Verbatim Report of Debate
ARRANGED BY THE FELLOWSHIP OF MEDICINE
ON THE MOTION
“That the Present Rate of Maternal Mortality is a Discredit to Modern Obstetrics.”
HELD IN
THE BARNES HALL OF THE ROYAL SOCIETY OF MEDICINE,
1, WIMPOLE STREET, W.I.
ON
WEDNESDAY, NOVEMBER 13th, 1935.

T. WATTS EDEN, M.D., F.R.C.P.
(Formerly President of Royal Society of Medicine)
in the Chair.

Proposers of the Motion:
DAME JANET CAMPBELL, D.B.E., M.D., M.S.
PROFESSOR J. M. MUNRO KERR, LL.D., M.D.

Opposers of the Motion:
PROFESSOR GILBERT STRACHAN, M.D., F.R.C.P., F.R.C.S.
PROFESSOR DANIEL DOUGAL, M.C., M.D.

MR. HERBERT PATERSON: Ladies and gentlemen, you will know, by the advertised programme, that we were expecting Sir Francis Fremantle to take the chair to-night. He was very anxious to be present, and when replying to accept the invitation he said "Nothing but a General Election will prevent me"—he did not then expect there would be a General Election yet. But when the Election was fixed for to-morrow he had to cry off. However, most fortunately for us, Dr. Watts Eden has most kindly stepped into the breach and agreed to take the chair for us. He is not only a distinguished gynaecologist, he is also an ex-President of the Royal Society of Medicine, and I am sure that on behalf of this meeting I can offer him a very warm welcome, and thank him for so kindly consenting to take the chair.

THE CHAIRMAN: Ladies and gentlemen, I am sure you all deeply regret Sir Francis Fremantle’s absence, and I am sure also that you cannot regret it more than I do.

I have a few announcements to make. First, I have to intimate that the Fellowship of Medicine regard this as a private meeting; they have made their
own arrangements about publication of the proceedings, and they are rather anxious that reports of what is said and done here to-night should not appear in the public Press. Therefore, if there are any representatives of the Press here this evening, I shall have to ask them, in the name of the Fellowship of Medicine, to withdraw, because this meeting is only meant for members of the medical profession.

The next thing I have to say is that it is necessary, in a debate of this kind, that speakers should be limited as to time; and the arrangement is that each of the four opening speakers shall occupy a quarter of an hour, which will account for the first hour, and the second hour will be thrown open for general discussion. It will help in maintaining the balance of debate if speakers will indicate on which side they propose to speak. The speakers in the second hour will be allowed five minutes each. After an hour of these five-minute speeches there will be a reply from each side, and then I may exercise the chairman's privilege of saying the last word.

We are greatly indebted to the Fellowship of Medicine for bringing forward such doughty champions of obstetrics on the platform this evening, and I am sure we are looking forward with keen anticipation to the encounter which is going to take place.

The first speaker is Dame Janet Campbell, who needs no introduction from us. Dame Janet's Reports to the Ministry of Health are very much appreciated. But now she is in "a position of greater freedom and less responsibility" in regard to what she wishes to say.

**Dame Janet M. Campbell.**

**Mr. Chairman, Ladies and Gentlemen,**

It is only within comparatively recent years that there has been any association between obstetrics and public health. But the concern of the public health service with infant mortality, and afterwards with maternal mortality, raised questions of clinical and administrative importance which could not be evaded by a service responsible for national health, but which also needed the guidance and assistance of the obstetrician for satisfactory solution. Public health workers have been led to make a careful study of the conditions of midwifery practice by doctors and midwives with a view to administrative measures for the reduction of maternal mortality and morbidity, and it is familiarity with such measures that must be my excuse for venturing to discuss the influence which obstetric medicine has exercised, or has failed to exercise, on Maternal Mortality and its allied problems.

We have, in this country, a death rate associated with child-bearing which we believe to be unnecessarily high. As long as we know that a substantial proportion of maternal deaths might be prevented if the medical or social conditions were more satisfactory, it is comparatively unimportant whether the tendency of the mortality rate to rise indicates a real or only an apparent increase. Until we can satisfy ourselves that all reasonable precautions are being taken to prevent avoidable damage during pregnancy or childbirth, we are bound to continue our efforts to improve obstetric care whether the rate is rising or falling. It is this
practical issue which explains the keen interest taken in Maternity Services, and it is from this point of view, rather than from that of clinical obstetrics, that I desire to make a few remarks this evening.

The reduction of mortality and injury associated with childbearing is surely, primarily, a question of obstetrics. Whatever else the Departmental Committee of 1928-32 established, its findings proved that fact. It was, I submit, the business of the obstetrician to observe and examine and call attention to the fact of an unnecessarily high maternal death rate, and to suggest means of securing better clinical results. It was not, of course, within the province of clinical obstetrics to attempt to deal with the social problems which are so closely connected with midwifery practice among working class families, but if a strong lead had been given in regard to the clinical requirements and details of a maternity service, some current misapprehensions and mistakes might have been avoided, and much time would have been saved. The support and inspiration of the obstetric branch of the profession would have been of immense value to the public health services in formulating and carrying through an agreed national scheme. As it is, it has been left mainly to the public health service, with the support of lay opinion, to indicate and define the problem, to endeavour to ascertain the causes of failure, and to suggest schemes for meeting, more or less completely, various faults and deficiencies. I am not unmindful that obstetric medicine has put forward much valuable suggestion and criticism in regard to teaching facilities and other matters, and that many individual obstetricians have been keenly interested and extremely helpful. But this does not alter the fact that the special branch of the profession connected with obstetrics failed to take the lead in handling a difficult and complex question which has not yet been dealt with successfully.

Midwifery differs from other branches of medicine because it is concerned with a fundamentally physiological process which only becomes pathological accidentally. The physiological aspect is the important one. But modern obstetrics has been preoccupied mainly with the abnormal, and obstetric medicine has been largely overshadowed by obstetric surgery and gynaecology. It was probably because of this absorption in gynaecology and surgery that specialist obstetricians in a large degree failed to realize that there was a great deal of avoidable loss of life and suffering associated with every day midwifery practice. The maternity case primarily needs the care of an obstetric physician, able to bring the support of practical psychology and general medicine to the aid of nature and good nursing. As it is, normal midwifery has been left largely to the midwife, and the training of the student, at any rate until recently, has not been designed to arouse his interest in midwifery practice, or his desire for further post-graduate study.

Medical Education.

The medical profession acquiesced too long in accepting for obstetrics a position inferior to that of medicine and surgery, and this has coloured the whole outlook of midwifery work in the medical school and in private practice. The fact that a minimum of time was allocated to clinical midwifery, that extern cases were often scamped, that the senior teachers were seldom concerned with the delivery of the normal case, that teaching on ordinary cases was given by the junior staff, or that there were few if any maternity beds in the teaching hospital, was scarcely likely to impress the medical student with the importance of obstetrics. Instead of serving as a model of good midwifery in a working class home, the hospital district practice was often quite the reverse. It was seldom under adequate medical or nursing
supervision. The student did the best he could under poverty-stricken conditions, helped by a handy-woman or a relative. The interest was concentrated on the delivery, little attention was paid to pre-natal care or the supervision of the puerperium, and invaluable opportunities for observation and teaching were lost.

The failure of the Medical Schools to take obstetrics sufficiently seriously not only gave the student a cursory and inadequate midwifery training, but often sent him into practice with a distaste for midwifery, and no foresight or understanding of the effect which bad midwifery might have on the health and comfort of his women patients. No emphasis was laid on the importance of subsequent post-graduate training, and indeed the facilities for this were few and far between. It is true that teaching conditions have greatly improved, largely owing to pressure from outside opinion and circumstance, but midwifery is even now apt to be regarded by the student as a subject to be got through as speedily as possible rather than as a matter of enormous importance to the health of women of all ages.

Midwifery in practice.

Early impressions of midwifery were apt to be deepened rather than removed by the worry so often associated with private maternity cases, and the time, trouble and anxiety they cause for small financial remuneration. It is not surprising that midwifery is unpopular in general practice, and commonly assigned to the junior rather than the senior partner. But this is all wrong from the point of view of good domiciliary midwifery. Skill, experience and vigilant attention are necessary if even the normal case is to be handled with a minimum of distress and injury and a maximum of recovery, and we should realize this more clearly if women were less patient with post-natal disability.

Another misfortune I think has been the failure of the obstetrician to recognize the potential value of the competent midwife as an ally and assistant, and to develop her usefulness on these lines rather than allowing her to remain an inferior but independent practitioner. It is of primary importance to determine the proper place of the midwife in obstetric service, public and private; how she should be trained for modern midwifery; her conditions of work; and above all her relation to the medical practitioner. It is obstetric medicine which should guide us as to how far it is now desirable that the midwife should remain independent; whether normal delivery by the midwife in a wider social sphere than at present should be encouraged; how far, and in what ways, the midwife can properly relieve the doctor of routine work in connection with midwifery; how the full value can be obtained from her services as an aid to the doctor and as a member of a team.

Then obstetric medicine has never sufficiently impressed upon practitioners or the public the importance of skilled maternity nursing whether the woman is attended by a doctor or a midwife. If the student sees his extern patients nursed by "handy-women," he is likely to accept unqualified nursing in his own practice later on with less reluctance than if he had been taught to expect a trained midwife as a matter of course. The inadequate nursing care given to working-class patients even when they are attended by a midwife must be responsible for a considerable amount of unnecessary morbidity.

