .	280	326 (+ 46)
1873, . . . .	231	247 (+ 16)
1874, . . . .	202	211 (+ 9)
1875, . . . .	183	242 (+ 59)
	<hr/>	<hr/>
In fifteen years,	2597	2840

Now, if we make a calculation, based upon our inquiries for the six months, as to what is the excess of deaths from puerperal fever over and above the numbers given in the public statistics, we arrive at the remarkable result, that (just as in the sixteen years, 3402) so in the fifteen years 3211 lying-in women died of puerperal fever; that is to say, *more* than the State statistics allow to have died in pregnancy and in childbed *put together*.

From this we are driven to the conclusion, that in reality a considerably greater number of women died in pregnancy and in childbed than appears from the old statistics derived from the church registers. Further, we are driven to the conclusion, that of the mortality "in pregnancy and in childbed" the mortality from puerperal fever has by far the greater share, and that the latter is so important an element as to throw all other causes of death quite into the shade—a conclusion which is entirely supported, as far as Berlin is concerned, by a comparison of figures for the several years.

But an objection may be raised to our comparing the statistics of Berlin with those of the whole State of Prussia, namely, that in Berlin, with its dense population and its two great lying-in institutions, the cases of puerperal fever are much more frequent than in the country. Accordingly we inquire what relation does the mortality "in pregnancy and in childbed" in Berlin bear to that of the whole State of Prussia. In Berlin, during the years 1861–1875, out of 431,600 lying-in women, there died 2840 (equal to a mortality of 0.658 per cent., or 1 in every 151.97 cases); while in the State of Prussia, during the years 1859–1875, out of 14,735,799 lying-in women there died 116,615 (equal to a mortality of 0.792 per cent., or 1 in every 126.33 cases). *The mortality in pregnancy and in childbed is thus shown to be considerably less in Berlin than in the whole of Prussia.* Since, then, we have seen above from the figures for Berlin that the great majority of those who die in pregnancy and childbed die of puerperal fever, we can but conclude that puerperal fever carries off less women in Berlin than in the whole of Prussia. At any rate, although the objection be true, that on account of the more ready provision of skilled medical aid the number of fatal cases "in pregnancy and in childbed," from causes other than puerperal fever, is less frequent in Berlin than in the provinces, from these figures we may conclude that Berlin shows by no means a special frequency of puerperal fever, but that this disease occurs at least quite as frequently in the provinces.

But since, according to the public records of Berlin, the number of those actually registered as dying "in pregnancy and in childbed," bear, to those who were shown by our inquiries to have really died of puerperal fever, the proportion of 100 to 113.06, it follows that if, according to the church registers, in seventeen years there died in the whole of Prussia 116,615 women in preg-



nancy and in childbed (a rate of 6865 per annum), at least 133,841 women must have died of puerperal fever, which gives an annual rate of 7873. Even this number is too low for the present rate, because the State of Prussia is now more extensive than it was formerly; so that if we only take the period since 1867, there have died in pregnancy and in childbed, during nine years, 70,666 women, or at the rate of 7851·7 per annum. This will give, with our corrections, for the State of Prussia as it now exists, a mortality from puerperal fever of 8872·4 women per annum.

From these large numbers it can now be clearly seen what an important factor puerperal fever is in the mortality of the country.

Again, the official records show the mortality in pregnancy and childbed—which we have shown to fall considerably short of the reality—to be as follows:—Out of every 100,000 inhabitants of the whole of Prussia there died in childbed from 28 to 39 women annually in seventeen years; and of every 100,000 deaths during these seventeen years, from 880 to 1280, or on an average 1091<sup>1</sup> women have died each year in childbed—in other words, out of every 100 deaths occurring in the State, *one* at least has occurred in childbed.

As a further proof of the great danger into which women of the ages from 20 to 45 are actually brought by puerperal fever, we cite the experience which the great Life Assurance Societies have had with women within these ages. The figures are derived from information supplied to us by Dr Wegscheider, examining physician to the Berlin Life Assurance Society. Whilst, according to the calculations on which the tariff is based, the general probability of death for men and women taken together is, for the ages from 26 to 30, 0·82 per cent.; from 31 to 35, 0·89 per cent.; from 36 to 40, 1·09 per cent.; and from 40 to 45, 1·30 per cent.; the *actual* mortality among *women* at these ages respectively was as follows:—

Berlin Society, 1·44 per cent.; 1·28 per cent.; 1·50 per cent.;  
0·99 per cent.

