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OBSTETRICS AND THE STATE

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CUSTOM seems to have ordained that your chairman should, at the opening meeting of his section, deliver an address, and that the subject of such address should be as broad and general in its application as the limits of the section permit. Having this in mind, then, I have chosen as my text for the evening, the subject of obstetrics and the state.

Should there be any such connection, and if so, what form should it take? To the first question, an affirmative answer has been practically compelled by two forces; the ever busy statistician, and the equally busy labour party. It was only the other day that a deputation appeared before Mr. Lloyd George with an earnest petition that his government should see to it that the benefits of twilight sleep should be brought within the reach of the wives of the poor. Last year the Ontario Medical Society was addressed by a representative of the Labour party from Toronto, who declared that, more particularly in obstetrics, labour felt itself at the disadvantage of being unable to secure for the wives of their class, those advantages that wealth could command, and was determined that government should adjust this inequality. Statistics have been under consideration for a much longer period, and the conditions they disclosed have been the subject of legislation in many countries.

I would ask you, therefore, to consider what are the problems involved; what steps have been taken in this and other countries

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to solve them; and lastly, what personal views I may have to offer on the subject.

The fact is that there is an unnecessary maternal mortality and morbidity in pregnancy and childbirth, and the problem is to see how they may be reduced. I must ask your careful attention for a few moments while I lay before you some statistics on the question of maternal mortality.

Statistics are only with difficulty compiled and interpreted. Any one who wishes to know something of the difficulties peculiar to this department should read the report on maternal mortality in the United States made by Dr. Grace L. Meigs to the United States Department of Labour wherein they are fully and intelligently discussed. Very illuminating, too, are the reports on the physical welfare of mothers and children in Scotland, Ireland, England and Wales, by the Carnegie United Kingdom Trust, and the report to the Local Government Board for 1914-1915, on maternal mortality in connection with child-bearing by Sir Arthur Newsholme. The most useful table shows the number of maternal deaths to one thousand living births, the proportion of those deaths due to sepsis, and the direction in which the figures are tending, in England and Wales.

On the occasion of his recent visit to Toronto, Sir Arthur Newsholme told us that in England and Wales 75 per cent. of the midwifery is done by midwives. In the discussion which preceded the passage of the midwives' bill in 1912, an eminent British surgeon made the statement that the physician, in England, was practically left to acquire his obstetric education at the hands of "ignorant howdies" who had no scientific education and were apparently guided in their practice only by the traditions of their class. The midwives' bill provided that a midwife must have a three months' (since increased to six months) training at an obstetrical centre. She was then registered after examination. She was compelled to call in medical aid in obstetrical difficulties, and to report sepsis. Officials were also appointed to supervise the work done, and a midwife could be suspended for due cause. The bill applied only to *England and Wales*.

In these countries, then, there was found at first, a maternal mortality of 4.65 per 1000 living births, of which 2.24 were due to sepsis, a proportion of 48 per cent. of the whole deaths. During the ten years, a steady fall took place until in 1910 the total maternal mortality was 3.69 per 1000 living births, of which 1.44 were due to sepsis, a percentage of 39. The decline in both

cases was progressive. The figures for total mortality during the period do not include deaths from puerperal nephritis and albuminuria, and should, therefore, be much higher. During the years 1911-1915, the figures remain practically stationary on the basis of the old classification, but adding the nephritis cases, the figures are for total mortality 4.2 and sepsis proportion 33 per cent. *In the provisional registration area of the United States* in 1910 the total rate was 6.5 per 1000 living births, with sepsis at 2.9, providing a proportion of 44 per cent. New York City probably brought the figures up that year by providing the enormous mortality of 10 per 1000, with 5.7 or over 50 per cent. of the total due to sepsis. This was, no doubt, due largely to great numbers of the poor being attended, as Edgar pointed out, by wholly untrained, dirty and ignorant midwives, a condition which has since been much improved. In Ontario during the years from 1909 to 1918 inclusive, the figures kindly furnished me by the Registrar-General show a total mortality of 5.4 per 1000 living births with sepsis accounting for 1.88 or a percentage of 35. This percentage was 33 in 1909 and 31 in 1918.