Again, obstetrical experience might well have given much clearer guidance in regard to pre- and post-natal care. There has been a good deal of criticism, much of it no doubt justified, of municipal and voluntary pre-natal clinics. But
the pre-natal clinic of the hospital maternity department is seldom a model of ante-natal supervision in its widest sense, and the student has as a rule been taught to regard pre-natal care merely as a means of detecting obstetric abnormality. Again, systematic post-natal care is almost unknown, and although the gynaecological out-patient department is available for the examination of post-natal damage, the importance of routine post-natal care, both local and general, has never been adequately impressed upon students or doctors. The after-care of patients delivered in maternity hospitals has been almost entirely neglected by the hospitals which seldom make arrangements to follow up patients in their own homes after discharge. The public health service has done something to encourage post-natal care, but much greater progress would have been made if the importance of this branch of midwifery had been strongly emphasized by the obstetrician.

**Anaesthetics and Analgesics.**

The use of anaesthetics and analgesics in ordinary midwifery work is a question which has been almost forced upon obstetric medicine by outside pressure. Relief of pain has for long been available for the well-to-do woman. But little was done to relieve suffering among working-class women and hospital patients in normal cases until the demands of the lay public led to investigation and inquiry into safe and effective means of alleviating distress.

And with this is bound up the difficulties of the busy doctor whose patient clamours both for relief of suffering and for speedy delivery. It is well known that hurried instrumental delivery substantially increases the risk of childbirth, and the aid of the obstetrician is needed to find a satisfactory way out of the dilemma.

**Puerperal Sepsis.**

Puerperal sepsis is one of the main causes of maternal death and injury. But it was left to the public health service to recognize the continued and widespread prevalence of puerperal fever in hospital and domestic midwifery practice, and to call for more effective measures of ascertainment, control and treatment. Notification of "puerperal pyrexia" was an attempt to obtain information of septic conditions at an early stage so that patients could be isolated, nursed and treated with hope of success. Notification is, however, still incomplete, septic conditions are still described as "pneumonia" or "influenza," and the dangers of mild infection are still imperfectly understood.

These are examples of the directions in which I suggest that obstetric medicine might have done more to educate the medical profession and guide the public health service. Until maternal welfare is recognized as fundamentally a medical problem, even though the medical aspect is more than usually complicated with social questions and difficulties, and until we have a strong professional lead, we shall never, I think, succeed in getting the truly efficient Maternity Service which will command support from everyone concerned. It is essential for success to avoid over-statement and the creation of alarm and fear, to prevent maternal distress from being wrongly exploited for political ends, and to inspire confidence and trust in medical advice, and for this the administrator must have the support of sound professional opinion behind him.

The experienced general practitioner is probably the best practitioner of midwifery except in so far as the purely operative side is concerned, and this after all
affects relatively few cases. It is eminently desirable that he should be interested in midwifery and look upon it as of primary importance. He is not likely to do so unless the conditions of practice can be made reasonable, and he is not overwhelmed with detail which dislocates ordinary practice and increases anxiety and fatigue. I suggest that obstetric medicine might do more to influence the doctor to come into closer partnership with the health service and also to show how advantage can be taken of the practitioner’s knowledge and experience without making too great a demand upon his time and energy.

While it is true that some of the conditions mentioned have been remedied, and that others are under consideration, the pace of reform, confronted with a stationary or even a rising, maternal death rate, needs acceleration. In this also obstetric medicine should play its full part. If the Medical School will effectually educate and inspire the student with a new conception of midwifery practice, if the practitioner in his turn will help to educate his patients and the public in the responsibility which is theirs, and if Obstetric Medicine would seriously consider the social and administrative as well as the clinical problems of midwifery, it ought not to be long before avoidable mortality is at least substantially reduced.

**PROFESSOR J. M. MUNRO KERR, LL.D., M.D.**

**MR. CHAIRMAN, LADIES AND GENTLEMEN,**

My contribution to this debate is primarily concerned with the problem of Antenatal Care. I have been briefed to defend it, and to indicate why it has not produced the results many of us hoped for, when it was seriously introduced as a part of obstetric practice early in the present Century. Further, I take it, that I am expected to make some constructive proposals for betterment—otherwise what purpose does this discussion serve!

I propose that you should grant me this premise, viz. that Antenatal Supervision is of benefit to the pregnant woman. That being accepted, the contrary cannot be questioned, that the extent of benefit is dependent upon the degree and quality of the supervision. It is obvious, if we are going to discuss this question judicially and with profit to ourselves and others who may read the report of this meeting, that what is implied by adequate antenatal care must be clearly defined.

I would liken the supervision of the pregnant woman to the navigation of a ship. The navigator takes observations and soundings and consults his charts; he is constantly on the outlook for any danger ahead. In proportion to the thoroughness with which he makes his observations and the correctness of the interpretations of his findings does he secure a safe voyage for his ship.

Judging by results, the voyage the pregnant woman is called upon to make is much more dangerous than any ship undertakes. Death, comparable to “total loss” in the case of a ship, takes a toll of approximately 1 in 200. In addition, there must be included the disabled and permanently injured, a number at present impossible to compute, because there are not the requisite data to justify any estimate. These appalling results are familiar to all who know anything about maternal mortality and morbidity. Yet there is constantly being presented the
platitude—that pregnancy and child birth are physiological processes. Of course they are physiological processes, but how often do they not pursue a physiological course? Can any one tell me any other means of recognizing early disability or serious disease than by examining the patient? The pregnant woman must be considered "suspect" as regards health. The disturbances in hormonal activity and metabolism—to mention only two factors—induced by pregnancy, disturb all her functions, and may disturb her health balance. I have known a woman to be violently sick in the morning by the 10th day of pregnancy—not psychological nor psychical in origin, but chemical in origin. In suitable and adequate ante-natal care we witness preventive medicine in excelsis.

The lay press has done a great service and a great disservice to the furtherance of maternal welfare. It has arrested attention, and is compelling all of us, who are in any way responsible for the care of the mother in pregnancy and child birth, to give the subject most serious consideration. The disservice for which it may be held in part responsible is that it has alarmed a number of women. But I imagine only a few British women fear the great adventure of pregnancy and child birth. When all is said, the most effective way of allaying that fear is to lower the death rate, and it is up to us to do it and not to talk so much about it.

There is another very dangerous suggestion—that there must be some occult cause which, if we only knew what it was, would explain the stationary position of maternal mortality. In a leading article in the Morning Post of 14th October, this dangerous suggestion appeared. I have heard the same statement on many occasions. Admittedly there are important details and aspects of the subject which require further elucidation. These for the most part, however, are concerned with obscure scientific questions, such as the aetiology of the toxemias, the virulence of infective organisms and the resistance of the individual to infection. There is no mystery about maternal mortality. The death rate persists because we do not employ the means at hand to prevent the known causes of death coming into force; not because we are ignorant regarding them but because we neglect taking adequate measures to prevent them.

Is there any proof that careful supervision of women in pregnancy and child-birth can secure results comparable to, I do not say on an equality with, the results good navigators secure in respect to their ships? There is definite evidence that this desirable consummation has been attained by certain services in this country. The British Lying-in Hospital, York Road, and the East End Maternity Hospital, with their institutional and domiciliary services (carried on in some of the worst districts in London) have been able to secure in their "booked" and supervised patients a mortality rate as low as 0.7 per 1,000 and 1 per 1,000 respectively (1928—31). This mortality rate is five to six times lower than for England and Wales generally because, if comparison is to be made, deaths from "associated diseases" (1.2 per 1,000) must be included in the figures for England, as they are included in the figures for the two hospitals mentioned. In these services death from eclampsia and sepsis very rarely occurs, as you well know. Then there is the experience of Rochdale where by taking precautionary means the death rate was reduced by fully a half. The death rate from eclampsia—a definite clinical entity—is the criterion, the acid test of journalists, by which we can assess the quality and efficiency of antenatal care. In the country generally there is no evidence of a lowering of the death rate from eclampsia. The conclusion is obvious, in the one case the patients are being adequately supervised, in the country generally this does not pertain. Similarly, the acid test of the adequacy of intranatal care is the death rate from sepsis.
The problem before us is not enquiry into the causes—we know enough although not everything regarding them—the problem is to organize antenatal and intranatal supervision so that the activities of the different agencies (obstetric specialists, family practitioners, midwives, and local authorities) are co-ordinated to the fullest extent.

Let me make myself perfectly clear; my concern for the moment is with the women of the country who receive maternity benefit or are of the poor and destitute class. My remarks and proposals have no concern with women who are private patients of family practitioners or specialists. Now having made that point quite clear, let us get right down to the problem. In the first place, I consider that the problem for densely populated industrial areas is different from that for small urban and sparsely populated areas. In the latter the family practitioner and district nurse must, at least meanwhile, carry on the work, although I think Local Authorities might do more in providing midwives and suitable transport for such midwives. Personally, I am delighted to notice that both Mr. Baldwin and Sir Kingsley Wood have promised that a midwife service has to be provided.