Gotha Society, 1·66 per cent.; 1·79 per cent.; 1·92 per cent.;  
0·92 per cent.

This difference is of such practical importance, that the Berlin Society has found itself compelled to require not merely a single extra premium for pregnant women, but to receive no woman from the beginning of the childbearing age up to forty years without an addition to the yearly premium on account of her sex.

The importance of the mortality among women from puerperal fever is most clearly brought out by comparing it with the mortality arising from the most terrible epidemic diseases, such as smallpox and cholera.

<sup>1</sup> These numbers are misprinted in the original. I have corrected them from a reference to the tables given in a paper by Dr Boehr, which accompanies the report and contains in full the statistics upon which it is based (Trans.)

According to the tables which we have constructed, there died of smallpox during the seventeen years from 1859 to 1875 inclusive, 211,069 persons—and of puerperal fever 133,841 women, according to our reckoning. The excess of mortality from smallpox is caused by the severe epidemics which broke out as a result of the war with France, and which in two years carried off 124,948 persons. If we leave out of account these two years, we find that in the remaining fifteen years 86,121 persons died of smallpox, and 99,070, or, with our corrections, 111,949 women died of childbed fever. Thus, apart from the quite excessive smallpox epidemic of 1871 and 1872, the death-rate from puerperal fever is considerably greater than that from smallpox. And we can state in addition a fact, which is likewise brought out by our tables, viz., that the carrying out of compulsory vaccination has reduced the mortality from smallpox to 9 per 100,000 living in the year 1874, and to 3 per 100,000 living in the year 1875, whilst the mortality from puerperal fever reaches, year after year, to from 28 to 39 per 100,000 living.

The deaths from cholera, in the seventeen cholera years which occurred between 1831 and 1867, numbered, in the State of Prussia, 343,726. To these falls to be added the latest epidemic in the years 1873 and 1874, about which we cannot obtain accurate data; so that in *forty-six* years, from 1831 to 1877, in nineteen cholera years there have occurred about 360,000 deaths. But in seventeen years there died in the State of Prussia, according to our reckoning, 133,841 women from childbed fever, so that the mortality from childbed fever is almost as great as that from the dreaded cholera, and *may even be looked upon as greater*, if we take into account the fact that 114,683 deaths from cholera took place in the year 1866 alone, in consequence of the great extent of the epidemic brought about by the war.

We claim to have proved by these bare numbers the immense importance of the mortality from puerperal fever. But the figures appear in even a more serious light if we consider that while cholera and smallpox affect indiscriminately men and women, old and young, and especially the weakly of every age and of either sex, puerperal fever finds its victims *solely among young mothers*. The 133,841 fatal cases of puerperal fever in the seventeen years came from among women who had just become mothers; in other words, there die at the present time in the State of Prussia annually 8872 women in childbed, and their death is not necessarily connected with the process of childbirth.

The full intensity of the ravages which take place among women of childbearing age as a result of death in childbed, or, as it should more properly be called, death from puerperal fever—for this is the cause of death in an overwhelming majority of the cases—can be best recognised and most thoroughly estimated by inquiring what is the relative mortality “in childbed” as com-



pared with the *total number of deaths among women of the child-bearing age*; and this last we know accurately from public records, because there is here no question of doubtful diagnosis.

We are in a position, most respectfully, to lay before your Excellency materials, derived from the last volume of the Prussian statistics, for a decision and a comparison of the fatal cases "in childbed," with the absolute total mortality among women of the ages of 15 to 20, 20-25, 25-30, 30-40, 40-50, in the whole country, in each registration district, and in every province, and this we have done in the accompanying table.<sup>1</sup>

Your Excellency will perceive from our arrangement of the 7213 deaths for the year 1875, under the respective registration districts, provinces, town and country population, and ages, and the similar arrangement of all deaths of women of childbearing age from any cause whatever, as also of the special cases of women dying "in childbed,"—a minimum number according to our previous observations:—1. That no registration district and no province of the country escapes from a high mortality "in childbed," that is to say, from puerperal fever. 2. That this public calamity bears in the provinces of the State the scarce credible proportion of from 10 to 15 per cent. to the total mortality among women of child-bearing age from all causes.