I have taken the three English speaking countries to illustrate the point, but Dr. Meigs gives those of fifteen other countries. It is pointed out that, owing to numerous statistical pitfalls, which are discussed in detail, no sweeping general deductions or comparisons can be made. One source of error may be referred to, the practice of reporting a cause of death without mentioning its connection with pregnancy or childbirth. In England and Wales, when the death of a woman of child-bearing years is reported, the Registrar-General sends the physician a confidential letter requiring him to state whether the death was in any way connected with childbirth. The replies to a long series of such letters resulted in the transference of nearly 8 per cent. of the cases from the general to the puerperal column. Another interesting fact is that in twelve countries whose statistics have been analyzed for the purpose of ascertaining what per centage of the total death-rate is due to sepsis, it has been shown to vary from 30 to 50 per cent. We believe that this death-rate is nearly all preventable; and this, only one of the preventable causes. But I must not dwell too long on statistics. Out of the huge mass of them arise these facts: Some countries, *e.g.*, England and Wales, show a death-rate from puerperal causes steadily falling from 1901 to 1910, and remaining practically stationary during the next five years. Some show an almost stationary rate, in which class stands Ontario. It is true

that the last year has the lowest death-rate, but there is no progressive decrease. Our death-rate is not the lowest, but stands, with the majority, about the middle of the list. One country, Scotland, shows an increasing rate, *i.e.*, from 4.7 in 1901 to 6 in 1914. The increase does not, however, appear to be due to sepsis. Lastly, the low rate in most countries has been reached after a vigorous public campaign and much legislation, but in Ontario the government has not yet moved.

So much for the problem. We have next to consider what has been done about it. In England and Wales the improvement in the death-rate has been attributed to the enactment of two measures—the midwives' bill above referred to, and the Health Insurance Act, which includes maternity benefits. The last named act is compulsory, and covers all wage earners whose annual income falls below a certain sum. The wives of workers, married and unmarried women, are insured against the trials of maternity. The benefits are, a cash bonus of thirty shillings, and the provision of medical attendance. Rest for a period of six weeks is enforced, at least four of which must be after the birth has taken place. In as much as the rest is compulsory, it is deemed fair that where the insured is herself a worker, she should receive as a benefit a fixed proportion of her weekly wage during that time. This in addition to the cash bonus. The act was administered by co-operation with local benefit societies, and local government boards. More recently a Ministry of Health has been established which has sole charge of the administrative end.

It is a curious commentary on the fact that almost none of the numerous friendly societies included maternity benefit in their insurance schemes. If they found that they could not do so, surely this is an additional cause for the government to intervene.

In addition to these measures, maternity and child-welfare centres have been established, and a campaign of education and help set on foot. The funds for insurance claims are provided by a levy on the wages of the insured or her husband, on the employer, and by government contributions. In all countries that have moved in this matter at all, health insurance, including, for our purposes, maternity benefit clauses, has been the line of action.

The Senate of New York State passed a bill of this kind this year, which was afterwards turned down in some mysterious manner. It is to be introduced again next year.

In Ontario, no work has as yet been done by the government, but other agencies have been at work in municipalities, and more is

in contemplation. Hospitals have extended their out-patient work, so as to extend the benefits of their laboratories and staff amongst the poor. In the Toronto General Hospital the Golden Rule Guild, an association of the nurses, has furnished visiting nurses to aid this work, and the Associated Charities have taken them on their list. Should the State lend a hand? Why not? Look at the vast amount that has been done with regard to tuberculosis, typhoid fever, diphtheria, scarlet fever and other diseases, the laboratories in which expert diagnosis is made and sera furnished. Surely our work is of no less importance to the State.

Let me now call your attention to some causes of puerperal death, which seem to me to be in operation in this country.