Coming now to densely populated areas, the simplest solution is to have the routine antenatal work carried on by midwives with obstetric specialists in consultation. Local Authorities should enrol a sufficient number of midwives as integral units of their health service. Bradford, as you are aware, has had municipal midwives for nearly twenty years. Obstetric specialists should be more directly associated with the midwives. They are on the staffs of the different maternity hospitals and ultimately all serious cases come under their direction in hospital. What is happening to-day is that the midwife calls in the family practitioner to see and examine the patient and decide whether he should operate in the patient’s own home or send her into hospital. Time is lost and there has been a great deal of handling of the patient, which adds to the risks of infection.

Believe me, I have given much thought to this problem of a maternity service in densely populated areas. I have tried to persuade myself, and have repeatedly made suggestions, as to how the family practitioner might be utilized. I have suggested, as others have done, that there might be a rota of practitioners changing annually, or that a limited number should undertake the work, or that they should do antenatal supervision in the clinics of local hospitals. I feel certain, however, that while any of these arrangements might be suitable in small urban areas—they are in actual existence in some areas—none of the alternatives mentioned would be possible in large densely populated areas. There would only be confusion. I can see no satisfactory solution other than asking the family practitioner to give up maternity work in densely populated areas and leave it to municipal midwives and specialists. The family practitioner says, “but I can do antenatal work, it belongs almost entirely to the province of medicine!” I don’t question that contention for one moment, but there cannot be dual control; whoever supervises the woman in pregnancy should be responsible for her in labour, unless the complication is such that a specialist is necessary. Nor am I in reality asking a very great sacrifice. I know how bitter are the feelings of many of my friends in general practice—this and that has been gradually taken away from them. But if, on the other hand, they would only consider the other side of the picture. Have they not through the National Insurance Scheme been given an assurance of income they never had before its introduction? Furthermore, how many are really interested in obstetric practice? I ask them therefore to come to our assistance.
The other difficulties can be easily overcome and the midwife and specialist can be fitted into the service with the greatest ease.

Municipal midwives, well trained and well provided for, well trained specialists, more antenatal and maternity beds, antenatal clinics in well selected localities—these are what are necessary. When such conditions are established, and all women receive adequate and skilled antenatal and intranatal supervision, maternal mortality and morbidity will fall, on a conservative computation, by 30 to 40 per cent. in densely populated areas; but I doubt if the same applies to sparsely populated areas. In neither case can it be reduced to zero, for all time a price will have to be paid for motherhood. However, let us try by every means in our power to reduce this price to the irreducible minimum!

**PROFESSOR GILBERT I. STRACHAN.**

**MR. CHAIRMAN, LADIES AND GENTLEMEN,**

The scope of this debate is not quite clear; it is suggested that the present rate of maternal mortality is high and is a discredit to modern obstetrics, and therefore to those moderns who practice obstetrics. But it is not specified whether this discredit should be apportioned universally or merely nationally. This is an important aspect of the matter to which further reference will be made.

There is at least a certain satisfaction that this charge of culpability has been openly made, in that it can be met and answered; for long in various reports and discussions, often more of a political than a medical character, negligence or indifference on the part of the profession has been assumed or inferred and, on account of the very obliquity of this assumption, the defence has been hampered. That the matter has been worked up in a manner well calculated to cause public alarm cannot be denied; a large number of reports embodying the investigation of many thousands of cases have been compiled at the request of Government departments. Of these, the most noted is the Final Report of the Departmental Committee published in 1932, and the most recent the Report on Maternal Morbidity and Mortality in Scotland by Douglas and McKinlay just published; but there are many others. These reports have all been summarised and commented on, not only in the medical press where the matter can be viewed in its proper perspective, but at least as widely in the lay press with dramatic and arresting headlines. The two main results of such propaganda have been to engender in the public a general mistrust of and lack of confidence in the medical profession, and in the pregnant woman also a lack of confidence amounting in many cases to actual terror, so that contraceptive measures are increasingly sought, and it is probable that this is one of the main reasons why abortion, with its own attendant mortality, is increasingly practised. In this way the propaganda would appear rather to defeat its own end.

The political aspect of the matter is manifested by a large amount of evidence. The proceedings in the recent Manchester investigation were strongly tinged with politics and certain local political bodies were legally represented.

Recently the Council of the British Medical Association\(^1\) declined to appoint delegates to a meeting in London of national women's organizations entirely on

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account of the political nature of that meeting, while the Annual Representative Meeting of the Association\textsuperscript{2} in London this year (1935) passed a resolution "That the British Medical Association regrets that the question of maternal mortality has become the subject of widespread political discussion, receiving great publicity in the lay press . . . the publicity which it is receiving to-day is tending to terrify child-bearing women and is in itself, a cause of increased mortality."

Official figures show that since 1906 the maternal death rate has risen from 3.74 to 4.60 per thousand births, and this has to be regarded as the focus of the professional and public concern which is now evinced; but it has to be remembered that from 1891 until 1906 the maternal mortality figure fell from 5.49 to 3.74—almost 2 per thousand—and this, so far as is known, without the aid of any of the administrative measures that are proposed to-day. I do not think that it will be maintained that the standard of midwifery in general to-day is inferior to what it was in 1891. I cannot recollect any communication on this subject in which the fall of maternal death rate is stressed or even mentioned; only the rise in the rate in recent years is emphasized and in this way an entirely misleading lack of perspective is conveyed.

There is no discussion on this subject without the display of a large number of figures. This is, in the circumstances of the case, inevitable, but it is well to remember that figures can be made to prove anything. But is it not possible or even probable that, as the causes of death are now much more closely scrutinized by the Registrar-General than previously, more deaths have been shown of late to be due to obstetrical causes than was previously the case, so that the increase may be more apparent than real? This is obviously a most difficult matter to determine but it is only fair to keep such a possibility in mind. When we regard the relative or international aspect of the matter, however, the position of Great Britain is seen to be very favourable. The relative assessing of the maternal death rates of foreign countries is not an easy matter, particularly as they are, in many cases, compiled in so many various ways as to make comparison difficult or even useless. Thus in the case of certain countries deaths from eclampsia or from heart disease are not included in the maternal death rate, they are included under the respective headings of "Nephropathies" and "Cardiopathies." It would appear that in Britain we are most frank in including the maximum number of conditions under this category, to our detriment unless this aspect of the matter is appreciated. Again, it is surprisingly difficult to get recent figures of foreign death rates; this information might be expected from the League of Nations health publications, but the causes of death are discussed individually there and not under the more comprehensive heading of our discussion. Thus B. P. Watson, discussing this matter in Curtis's "Obstetrics and Gynaecology," published in 1933, reproduces an international maternal mortality chart compiled by the American Public Health Association in 1924. In that table Chile shows the highest death rate of 7.5, while the United States comes second with 6.7, Switzerland 5.5, New Zealand 5.4, Germany 5.1, Spain 4.8, England and Wales 4.0, and the Netherlands 2.4.

The official figures from Denmark and Sweden appear to be lower than those of England and Wales, but it has lately been shown that, had they been compiled in a similar manner, they would be at least as high. The study of international maternal mortality thus brings out this important point that Holland is the only country of any account that can show a maternal mortality rate materially lower than England and Wales. In the case of any other country such a favourable

\textsuperscript{2} Ibid. 1935, II, Supplement, 63.
position would be a matter for congratulation, but for some reason, in this country it is a matter for condemnation. Why is this favourable position of England and Wales consistently kept in the background by those who write and compile reports on this subject, and why is the public led to believe by inference that the problem of maternal mortality is peculiar to this country, to the detriment of the medical profession? What is the factor then that produces a lower maternal death rate in Holland? The Final Report of the Departmental Committee(3) shows that the main cause is the relative rarity of contracted pelvis in the Netherlands, and it is well known that interference in such cases, justifiable or otherwise, is one of the main factors in the production of our own mortality. It is to the credit of British obstetrics to know that a relative scarcity of contracted pelvis exists also in Denmark and Sweden, although the corrected maternal mortality figures of these countries are equal to our own.

Again, the rise in our maternal mortality has been accompanied by a practically similar rise in foreign countries; thus between 1920 and 1930 the mortality in Holland had risen from 2.4 to 3.31 per thousand while the uncorrected mortalities of Denmark and Sweden in the same period rose respectively from 2.8 to 3.8 and from 2.6 to 3.0.

We hear much of our own black areas such as Rochdale and South Wales with the Rhondda Valley; but in 1931 the maternal mortality in the State of Georgia was 10.0 per thousand, in Louisiana in 1934 it was 8.1,(4) while in Stockholm it rose from 3.9 in 1921 to 8.6 in 1930,(3) and this figure is uncorrected in relation to our own.

I think that sufficient has been said to indicate the international position of England and Wales and of English obstetrics in this matter of mortality; I regret deeply that it has been left to me at this late hour to do so.

Time and space will not permit of a full consideration of all the factors producing maternal death; only some of the main ones can be discussed.

The increasing incidence of abortion is one of the most important of these; this factor has been stressed in most reports and by most writers on this subject and its importance cannot be overestimated. An increase of 21 per cent. in deaths from abortions in two years has been shown by the Registrar General and "... As there is probably no great change in the case fatality nor in the degree of exactitude in certification during that time, it would appear that there has been an increase in the actual number of cases ... "(3).

Again, the proportion of deaths due to abortion from 1928 to 1930 to total puerperal deaths was 11.9 and sepsis following abortion accounts for 21.2 per cent. of all puerperal sepsis deaths.