In order to specify more precisely the varying share which the different ages of women have in this mortality, we extract from the general tables for town and country populations, arranged in relation to cause of death and age, for the year 1875, the following:—

1. Out of 5893 deaths between the ages of 15 and 20, 147, or 2·48 *per cent.* died in childbed.

2. Out of 7581 deaths between the ages of 20 and 25, 1066, or 14·06 *per cent.* died in childbed.

3. Out of 8741 deaths between the ages of 25 and 30, 1624, or 18·58 *per cent.* died in childbed.

4. Out of 18,353 deaths between the ages of 30 and 40, 3241, or 17·65 *per cent.* died in childbed.

5. Out of 16,544 deaths between the ages of 40 and 50, 1017, or 6·15 *per cent.* died in childbed.

6. Out of 2917 deaths of unknown age, 118, or 4·05 *per cent.* died in childbed.

Total.<sup>2</sup>—Out of 60,029 deaths within the childbearing ages, 7213, or 12·09 *per cent.* died in childbed.

We call attention to the fact that the year 1875, whose statistics,

<sup>1</sup> This table is published in full in Boehr's work above mentioned.

<sup>2</sup> It is to be noticed that this total includes the years at both extremes of the childbearing age. If we take only the deaths for the fifteen years, 25-40, the most prolific and consequently the most exposed to puerperal fever, we arrive at this terrible result: ut of 27,094 deaths from all causes, no less than 4865, or 18·11 *per cent.* died in childbed; and this, too, is the lowest possible figure, and in a year, as shown below, in which the puerperal fever mortality was relatively very small (Trans.)

abstracted from the recently published vol. 43, disclose these terrible and uncontrovertible details, with its 7213 "deaths in childbed," is by no means one of excessive mortality from this source, but, on the contrary, presents the least noticeable and smallest numbers, both absolutely and relatively, to the number of lying-in women, and to the total mortality among men, women, and children in the State, of any of the 17 years; so that this distinct conclusion is justified, that in the earlier years (as, for example, in 1872, with its 9872 deaths, at least, in childbed, and in 1873, with its 9241), the percentage of deaths in childbed among women of childbearing age has been in reality far higher than 10 to 15 per cent. of all deaths among women within these ages in every province of the State of Prussia.

We shall not attempt to portray from a humanitarian point of view the anguish which falls upon the numerous families where the wife and mother, who but now was radiant with the full bloom of health, has been carried off, just as the family has been increased by a new member, still utterly helpless and dependent upon a mother's care; nor shall we point out what injury is done to the national life of the State by the yearly death of thousands of mothers, and the ruin of thousands of families caused thereby. We may fitly compare the manner in which puerperal fever finds its victims in a definite class of persons, with the losses which are entailed by a great war. Just as in the latter case, the losses fall exclusively upon the young and vigorous male population, *so in the former is the most valuable part of our female youth carried off by puerperal fever*; nay, more, the loss which the family and the State suffer in consequence of puerperal fever is more acutely felt than that which in general accompanies war, because the latter concerns usually the unmarried and only just full-grown young men. The loss of an entire battalion of Landwehr is the only one which can be fittingly compared, in the severity of its results and the intensity of distress which it causes, with the ruin which puerperal fever brings with it.

The comparison between puerperal fever and the losses caused by a devastating war is so striking, that we may be allowed to develop it still further. Just as we reckon among the losses in war not only the killed but also the wounded, so does puerperal fever carry in its train a very numerous host of women, who have escaped with life, but only to become life-long invalids. How great the number is of women who owe their constant ill health and subsequent sterility to puerperal fever, we have no means of accurately determining; but every physician knows that by far the greater part of the diseases of women date from a childbed, and that a very large number of them are caused by infectious processes; and every physician knows how very frequently it happens that women, who have conceived soon after marriage, never become pregnant again, because they have suffered from childbed fever.



We believe that the figures and calculations we have brought forward are amply sufficient to show that puerperal fever must be looked upon as, in the fullest sense of the words, a great national calamity, and we anxiously and expressly put the question, "Can it be avoided, and how?"