1. Let us first examine *ourselves*. Many years of observation have led me to the conclusion that some, at all events, of the morbidity and mortality in child-birth has resulted from meddling midwifery. There is too great a tendency to injudicious, and particularly to premature, use of forceps. Furthermore, an obstetrician is, by virtue of his office, a surgeon, and must exercise as much care in this branch of the work as is exercised in any other. Many men, doing obstetric work in hospitals fail, I am afraid, to realize the value of the precautions by which their work is there surrounded. The aseptic delivery room, sterilized water, solutions, dressings, instruments and ligatures; the preparation of the patient for delivery, the gloves, gowns, caps and masks, with which they are supplied, are taken for granted, laughed at or even refused. If called upon to reproduce these conditions in a private house, it seems likely that many of us would not know how, or would not take the trouble.

2. *The patient*. The general public is grossly ignorant of the real dangers of parturition, and inclines to think the effort of the careful obstetrician mere ostentation. Amongst the better class of patients a great improvement has taken place, most people now demanding that supervision which they used to reject. Vast ignorance still persists among the poor.

3. *The surroundings*. Much obstetric surgery—instrumental deliveries, versions, repairs of the perineum—is freely undertaken in surroundings that make it unsafe. It is the venue of the case, I believe, quite as often as a failure of mechanical skill on the physician's part, that leads to disaster. But for this feature, the physician must bear the responsibility.

4. *The climate*. One curious fact comes out in Sir Arthur Newsholme's report—that the mortality noticeably increases the

farther north we go, being lowest in the southern, higher in the midland, higher still in the northern countries of England, and highest of all in Scotland. Perhaps no great significance attaches to this fact, but it is certainly in accord with my own observations on the effect of climate in the city. In spring and fall, great changes are likely to take place, suddenly, and such changes markedly affect, for instance, the prevalence of eclampsia. Then, again in the cold season, when our houses are necessarily closed against the weather, many diseases, and amongst them puerperal sepsis, are more liable to occur. The effect is, of course, much more obvious where housing and sanitary conditions are defective, and shows the linking up of our subject with other welfare movements.

In conclusion, I have some suggestions to offer as to what might be done here.

Education of students and nurses. I cannot pass by this opportunity to bear my testimony to the admirable use which my colleague, Professor Watson has made of the opportunities placed at his disposal. The students have been allowed, and indeed, compelled to avail themselves to the utmost of the greatly increased facilities which the opening of the new General Hospital have afforded. I am confident that this factor alone will have a very beneficial effect in years to come. More meticulous reports of the work done, and their wider dissemination would, I feel, further the good work. For example, my colleague, Dr. Gordon Gallie, has handed me a report of the outdoor clinic work done since the clinic was established. It reads as follows in regard to eclamptic toxæmia:

1. Total number of patients confined in Burnside.	3,990
2. Total number of patients who have attended the Burnside out-patient clinic.....	1,795
3. Total number of clinic patients who have been confined in the Burnside.	1,457
4. Total number of eclampsias treated in Burnside.	36
5. Pre-eclamptic toxæmia discovered in clinic patients.....	38
6. Results of these pre-eclamptic cases:	
36 normal babies at or near full time.	
2 inductions of labour near time.	
—	
38 healthy mothers left hospital.	

36 live babies (two died within first week).
2 still births.

—
34 live babies left hospital.

7. Number of eclampsias developing in clinic patients..... 1

This patient was urged to come into the hospital a month previously, but refused.

Government.

(a) Registration of the cause of death in women of child-bearing years should be more carefully investigated, and the statistics amended as has been done in England.

(b) More fully classified reports should be issued on the causes of maternal deaths.

(c) A propaganda should be started for the better education of the public in maternity affairs, by means of literature and the establishment of maternity centres in rural districts and municipalities, at which patients could attend for periodical examinations of urine, blood-pressure and general health, and by home visitation by trained workers.

(d) There is an especial and crying need for convalescent homes to which puerperal women might be sent after their discharge from public hospitals or ordinary medical supervision.