It is generally agreed that the majority of abortions are procured and an economic factor may enter here; in such cases the matter is often kept secret at first, and the doctor is called only when severe hemorrhage or sepsis has supervened and when the patient is thus seriously ill. It is probable that this is one of the most important items in the increased maternal death rate of recent years, and it should be appreciated in fairness that for the reasons indicated the matter is largely beyond medical control.

The matter of parity is also of importance. It is generally accepted that obstetrical interference, justifiable or not, is the main predisposing cause of the

injuries and subsequent infection which are responsible for fully a third of the maternal deaths and that such interference is most likely to occur in the case of primiparae. It is thus evident that with the continual decrease in the size of the family so marked to-day, the relative proportion of primiparae will in like manner continue to increase and it would appear that this explains another aspect of the present day rising maternal mortality. In an analysis of 165 consecutive maternal deaths in Monmouthshire it was found that 41 per cent. were primiparous while the New York Committee analysing 1,500 cases found 43 per cent. of primiparae. The importance of this proportion of primiparae, which is continually increasing, in raising the relative proportion of maternal deaths has not been sufficiently appreciated and the medical responsibility can only be limited.

The one main cause of a high maternal mortality is unnecessary interference on the part of the medical attendant, and although the profession is far from blameless in this matter, the blame should, in fairness, be limited. It is stated in numerous reports and papers, and from one's clinical experience it cannot be denied, that obstetrical interference, "meddlesome midwifery" as it is called, is practised to far too great an extent and the causes for this are various.

In the first place, with about 65 per cent. of the midwifery of the country being carried on by midwives, the doctor is called in only to abnormal cases, or to cases thought to be abnormal, and when he is called in he is expected to do something to effect delivery at once. The modern woman is not prepared to "grin and bear it", as was her mother and grandmother, and this, together with anxiety to the point of hysteria on the part of the husband, friends, or even the whole street, as well as urging by the midwife, is very apt to dislodge the medical attendant from his judgment that the time is not yet ripe for interference and may induce him to apply forceps in the presence of a partly dilated cervix or to attempt immediate extraction by some other unwise manoeuvre. Such cases represent a large proportion of the obstetrical emergencies with which all maternity hospitals are familiar.

This represents one of the greatest practical difficulties in domestic obstetrics; in hospital the matter is entirely different and the hysterical relatives can be put out of doors and the case treated on its merits, so that a modern maternity hospital should offer the best chance of the avoidance of operative interference.

But mankind, to-day, is accustomed to having life made easy and the woman in labour shares this expectation. She has read so much about "twilight sleep" and the right of the poor as well as the rich to have anaesthetic relief in parturition that she is determined to have it. As Gibberd puts it "... our standards of what we call 'tolerable suffering' have changed", and he goes on to say, "This is a natural consequence of changes in social conditions. These two changes go hand in hand, and to condemn the one as a curse, while accepting the other as a blessing, is merely a peevish outcry against the inevitable. The increase in obstetrical interference has come to stay, just as our improvements in the standard of living have come to stay, and any attempt to tackle the problem of maternal mortality by 'back to nature' methods is doomed to fail ... by the impossibility of forcing it upon our patients rather than by any unwillingness on the part of the accoucheur."

There is much truth, but not the whole truth, in this statement, and it errs on the side of pessimism. It does not excuse the too early application of forceps, and the unnecessary induction of labour or abortion, or the increasingly large number of unnecessary Cæsarean sections now being performed.

Again, it is questionable, if such proportion of blame as can fairly be laid on the practitioner is really his or his teachers'. Although things have improved in this respect, the operative aspect of obstetrics is still far too much to the fore in the medical schools. In the undergraduate and post-graduate teaching of obstetrics the wonderful adaptability of the foetus to pass through even a contracted pelvis, the grave dangers of any interference, and the necessity for the free use of antisepsics in labour should be emphasized again and again as the main principles of practical obstetrics. In this should lie our main hope of reducing or arresting the maternal mortality figures. Much has been made of the aspect of preventability and the statement in the Departmental Committee's Final Report(5), that at least one half of the maternal deaths occurring in this country were preventable, has been quoted again and again to the detriment of our profession. In New York(6) it is estimated that some 80 per cent. are preventable and a similar figure is given in the recent Scottish Report(7) in which, however, the conclusion is reached (p. 68) that the estimated proportion of avoidable deaths must not be regarded as indicating the level to which the maternal death rate can be brought in practice. In discussing this matter of preventability the British Medical Journal(8) wisely says "... such figures as are given may be misunderstood by the public and be unfairly quoted in wholesale condemnation of medical practice". That they have been so quoted is very clear to anyone who has studied the propaganda of recent years. There can be no doubt that those who prepared the various reports weighed their words carefully and reached their decisions only after painstaking and conscientious research into all the facts before them; but it has always seemed to the writer to be extremely difficult to reach a practical conclusion in this matter in a large number of cases. Such conclusions as are quoted rather savour of wisdom after the event, and this is particularly the case when the obstetrical judgment is held to be faulty. We all know how difficult it may be to form a judgment in an obstetrical emergency and it is unfair to apportion blame if the event should show that this judgment was faulty. Every obstetrician has committed errors of judgment, and will continue to do so, but if he does what he conscientiously considers is best for his patient it is unfair to blame him or his profession if the course of events should show him to be wrong.

But it has to be remembered that a definite proportion of maternal deaths are absolutely unpreventable. Thus, in considering deaths from puerperal sepsis, the Final Report of the Departmental Committee admits that in 50 per cent. of such cases investigated no obstetric abnormality and no operative interference could be traced and that "... neither improvements in ante-natal work nor increased dexterity or judgment in obstetric operations will have any considerable effect upon this moiety of the fatalities". While various other investigations have demonstrated varying percentages it may be taken in round figures that 50 per cent. of the deaths from puerperal sepsis are unavoidable and this represents about 18 per cent. of all maternal deaths.

Ante-partum hæmorrhage and toxæmia of pregnancy may also be mentioned as grave but quite unavoidable complications of pregnancy and in a proportion of such cases death will occur. Obviously the death rate will vary according to the type of case, the character of the treatment employed and the judgment of the attendant, but it has to be emphasized that a certain degree of mortality is unavoidable. This matter has been considered in more detail in another communication(9).

Although maternal mortality is thus essentially a medical problem it will be seen that it is influenced by factors sometimes partly or wholly beyond the control of the doctor.

As regards methods for the reduction of the mortality figures there is great disagreement. The wearing of masks is urged to prevent droplet infection, but in some places with the lowest mortality masks are not worn. Certain types of antiseptics are strongly recommended by one authority while others are equally strongly advised by other authorities. There appears, however, to be a large body of opinion that our salvation lies in the establishment of a National Maternity Service in which the maternity nurse, the practitioner, the obstetrical specialist and the maternity hospital would all be suitably correlated. More than one such scheme has been detailed but the underlying idea of all is that the pregnant woman would be taken charge of from the early days of pregnancy until the completion of the puerperium so that abnormalities would be noted and treated at as early a date as possible. The whole scheme would be administered and correlated by a Government department.

On paper the matter is made to appear very attractive and a certain agency for the reduction of maternal mortality. But it has to be remembered that maternal mortality is a very complex matter and that what might reasonably be expected to be a certain remedy may fail in practice. Thus Ballantyne prophesied that the establishment of ante-natal supervision would considerably reduce the maternal death rate but in practice it has failed to do so. Again, in Denmark and Sweden, there are in existence highly developed National Maternity Services and the true death rates in these countries are similar to our own and are also rising.

Professor R. J. Johnstone, discussing this matter, points out that such a service would represent ‘‘another social service given by the State to many who are certainly not in need, and it would be a costly service at that’’. It would also create another battalion of the army of officials and administrators. He also points out that the only class of case likely to be benefited by a National Maternity Service is that in which lack of skilled assistance or of adequate facilities for treatment are present and that this is by far the smallest class of case. ‘‘. . . enrolment in a State Maternity Service will neither increase the skill nor the judgment of attendants who lack them.’’ It has further been suggested that the general practitioner should be excluded from such a scheme and that all the midwifery of the country should be in the hands of nurses and full-time obstetricians specially trained. The objections to this are many and the main one seems to be uncertainty that such a body of men would reduce the present mortality by the slightest degree. With a full-time service and the accompanying hospital provision the temptation to operate would be great and the operative incidence with its attendant mortality would soar.

There would appear to the writer to be no easy high road to success in this matter but improvement is likely to occur through various channels. Improved obstetric teaching is one of these and this is now on a very high level in this country and has been made so by the spontaneous efforts of the teachers themselves. In such improved teaching the undesirability of unnecessary interference should be kept always in the forefront and with this and the free use of antiseptics, a conservative mentality would be created which would result in an improved maternal mortality.

It is by such simple methods that maternal mortality has been reduced in Rochdale from 9.63 to 1.96 per thousand, in Merthyr Tydfil from 5 per thousand to 1.8 per thousand and in the Rhondda from 10.9 to 3.0 per thousand.

The fact has to be faced that under modern conditions human reproduction is not the absolutely normal process it is so often represented to be; for various reasons the pathological aspect is coming more to the fore and a certain death rate is inevitable under the most ideal circumstances.

What national death rate, then, would be regarded as satisfactory? This question has to be faced and answered before we can know the goal for which we are striving. Taking our present death rate at 4.6 per thousand births it is maintained that if we reduce that by one per thousand we can hope for nothing better. The many quack remedies which are suggested, and for each of which it is claimed that it would immediately reduce the maternal mortality rate by half may be entirely disregarded. The process will be a slow one on the lines indicated and time and patience are required before any result is to be expected.