Before we proceed to answer this question, allow us to give a broad outline of what we mean by puerperal fever, and how it is brought about.

Under the names "puerperal fever," "malignant childbed fever," are included a group of diseases occurring in childbed, which vary very greatly in their manifestations, but have this in common, that they are called into being by the absorption from the organs of generation of a material which gives rise to destructive inflammation and fever. There are, indeed, a number of substances, mainly composed of organic materials in a state of putrid decomposition, which, when brought into contact with an open wound, set up inflammation in it, which extends to the neighbouring tissues; a further absorption by the lymphatics and bloodvessels leads to more extensive inflammation among neighbouring and remote organs; and when a large quantity is rapidly absorbed into the blood, a quickly fatal poisoning of the whole organism occurs. To surgeons the deadly effect of these materials upon wounds is only too well known, and the greatest advance, probably, which surgery has ever made consists in the so-called antiseptic method of treating wounds—that is, in the scrupulously exact removal of such materials from fresh wounds.

Puerperal fever is indeed nothing else than the infecting of fresh wounds, such as are found in every newly-delivered woman, with these destructive septic materials. Almost every woman after labour has small wounds on the external genital organs, which are caused by the passage of the child through this narrow opening, and in every newly-delivered woman the inner surface of the uterus, from which the protecting membrane has been cast off with the ovum, presents a large wound surface. Thus, every newly-delivered woman is liable to suffer from the dreaded infective wound diseases,—which in persons wounded under other circumstances are called pyæmia, septicæmia, wound fever, blood-poisoning, purulent infection, etc.,—*so soon as suitable septic materials are brought into contact with the genital organs.*

Now, materials of this sort gain admission in two ways: first, and this happens more especially in very difficult and long labours, under the influence of the particles that cause putrefaction which are ever present in the air and ever ready to press in, decomposition occurs in the mother's own secretions and excretions, and thus takes its rise in the maternal organism itself; or, secondly, these materials are introduced into the female genital canal *from outside.* This latter is brought about almost exclusively by the finger or instruments of those who examine the lying-in woman—that is to say, of the midwife or the physician.

If the instruments or finger of these persons have not been cleaned with the greatest care, and disinfected most conscientiously after they have been in contact with any infective matters, the result is that these matters are brought into contact with the fresh wounds of the woman during labour or subsequently, and thereby infect her with a fatal disease. A specially frequent channel of infection is from a diseased lying-in woman to another, because midwives quite commonly go from a diseased lying-in woman, whom they are nursing, to attend upon a new confinement, without sufficiently purifying themselves; and it cannot be doubted that, in the majority of cases, the midwives are the carriers of this infection, because to their exclusive care the great majority of labours is intrusted, and they naturally come into more intimate relations with the lying-in women than the physicians, who, in very many cases, are only called in after the onset of threatening symptoms.

From the foregoing exposition it will be seen that we know the cause of puerperal fever, and the manner in which it is brought about, more accurately than in almost any other disease, and, on the strength of this knowledge, have to ask ourselves the question, By what regulations can the occurrence and spread of puerperal fever be prevented, or at least lessened in amount?

These regulations naturally divide themselves into those which aim at preventing the occurrence of individual sporadic cases of puerperal fever, and those whose object is to avoid the transmission of the disease from infected lying-in women to healthy ones.

As regards the first object, it is obviously of great importance to avoid the putrid decomposition of the discharges which come from the woman during labour. This is, of course, the aim of a rational management of a case of labour, which would, if possible, bring the labour to a conclusion before any stinking excretions come from the genital parts; we work in the same direction by keeping away anything which can excite putrefaction. The midwife should, accordingly, remember that frequent and careless examinations hasten the decomposition of the secretions, and should be instructed to use *disinfectant injections* in all cases of prolonged labour, so that the products of decomposition may be formed in the female genital passages as late, and in as small quantity, as possible. Of still greater moment is it that the medical persons (*Medicinal-personen*) to whom is entrusted the care and treatment of the lying-in woman, should recognise to its fullest extent the danger which threatens women, where putrid substances are brought into contact with the sexual parts either by the finger or by instruments. Among physicians this danger has long been known, and is universally recognised; but midwives cannot be too earnestly and strongly warned of it. That the rising generation of midwives may be properly instructed in this matter, will require even more careful attention in the new editions of the hand-books