(e) Health insurance, with, for our purpose, maternity benefits. Many countries have followed this course, but I could not undertake to urge it without a further study of the results produced. I might, however, discuss some aspects of it. As the insured contributes to the fund, her right to cash benefits cannot be denied, but I am opposed to cash benefit by the State. I remember once being met by an indignant husband who objected to his wife being moved to a hospital. "When my wife," said he, "was known to be sick, people were sorry for us, and gave us things; but now you are going to take her to a hospital, and what am I going to do for a living?" Why should public money be spent in supporting such a man? The best thing the State could have done would have been to have administered Cromwellian discipline and "knocked him on the head". In Great Britain a pamphlet was published containing letters of poor mothers who were asked to state their cases. One of them had a large family, and a reporter from the *Spectator* interviewed her. "Your older children ought to be able, now, to help you," said the reporter. "Well," said the

mother, "I thought so too, but the more I get from my sons, the less I get from my husband." As the editor remarked, "If for 'sons' we substitute 'State', we have the argument against State cash aid."

Many enthusiasts for maternal insurance carry the idea to extreme lengths, advocating motherhood insurance or practically the State support of the mother. "In fact," says one critic, "they seem to think that the husband should be allowed to initiate the pregnancy and that the State should do the rest." Extremes of this kind seem to lead directly to Bolshevism, under which doctrine, as you know, children are to be taken from their parents in order to prevent the development of any family feeling, or any sense of love or duty to anyone except the State. The insurance benefit which the State might assume, in addition to those mentioned above, would be the provision of sterilized dressings, sheets, etc., for the accouchement, and in some cases for nursing and medical attendance. Then, too, the authorities should be the judges as to whether the patient should be confined at home or in a hospital. Two or three years ago, I was called to see a patient living not half a mile from the City Hall. I had to stoop to enter the low-browed shop, slipped awkwardly on the greasy floor, and landed in the bosom of the family. There they stood, clad in rags, dirt, and long beards, solemnly staring. I asked for some means of washing my hands, and was shown into a filthy kitchen, where in a dirty sink, stood the remains of the last meal, and the beginnings of the next, with a feeble trickle of cold water running over them, from a rickety tap. No soap! I was next shown to the lying-in chamber, and in the obscurity walked in to the end of the bedstead, and had to back out again to allow the husband to get out, before I could get in. There, on dirty bedding, lay the mother gazing through the one dirty window on a huge pile of old iron and general junk which represented the fruits of her husband's industry. She had a high temperature. I insisted on her removal to the hospital, and gained my point after some argument. It was not necessary to do anything for her, beyond reducing her to a state of approximate cleanliness, and in a few days she was well but melancholy. Inquiry developed the information that she was home-sick. Had she been a Kipling student I could have imagined her saying:

"The fatted calf is dressed for me,
But the husks have greater zest for me;
I think that my pigs will be best for me,
And I'm off to the styes afresh."

On another occasion I was shown into a chamber absolutely bare of furniture, except for the bedstead. Around the walls was arranged the usual collection of junk. Across the bare floor in the center of the room, crawled various vermin. On the rickety old wooden bedstead was piled a huge feather mattress, in which the patient was sunk, with another equally huge feather mattress covering her, between which Scylla and Charybdis I was supposed to exercise the functions of an expert obstetrician. To introduce a tidy nurse and sterile dressings into such surroundings would be but lost endeavour. The State should not be required to waste its good materials there, but should have the power to order removal to an hospital. In countries where the State has some such power, it has been found to be a great stimulus to home cleanliness.

In regard to the period of rest enforced by the health insurance regulations of some countries, one should remember that the "rest" referred to means simply abstinence from gainful employment. Thus many women would be compelled to stop work who might have continued without detriment, and many who need to stop sooner or rest longer, cannot do so under the insurance protection. Further, the "rest" given is inadequate, for many women need rest from family cares and surroundings quite as much as from work. It is for these reasons that rest homes and convalescent homes are strongly advised.

I cannot, sir, hope to cover this great subject in a detailed manner, and there are many interesting questions upon which I have not touched. All that I have sought, is to attract the attention and to arouse the interest of the Fellows in it. The most casual survey of the actions of other countries show that legislation of some sort, in Ontario, is inevitable, and it is the part of wisdom for us to be prepared.

For ready aid in the preparation of the paper, I owe sincerest thanks to our librarian, to Dr. Locke of the Public Library and his staff, to Dr. Hastings, to Dr. MacMurchy, to Dr. McCullough, and his staff, and to my colleague, Dr. Gordon Gallie.