While we all deplore that any woman should lose her life in bringing forth another generation, no good object is served by creating a scare or by blaming a profession which carries on its work often under conditions of great difficulty and with inadequate remuneration. I can do no better than quote in conclusion these words of Dame Louise McIlroy, "If the British accoucheur be compared with those in other countries it will probably be found that he is the best . . . ."

(It is a pleasure to acknowledge with much gratitude the help I have so freely received in compiling this paper from the Medical Officers of Health of Cardiff, Glamorganshire, Monmouthshire and Merthyr Tydfil as well as from the Professor of Preventive Medicine in the University of Wales.)

PROFESSOR DANIEL DOUGAL, M.C., M.D.

MR. CHAIRMAN, LADIES AND GENTLEMEN,

"That the present rate of maternal mortality is a discredit to modern obstetrics" implies that modern obstetrics has been responsible for so many maternal deaths that it has forfeited, or deserves to forfeit, the confidence of the public; therefore, if the motion is carried, you are passing what amounts to a vote of no-confidence in those of us who practise that most difficult and arduous branch of medicine.

That would be a most serious thing to do, so serious that I am quite sure you will refuse to support the motion unless the proposers have satisfied you beyond all reasonable doubt that obstetricians as a body are actually responsible for these deaths.

Dame Janet’s speech reminded me of some of the broadcast addresses we have had to listen to during the last fortnight, because it painted such a gloomy picture of our performances and made no allowance whatever for the difficulties with which we have had to contend.

Professor Munro Kerr, on the other hand, has given us an exhibition of what I believe is known in sporting circles as "shadow boxing"; that is to say, he has put up a spirited fight in defence of the principles of ante-natal care which, so far as I know, have never been attacked.

I cannot remember having read of any debates on the motion "that the present mortality rate from medical diseases is a discredit to modern medicine", or "that

the present mortality rate from surgical diseases is a discredit to modern surgery”, although the death rate from these diseases is considerable and amounts to between 3 and 4 per thousand during the healthiest period of life, that is to say between the ages of 20 and 45 years.

There must therefore be some special reasons why modern obstetrics has been singled out for criticism.

The first and probably the chief reason is that childbirth is a function and not a disease or, as Dame Janet puts it, “a fundamentally physiological process which only becomes pathological accidentally”. Surely that description applies to all functions of the body, the only difference being that, from the violence or crudeness of its mechanism, childbirth is more liable to become pathological than any other. Professor Munro Kerr evidently agrees with me because he urges us to consider every pregnant woman “suspect” as regards health. Yet 3,000 deaths each year from complications of childbirth are sufficient to raise a storm in both medical and lay circles and even to become a political question while 50,000 deaths from diseases of the respiratory function and 25,000 deaths from diseases of the digestive system, to take only two examples, excite no comment whatever.

Linked up with this “physiological” argument is the feeling shared by every right-minded person, that these deaths ought to receive special consideration as it is peculiarly tragic that in bringing new life into the world, a young mother should forfeit her own.

Another reason is that the compulsory notification of births makes it possible to calculate the maternal mortality rate and therefore exposes the results of obstetric practice in a way which is not possible in the case of medicine or surgery. I would remind you, however, that the official figure is misleading, as abortions and ectopic pregnancies are not notifiable, although deaths from these complications are included in the mortality tables and amount to about 17 per cent. of the total.

The last and most weighty reason is that the maternal mortality rate is said to be unnecessarily high, to be stationary or even increasing, and to compare unfavourably with that of certain foreign countries.

Is the maternal mortality rate unnecessarily high? The figure for 1933 was 4.32 per thousand or about 3.7 per thousand if an estimated number of abortions are added to the total births. That is not an alarming mortality, but it is certainly higher than it ought to be because we all know that many of these deaths could have been avoided if certain conditions had been fulfilled. We must remember, however, that this is an imperfect world and that avoidable deaths will always occur in midwifery as in other branches of medicine. By all means let us try to reduce their number as far as possible, but do not let us deceive ourselves or the general public into believing that they can be entirely eliminated.

Is it a fact that the maternal mortality rate is stationary or actually increasing? Again the answer must be in the affirmative if the official statistics are accurate and the figures for the different years strictly comparable. Statistics, however, are notoriously misleading and I, at any rate, refuse to believe that midwifery practice has not improved during the last twenty or thirty years. If it is true that the rate is increasing, then the increase must either be due to more accurate notification of maternal deaths or to the existence of certain factors which did not operate at that time.

I quite agree that a stationary or rising mortality rate demands energetic action on the part of everyone concerned, but it is no easy matter to seriously reduce a
mortality of less than 4 per thousand when the deaths are spread over a wide area and so many different individuals are responsible.

Does the maternal mortality rate compare unfavourably with that of certain foreign countries? It is extremely difficult to compare the statistics of different nations, because so much depends on the way in which the mortality tables are compiled, but it seems to be generally agreed that the maternal mortality rate in Holland is considerably lower than our own. But Holland is largely an agricultural country, peopled by a race who are of good physique, placid disposition and cleanly habits, and in my opinion these national characteristics explain to a very large extent the relative immunity of Dutch mothers to the dangers which encompass childbirth. Overcrowding in the towns and depopulation of the countryside are largely responsible for our relatively high mortality, as they are for that in the United States of America where the rate has fluctuated in the last ten years from 7 to 6.3 per thousand.

Do not imagine that I view the present situation with complacency; on the contrary, I believe that our maternal mortality would be much lower if all the factors upon which it depends were properly co-ordinated and controlled.

My complaint to-night is that only one of these factors, obstetric medicine, has been singled out for adverse criticism and the others, which in my opinion ought to share the responsibility, completely ignored.

If we are to view the problem in proper perspective we must consider the parts played by the Ministry of Health, the different bodies responsible for the training of medical students and midwives, the practitioners in actual contact with the patients whether they be obstetricians or general practitioners, and finally the patient herself.

Let us take the Ministry of Health first. The present Minister has told us that he intends to grapple with this problem of maternal mortality and do everything possible to find a solution. Those of us who admire his past record in another Department of State will hope that the fates will deal kindly with him to-morrow and give him an opportunity to translate his words into deeds. I hope that his advisors have told him that finance lies at the root of the whole problem and that it is impossible to get a first-rate maternity service unless you are prepared to pay for it. A great deal of public money has already been spent on maternity services, particularly in connection with ante-natal clinics, but he would be a bold man, or woman either, for that matter, who would be prepared to say that full or even sufficient value has been obtained for it. Dame Janet blames the obstetricians for this and accuses them of being backward in giving a lead and of failing to place their expert knowledge at the service of the public health authorities.

My contention is that until recently these authorities did not think it necessary to consult the obstetricians but were content to rely on their own experts. We see the results of this policy in the public ante-natal clinics which are staffed for the most part by whole-time officers with little or no experience of practical midwifery apart from ante-natal work. Any obstetrician would have told the public health authorities that ante-natal work is not a special branch of medicine but a vital and therefore inseparable part of midwifery as a whole.

Professor Munro Kerr has likened ante-natal supervision of the pregnant woman to the navigation of a ship but I would remind you that a navigator is a fully-trained executive officer who remains with his ship until she arrives safely in port and not a mere landsman who is trying to do his best during a comparatively uneventful part of the voyage.
I am not unmindful of the great services rendered by the public health authorities but I contend that in the organization of their maternity services they have frequently adopted an attitude of self-sufficiency and have shown a reluctance to avail themselves of expert opinion. In the Rochdale "experiment" we see the other side of the picture and the happy results which follow when there is sympathetic understanding and close co-operation between everyone concerned.

The General Medical Council can only make recommendations, but we must all recognize that in recent years it has made a serious effort to improve the medical student's training in midwifery. Unfortunately, the different Licensing Bodies responsible for arranging the curriculum have not responded with equal enthusiasm and the general result has been disappointing. The fault does not lie with the obstetrician, however, but with those physicians and surgeons who are still inclined to look down on obstetrics as a sort of poor relation.

The Central Midwives Board has definitely improved the training of midwives but a much longer period of training is urgently necessary if these women are to take their proper place in an improved maternity service.

It may be that the young men and women of to-day are less willing to accept advice from their elders than their predecessors of a generation or more ago, but making every allowance for this I think that a teacher who knows how to impart knowledge and has the necessary personality will always be able to exert a great influence over his students. Unfortunately, our teachers are usually chosen because of their position in the hospital and being for the most part unpaid they are apt to look upon their academic duties as of secondary importance.

Dame Janet has accused the teachers of laying too much stress on the abnormal or even the surgical aspect of midwifery, but however true that may have been in the past it is certainly not true to-day. Every student is taught the anatomy, physiology and management of the reproductive function and only when he has mastered these is he instructed in the diagnosis and treatment of abnormalities. There is some truth in what Dame Janet says about the teaching of clinical obstetrics but her remarks only apply to certain hospitals. In Manchester, I cannot remember a handywoman being employed on the hospital district, but always a midwife in private practice or in more recent years a district sister or staff nurse with the services of a medical officer readily available if and when required. Moreover, it is the opinion of most teachers that the experience gained by the student when taking his maternity cases on the district is probably the most valuable of his whole career as it brings him into contact with patients in their own homes.