for midwives, and in oral instruction, than it has hitherto met with; but it is quite essential that those already in practice, that is, those who were passed midwives prior to 1866, the year in which the present *Kangow Hand-book for Midwives* was introduced, should receive fundamental and exact instruction as to wherein the danger lies, and how it is to be avoided. We do not consider it as our object to work out such a system of instruction, but we feel it our duty to lay great stress upon this point, because the great majority of our practising midwives are without anything like a sufficient appreciation of the danger.

Indeed, since it may be long ere all midwives are thoroughly instructed on this subject, the question arises, Whether it would not be the wiser plan to appeal directly to the public in this matter, and to enjoin upon husbands not to allow their wives to be examined by any hand which has not previously been thoroughly disinfected?

When we reach this point, when it is the universal custom, *in every single case, and under all circumstances, for the physician and midwife to disinfect their hands before they introduce them into the genital organs*, then, without any doubt, the annual mortality in childbed will become very much less, and thousands of women, who now die of infection brought about by thoughtlessness or ignorance, will be saved.

It remains to speak of special rules for those cases in which puerperal fever has already broken out, because the danger of transmission of the disease then becomes more considerable, and experience teaches us that, where definite epidemics of puerperal fever occur, *they cling for the most part to the practice of a single midwife*. A large number of instances are on record in which a midwife has carried the infecting material from one diseased lying-in woman to others, with the result that a number of newly-delivered women have sickened, and many of them have died.

In order to cut short these definite epidemics when they arise, and to prevent them from breaking out, it appears absolutely necessary *to lay upon all medical persons (Medicinal-personen) by law the duty of reporting such cases to the Sanitary Boards*. The simplest way of effecting this is to include puerperal fever among the contagious diseases, of which it is necessary to send in a report. Undoubtedly special difficulties present themselves in regard to diagnosis. The question whether a disease during lying-in is to be looked upon as an infectious childbed fever or not, may be a very difficult one even for the physician, and is entirely beyond the judgment of a midwife. Accordingly, we hold it to be the bounden duty of midwife and physician to make a report to the sanitary authorities, *in every case of severe feverish disease occurring in childbed, unless it be clearly established that it has no connexion with the puerperal process*.

But since even here differences of opinion may arise, there is one

thing, at all events, about which there can be no doubt, namely death; we therefore deem it necessary to add, *that all midwives are in duty bound to give notice of every fatal case during childbed which occurs in their practice.* The sanitary authorities will probably in this way get sufficiently early notice of the existence of puerperal fever epidemics.

But if they are to be in the position effectually and certainly to cut short commencing epidemics, *they must have the power to suspend the midwife from the practice of her calling for a fixed period,* since this is the only sure means of preventing the extension of the disease through the same midwife.

We are thoroughly convinced, especially when we consider how wonderfully the mortality from smallpox has decreased since the carrying out of compulsory vaccination, that these rules will have a decided influence in lessening the mortality from puerperal fever; and, although we are far from believing that puerperal fever can in this way be rooted out, and though we do not for a moment doubt that, even under the strictest laws and with the most scrupulous care on the part of medical persons, sporadic cases of puerperal fever will always occur, yet we must express a confident hope that, by the carrying out of the regulations sketched above, the mortality from puerperal fever will be very materially diminished, and that in this way every year several thousands of young mothers, who now die, may be saved to their families and to the State.

With this hope we lay our suggestions before your Excellency, with the prayer that you will examine them, and eventually will undertake the necessary steps to carry them out.

Signed, in the name of the Society for Obstetrics and Gynæcology in Berlin, by the Committee for the drawing up of Regulations to prevent the spread of Puerperal Fever.

Dr C. SCHRÖDER, Professor of Midwifery, Director  
of the Royal Lying-in Institution.

Dr MAX BOEHR, Medical Officer of Health.

Dr FASBENDER, Director of the Charité Hospital, Lec-  
turer on Midwifery.

Dr A. MARTIN, Lecturer on Midwifery.

Dr LÖHLEIN, Lecturer on Midwifery.

---

---