I will deal with the midwife next as she has become and will continue to be the backbone of the maternity service. She has done her work well and most authorities agree that she is only responsible in a very minor degree for the present rate of maternal mortality. She would do her work even better, however, if her training and conditions of service were improved as a better type of woman would be attracted to the service and one less likely to quietly acquiesce in possible errors of judgment or technique on the part of an unskilful or careless medical attendant.

The rôle of the general practitioner in midwifery practice has been much debated and presents a problem for which the Midwives Act of 1902 is largely responsible. In a sense his position as a medical practitioner was somewhat anomalous before the introduction of that Act as he was not only responsible for the diagnosis and treatment of abnormalities but also for the management of normal
cases. The Midwives Act rationalised his position by handing over most of the normal midwifery to certified midwives but the result, as you know, has not been entirely satisfactory, largely because the general practitioner has been asked to do too little in some respects and in other respects tempted to do too much. In my opinion he is the proper person to supervise the health of the pregnant woman and to detect departures from the normal. The actual conduct of labour should be left to the midwife, but his services should again be available for the diagnosis of abnormalities and the treatment of such as he is competent to deal with or must deal with because of extreme urgency. In other words, he should have a limited objective in dealing with obstetric abnormalities just as he has in the case of acute surgical conditions. No general practitioner would under ordinary circumstances operate on a case of acute appendicitis so why should he attempt to perform version or a difficult forceps extraction.

Professor Munro Kerr has referred to the special difficulties of urban practice but I am sure that they could be overcome if a separate panel of practitioners willing to undertake maternity work were set up under the Health Insurance Acts and their duties allotted and restricted in the way I have suggested.

The position of the obstetrician is much simpler. It is his duty to help in the diagnosis of difficult cases and to treat those abnormalities with which the general practitioner cannot properly deal. He must also be a seeker after the truth, constantly on the look-out for new knowledge about the causes of disease and more efficient methods of diagnosis and treatment. Finally, his expert knowledge should be at the disposal of all those who are investigating administrative problems or endeavouring to improve the maternity services as a whole.

After hearing Dame Janet, however, you may think that the obstetrician is incapable of doing many of these things because he is lacking in initiative, unable to appreciate the problems which confront him and is content to remain in the subordinate position assigned to him by his medical and surgical colleagues.

I ask you to believe that the truth is something very different. Every new idea in midwifery, including that adopted child of the public health authorities, ante-natal care, has been introduced by an obstetrician. The problem of maternal mortality has not escaped our notice, but being better acquainted with the difficulties of obstetric practice we realize that no spectacular solution is possible.

And, finally, we no longer suffer from an inferiority complex, but have actually founded a College of Obstetricians and Gynaecologists which is already taking its place beside the older foundations and doing for obstetrics and gynaecology what they have done for medicine and surgery.

Lastly, there is the patient herself, very much of an unknown quantity but undoubtedly responsible to some extent for the difficulties which confront us. Her social handicaps may be safely left to the public health authorities but her mode of life and mental outlook as they affect her desire or capacity to bear children affect us very closely. There is, for instance, the important question of the increased incidence of self-induced abortion and the large number of deaths and considerable amount of invalidism which result therefrom. There are also the increased fear of pregnancy for which certain newspapers and public bodies must bear some of the responsibility and the demand for the relief of pain during childbirth with which most of us are in sympathy but which nevertheless adds to our difficulties.
I have dealt at considerable length with these different aspects of the problem because I am going to suggest to you that its solution does not lie within the power of modern obstetrics alone. The different authorities and individuals I have referred to must all play their part and until we succeed share the responsibility for failure. I have the greatest admiration and respect for both Dame Janet Campbell and Professor Munro Kerr but I respectfully submit that they have no right to be appearing for the prosecution to-night. Their proper place is beside Professor Strachan and myself, because you cannot convict us and allow them to go free.

The Chairman: We shall all agree, ladies and gentlemen, that we have had a very interesting start in the discussion, and it is evident that, as far as the affirmative is concerned, that there has been no collusion between the two openers of the discussion, for Professor Munro Kerr is in mutiny against his chief.

I have one suggestion before I call upon the other speakers. It is clear, from what has been said, that we regard the administration of the Maternity Service as, in a way, responsible for the mortality rate, as much as the practitioners and midwives; but we should understand the term "modern obstetrics" as including those who practise and teach midwifery and those concerned in the administration of the maternity services, because if we are going to blame anybody we must blame the lot.

Dr. Bethel Solomon (Dublin): I had intended to say a great deal about this subject, but the opening speeches have been so good that it seems to me there is little else to say. I am on the side of the affirmative to-night. I am surprised to hear that Professor Dougal is so satisfied with things in general that he feels we should not utter a protest against the present condition of affairs in the obstetric practice of the world.

In the short time allowed to me I shall only attempt to deal with one or two points. The first which I want specially to stress, and which I do not think has been dealt with enough, concerns regulations and education. The present education of the medical student does not fit him to practise when he has become qualified. His present education, according to the regulations, allows him to do a certain number of confinements, but it does not say he has got to learn what normal labour is, and that is one of the points which were raised by Dame Janet Campbell. If a man does not know what a normal labour is, he will not know what an abnormal one is; and I suggest that some body should take steps to get some rule passed which shall require that students shall show that they have attended cases all through, and not simply at the end of labour. In my opinion no man or woman should be allowed to practise, after being qualified, until he or she has done post-graduate work under supervision; until then they should not be allowed to practise on the unfortunate public.

The best thing which has been done in this connection was the formation of the British College of Obstetrics and Gynaecology, and I think in some ways this debate is premature, because the College would have dealt with it. I thought that the Irish Free State suggestions were the best that were put before the College. I hope more of those suggestions will be taken, and that hospitals will be formed
with specialists on the staff. I also hope that when the specialists are appointed they will receive the posts because they are members of the College of Obstetricians and because they have served a long apprenticeship to the science and art of obstetrics. So long as the number of forceps interferences remains high, with the proportion of mangled and dead women and children, we cannot smugly say the present state of obstetrics is a credit to our profession. Obstetrics is a beautiful science and art and we should do our utmost to preserve it as such.

Those are the chief points that I wanted to urge on the meeting, and when the voting comes I feel sure that many of those who have spoken in the negative will vote in the affirmative.

Mr. James Cook (Glasgow): I have travelled from Glasgow to see, to hear and to speak. I think the holding of this debate is unwise, because it places the profession, I consider, in the position of a criminal, of the criminal in Don Quixote. What we have been listening to chiefly is the old-time hiatus between promise and performance. The specialists speak as if the threads of this matter were all in their hands. I would ask them, have they solved a lot of other questions in medicine? What is the cause of the seasonal variation in streptococcus infection? Why is it that when the death-rate is highest for other causes the septic death-rate is lowest? What is the relation between attempts at abortion and the rate of septicaemia? What do we know about eclampsia? What can we do to control foetal abnormalities? What is the cause of cockroach infection?

I think that gynaecology should have stood in the dock instead of obstetrics.

The agents concerned in the cause of maternal mortality include the following: the unborn child, the mother, the midwife, the general practitioner, institutions, specialists, the Department of Health, and the General Medical Council. In many cases the mother will not take steps to ensure her own safety. The Queen’s nurses, I know, give perfect service, but on a semi-charitable basis. For the general practitioner midwifery is not an economic proposition. Institutions are heartless, they have been a menace for sepsis. Segregation provides the keynote in the efforts to secure asepsis, whereas aggregation of cases breeds sepsis. Three-fourths of the citizens of this “Land of Hope and Glory” arrive through the portals of charity. With regard to specialization, where the standard of midwifery is highest there is the highest sepsis rate. The Department of Health has stood still. The matter will never be solved in the atmosphere of blame. If education is defective that is the job of the General Medical Council. Before men or women are allowed to practise obstetrics they should have compulsory service for two years in an obstetric hospital. If there is blame in this matter we are all in the dock together, and if no blame attaches, we are all acquitted together. There are 24 verses which I can commend to you, containing much wisdom, if you care to apply it, namely, St. Paul’s Epistle to Philemon.

Dr. Harold Watkin (Medical Superintendent of the Newton-in-Makerfield Isolation Hospital): Many of the points which I was going to raise to-night, Sir, have already been mentioned, so I shall leave them out.
I have been bringing children into the world regularly for 45 years, and, for two years before that, irregularly, by which I do not mean criminally. I am only a general practitioner, but I am engaged in public health service as well. I have myself brought more than 3,000 children into the world. I have lost only four mothers in that time, three of whom should not have died. Disobedience killed one, and interference from outside killed two. The other, the fourth, ought to have died four times.

There are many points which could be touched on, but I came here to support the resolution. However, now that I have heard the defence I will pass my judgment before going further and say that the fight has ended in a draw.

When I started in practice we had no trained women; all the women available for this work were “handy women.” There were practically no telephones, and the few that there were were closed down at 10 o’clock at night. The nearest maternity hospital was 18 miles away. There were no ambulances, and whatever the case was we had to manage it, and frequently by ourselves, because by the time we could have got help the patient would have died. We have had to do what seemed to be impossible, and frequently with success. I think that the great trouble in this work at the present day is due to impatience; the younger practitioners are in too great a hurry; they are not only impatient themselves, but they allow themselves to be influenced by the relatives, who ask why the practitioner does not do something. I tell them if they are not willing to take my advice I shall leave the case. Practitioners at the present day are in too great a hurry to land the fish, to get rid of the placenta. These are the two great causes of the high maternal mortality. The third is sepsis. I have taken an ante-natal class for several years, and 250 have passed through my hands. Many of the cases which have come had previously had dead children, rupture of the perineum, etc. One case in particular I will mention. This girl had had five children; she was mentally on the borderline, almost a mental defective. She had a somewhat contracted pelvis, and five times instruments had been used, but in this last confinement she was delivered by a midwife of an eight-pound baby, alive.

I have been doing ante-natal work for thirty years. I have not taken any money for giving advice, and I do not carry out incessant internal examinations; these are, I think, unnecessary. I have made it a practice to tell mothers I will not allow alcohol during the pregnancy, and I always insist on a daily evacuation of the bowels; I do not allow butcher meat, and only a small quantity of albuminous food. I order plenty of fresh vegetables and fruit, with abundance of fresh air and some exercise. But I do not allow garters or corsets. I say that if you see any sign of puerperal sepsis you should douch freely with perchloride solution, and when the temperature goes up, curette. By this method I have not lost a case.

DR. W. M. HEWETSON: I agree, Sir, that the platform seems to be a typically Scotch one—the Campbells, the Kerrs, the Strachans. I expected from the opener that, first of all, a case would be put for the prosecution; but, in spite of all the charm with which Dame Janet Campbell spoke, I could not find in what she said a case for the motion at all. She begged the question, stating if obstetricians had done this and that and the other, we should not have done so and so. That, I consider,
was not putting the case. The title of this debate is an unhappy one, unless you can show that the maternal death-rate is much worse than it has been. There can be no "discredit'' unless our predecessors were discreditable, and no one, I think, can say they were without wit and wisdom in their practical affairs of life.

I am not conversant with the literature on the subject, and I am not now in midwifery practice. We have been told that the death-rate in the '90s was over 4, and in comparison with that the birth-rate has fallen 50%. I do not say there is no room for improvement, but contrasted with the mortality in medicine and surgery the figures are not bad. The fact is there has been and is a lot of rot talked about it, and it has been, as has already been said, made a political question. I shall vote against the resolution. Mr. Wilfred Trotter, in his recent Lloyd Roberts Lecture, said medicine is a practical art, an applied science and an experimental science. There is certainly room for experimental science and a new cephalometry. If there is practical art in the whole of medicine and surgery it surely comes into fullest play in midwifery.

I have been in practice in the Tropics. I had not many European patients, but I followed my cases closely, and after careful study of the effects of quinine over many years I noted with joy the ease of the labour, the shortening of the period of labour, the absence of complications and the satisfactory character of the temperature chart in those cases who had received quinine. I was the first to write on the subject from Rhodesia, in 1928, but it has since been taken up by Dr. Mitchell, of Bath, and I believe that my original views are now fairly generally adopted. I apologise, Sir, for having ventilated this personal matter, but I think that if the proper use of quinine were practised it would have a considerable influence on the reduction of puerperal sepsis.

DR. MARY KID (London): I would like to support the thesis of Dame Janet Campbell. During the last 17 years there has been such wonderful work done by the Ministry of Health for women and children in this country that we must admire it. One little point I would like to take up from my own experience, is that of the use of anaesthetics and analgesics in childbirth raised by Dame Janet. Their use is of great advantage to women in labour. It is not realized, as it should be, that the Maternal Mortality Commission decided that one appreciable cause of death in childbirth is obstetric shock, and many obstetric physicians believe that this obstetric shock is often due to the withholding of an anaesthetic. It is terrible the way in which poor women are unable to get such relief. I was distressed with the number in the audience who appeared to agree with Professor Strachan when he said that many women were not content to go through with it and bear it. Would they, I ask, be content to see their own relatives go through the same agony? Why should Minet's gas-and-air apparatus not be used more? To a poor woman who was admitted to a municipal hospital I said, "Did they give you anything to ease the pain?" "No," she replied, "I begged for it, but the sister would not give it, and said 'You can't have it here.'" Her husband remarked that he was outside, and her cries still rang in his ears. I say obstetric shock is an appreciable cause of death.

I would also like to mention the work the Ministry of Health is doing in giving milk to expectant mothers. Why is Holland's death rate so low? It is said that this is because the women in Holland have not such rickety pelves as the
women in England. And why is this the case? Because there is more agricultural produce in that country and the people consume more milk, butter and eggs. I think if we go on in the present splendid way, if the Ministry go on giving milk to expectant mothers, we shall find that the trouble which we are discussing will gradually diminish.

**Sir Henry Brackenbury**: It is obviously impossible to take more than one point in a debate of this kind at this stage, but I should like to say I cannot help thinking that if any impartial person sat in this hall listening to the debate with the view of giving a logical vote at the end of it, he could not do other than vote in the negative. We have heard two speeches in the affirmative, and two against the motion, and I think if you remember what was said in those speeches, you will agree that only three were directed to the proposition that we have to decide upon.

I noted that Dame Janet Campbell in her speech included thirteen separate items in her indictment of obstetricians. Every one of those thirteen has been true at some time; I believe they were nearly all true when I was a student. Few, however, of them have been true within comparatively recent times. But, if I know anything about the profession at all—and I claim to know as much about it as Dame Janet Campbell—there is not a single one of them which is true at the present day. I only take one point, and suggest to Dame Campbell not exactly that she is wrong, but that it is wrong to say that this is primarily a clinical and not primarily a sociological problem. I very strongly suspect that it is not, mainly, a clinical, a medical, problem at all, but that it is mainly a sociological one. What do we find? That the mortality rate is relatively high in one district and relatively low in another district; the death-rate from maternity is not a widespread national matter. If we could, as I said years ago—and it is only now that the Ministry of Health has taken notice of it—if we could reduce the maternity mortality rate in Wales, Lancashire, and the West Riding of Yorkshire to what is the average for England and Wales, then the average for England and Wales would be reduced to such an extent that no one, except Professor Munro Kerr, would consider it to be abnormal. I cannot believe that the standard of knowledge and of the service given by midwives, by general practitioners and by specialists is worse in Wales and Lancashire and in the West Riding of Yorkshire than in the remainder of England and Wales. Thus it seems to me that there must be some other reason. Probably it is to be found in the habits of the people, in their character, in their surroundings and their circumstances, rather than in any weakening of the standard of obstetric practice. At any rate, we have grounds for being so uncertain about it, and I suggest that a search into the habits of the people themselves might reveal that there is so much doubt about it that perhaps the boot should be on the other foot, and that it is not the obstetricians who should be blamed, but, rather, it is those in the Public Health Service who are more intimately associated with the sociological factors who should be in the dock instead of the obstetricians.
Dr. Colin J. N. Cameron: I am speaking on this subject to-night from the point of view of the country practitioner whose nearest hospital is 19 miles away, and who often has to conduct a midwifery case by the light of a candle which has a beer bottle for a candlestick, and with no water source nearer than a mile. To some extent I agree with Dame Janet Campbell that midwifery is not all that it might be, and my own opinion is that there are too many cooks stirring the broth. First, we have the District Nursing Association. There are two types of district nurse; there is the Queen's nurse, who is thoroughly well trained, and excellent; and there is the district midwife who is promoted to be a nurse because there is no other way of paying her salary except by way of employing her as a nurse. Those women often have to go to septic cases between their midwifery cases. I have known a tragic case where the district nurse was called in to see a child who was suffering from a sore throat. Half the district nursing associations have these arrangements, and there again the reason for calling for subscriptions is, often, to save the doctor's fee. This particular woman went in, saw the child with the sore throat, and it turned out to be a case of scarlet fever, but she never knew it. She went on to the confinement case, and the woman she nursed and delivered died of scarlet fever. These district nurses are under the Ministry of Health, that is to say, the county medical officer in most counties.

Again, ante-natal work is done by the assistant county officer. He is not the man who is called out in the morning; it is the general practitioner who has never seen the case beforehand. With all due respect to Professor Munro Kerr, I get most of my cases as occipito-posteriors or breeches with extended legs. If this state of matters is to be put right, there is only one way, and that is to have properly trained midwives and not nurses who go to all sorts of cases, including septic ones. And this is only possible by raising the fee. People cheerfully pay ten shillings a year for a wireless licence, indeed they will pay for anything except a decent salary for a properly trained district nurse. The practitioner is capable of dealing with the average kind of case in midwifery; occipito-posterior and breech presentations he can deal with; I do not say so much about placenta praevia or version. But I will say this: that specialists will always come when asked, whether there is money in the case or not, to help the general practitioner, and I do so with feelings of gratitude for I have found it so time and time again. General practitioners should be properly trained, and midwives should be capable of being ordinary midwives. And finally, if we are going to have specialists, let us have proper ones in the country, and who are capable of being got hold of by the general practitioner when required.

Dr. Josiah Oldfield: I like to be a very practical man, and I ask myself always "What will be the result?" I ask that about this debate; what will be the result of it in the matter of maternal mortality in the next ten years? My contribution to-night will be restricted to one point, namely, puerperal sepsis.

The statistics given by Professor Strachan were wrong with regard to puerperal sepsis as opposed to puerperal mortality. The point has been neglected, and I hope I may help, and that those of you who are engaged in this great
work will be able to reduce puerperal sepsis, which is greater in countries—so called civilised—than in others. In days gone by the surgeons were as good as those of the present day, except that they had dirty hands and dirty coats. Some obstetricians to-day have forgotten that women often have a septic bowel, and it is owing to this sewer system that much of the pathological conditions met with in midwifery arise. If you had a permeable sewer going under the delivery room, you would say either "I must remove the sewer," or "I must stop sewage from flowing through it." Sir Arbuthnot Lane took the first course, and cut out the sewer. If you can cut out the bowel of the pregnant woman (but do it kindly and gently), your mortality may go down. But there is a better method, and that is preventing sewage passing along it, and my work in the last fifty years has been in transforming the pathological flora of the alimentary canal into a beneficial physiological flora. If you can do that, you are getting rid of the sewage system in a perfectly rational manner. The faeces of the healthy cow can be used quite well as an aseptic dressing. After a course of proper dieting you can get a woman's alimentary canal to be free from septic organisms, especially the Coli tribe, if the patient is fed on starch and sugars and the protein of milk. But if you feed these organisms on the protein of dead meat they become malignant. Every woman, when she is pregnant, should be put on a special pregnancy diet; you should not wait until the last month, or the last minute, and then give her castor oil at one end, and use enemata at the other. During the whole of the nine months she should be on a proper diet.

DR. J. R. BIBBY (Gloucester): I have come 150 miles to be present at this debate and I sent up my name because I disagree entirely with the resolution. It has been claimed by speakers to-night that the maternal death rate is abnormal, In Gloucester it is not only not abnormally high, it is startling in its lowness, and that fact is attributable to the trained district nurses working in that City. In ten years there have been 5,410 cases, and only 2 deaths. The cases have been all attended by trained women, who have become midwives afterwards. I have been astounded to hear that nurses attending septic cases have been allowed to visit parturient women as well. In Gloucester the nurses have called in the doctor 1,500 times; and 300 of these were under the heading "Difficult labour," and presumably in the majority there was instrumentation. If we want to lower the death-rate, as of course we do, then, in the present conditions of the country, I contend that the ideal way to tackle the problem is to have trained women to attend these people, and to increase the ante-natal clinics or centres. One part of the problem to tackle is the mothers themselves; it is they who are indifferent, they do not take the matter seriously. I often tell mothers that whenever they pass the district nurses' institution they should bow and make obeisance as a recognition of what they owe to the trained women of the City; two deaths of mothers in well over five thousand cases. I say increase your maternity hospitals. We hope soon to have a maternity hospital in Gloucester. We shall have a Resident, and he will be an obstetrician. I have had 45 years in practice, but when I started I knew nothing about it. I did not learn the work in Edinburgh University, but among the people themselves. That ought not to be; the practitioner should come prepared to deal with disease. Childbirth is often said to be a physiological process, but frequently it is pathological.
DR. W. M. CROFTON stressed the value of vaccine therapy in contrast to the use of anti-toxins in the treatment of puerperal sepsis.

DR. HERBERT W. NOTT: I have brought a message to the meeting, Sir, from Sir Bernard Spilsbury, who is sorry he is unable to be present. He says “In my opinion, the increase in maternal mortality is explained to some extent by the great increase in criminal abortion in recent years. Now-a-days the married woman who does not wish to have a child, or does not wish to increase her family, is a worse offender than the unmarried girl.”

I shall not give my own opinion, but will read you what occurred in a nursing home four years ago. A healthy, strong well-nourished primipara had, a few days before term, lightning pains. She had some fever which was rising, and strong pains. On the fifth day the temperature was rising sharply. The doctor dilated under an anaesthetic, and delivered with forceps. There was no laceration and no hæmorrhage. The lochia were offensive. The next day the patient’s condition was desperate, her temperature was 105° F., and she was hardly able to swallow water. The child was very cyanosed, and was in danger of heart failure, and it was said that neither mother nor child was likely to be alive in 24 hours. Having heard of the good results of permanganate enemata, we decided to use them. She received these injections every two hours for three days. There was great improvement in 36 hours, and on the third day from commencing this method of therapy the temperature was 100° F. The child also was thriving under the same treatment. This case demonstrates what can be done with the use of permanganate of potash in the control of sepsis.

DR. PRAMATHER BARDHAM (Singapore) said that he felt that the present rate of maternal mortality was not due to inefficient obstetrics but to bad social conditions, the improvement of which would cause a fall in the deaths from maternity.

THE CHAIRMAN: I shall now call upon Professor Strachan to reply for the opposition.

PROFESSOR STRACHAN (in reply): I think it is quite permissible to take exception to the attitude which has been expressed that Professor Dougal and I are complacent about the present rate of maternal mortality. That is not the case. But that is a very different matter from sitting still while a hail of brickbats is going on about us. We have each tried in our own way, while appreciating the gravity of the problem, to point out that it is not a matter of discredit, far less of disgrace to modern obstetrics.

Dr. Solomons had some important things to say about education. One astonishing thing he said was that the student is not taught to understand normal labour; I am horrified to find that is not the case at the Rotunda Hospital. (DR. SOLOMONS: No, I said I would like the regulations changed). I am sorry
if I misunderstood him. But what can you do with the student in surgery, medicine and obstetrics? Can you teach him more than the fundamentals of his job? You cannot. Whether you make it three months, six months or three years, you cannot turn out in that time an experienced physician, surgeon or obstetrician. And that is one of the main burdens of my paper, as you will see when you read it, that we should concentrate on general principles, e.g., that one's hand should be held, as far as possible. Use antiseptics lavishly, but interference little.

So many points have been raised that it is impossible to answer them all at this late hour. I am not surprised to be told by Dr. Solomons that the Irish Free State suggestions were the best; they always are.

Dr. Mary Kidd has left me in doubt whether she has practised obstetrics or not. Her views with regard to shock are incorrect. A large proportion of the shock caused now-a-days is by women reading startling headlines in the papers, much more than by withholding anaesthesia. She asked if we would see our relations suffering pain. Our mothers and grandmothers have suffered it, but any alleviation of pain which should be at hand for women in labour must be practised under hospital conditions. There is no mass method of anaesthesia which does not raise the interference rate. I should also like to state most emphatically that there is no truth in the suggestion that medical men discriminate in their treatment of the rich and the poor. What is right and proper and necessary is given equally to all classes in society.

The case of the country of Holland has been quoted largely to-night; they withhold anaesthesia in Holland as a cardinal principle, and the rising death-rate in Holland to which I referred in my opening remarks has been attributed to the fact that women are now demanding anaesthesia and analgesia.

It has been a great pleasure to me to come and speak here, and I hope the meeting will support the views of Dr. Dougal and myself.

DAME JANET CAMPBELL (in reply): I feel in a very lonely position, as the one person I imagined would support me has turned on me. I disagree with what he said about specialists for every maternity case as it is unreasonable and impracticable; it is on the experienced general practitioner that we must rely for medical advice for the ordinary case and for the semi-abnormal one. His example, that of Rochdale, was unfortunate as an example instancing his view in regard to specialists, because in Rochdale the reduction was effected by the ordinary practitioners and midwives of the town, and I think I am right in saying, without any specialist assistance, or any new blood coming in to tell them how to do their work. It was a big drive in education. I still say the question is a clinical problem, not a sociological one, because the educational drive meant a better standard all round, everybody taking a little more care, and that is the secret of the reduction of the maternal mortality rate.

It is rather a difficult resolution to speak in support of, because the debate has shown there is so much to be said on both sides, and hardly anybody is wholeheartedly in favour of one side or the other. But I feel the great point is the
principle, rather than the details, and that though much has been done to improve the care of maternity cases and maternity practice, more might have been done if obstetric medicine—I do not speak of individuals—had done more, if the influence of obstetrics as a whole on medical work had been more pronouncedly in favour of good ordinary midwifery; if we had had more obstetric physicians rather than surgeons to help us, I feel that the public health service would have learned more and have benefited, and that we should have got much further than we have to-day in solving the admittedly very complex and difficult problem of maternal mortality rate reduction.

The Chairman: I will only say about half a dozen sentences by way of winding up this very interesting and discursive debate.

Dame Janet said wisely just now that there did not seem to be very much difference between one side and the other. That is what struck me most about the discussion. I was almost hoping someone would say he or she was proud of our maternity rate, but no one has done that. Even Professor Strachan made admissions which go far to place him on the other side. He said one main cause of the high mortality rate is unnecessary interference on the part of the medical attendant. Is that a creditable state of affairs to modern obstetrics? Professor Strachan might almost be said to have inverted the rôle of the Prophet Balam for, having been called upon to bless, he has joined those who are cursing. Professor Dougal also is not enthusiastic in feeling we have any reason to be satisfied with things as they are. It seems to me that nearly all the speakers on both sides have had to confess that there is much in the conditions of the work at the present time of which we have no reason to be proud. There has been some difference of opinion as to which side ought to be brought in to blame; but that is fruitless. We are a team, not independent warring elements in a team. We need administrative services, and these need a clinical team. They need their teachers, practitioners, midwives, and the sooner we can get together and sit down to the problem which Professor Munro Kerr adumbrated as to what we shall do about it, the better.

Mr. Herbert Paterson: I am sure, ladies and gentlemen, you would not wish to leave without according a very hearty vote of thanks to our Chairman for the admirable way in which he has presided this evening. He has had very little trouble, and I am sure we have all enjoyed his summing up.

The motion was carried by acclamation.