

do not, however, appear to justify Professor Strachan's optimism, but rather give grounds for serious alarm. The figures there set out (p. 63) show that the slow but steady fall in the maternal death rates which continued, with some interruptions, until 1924, was then arrested, and that a rise of about 20 per cent. has occurred in the last nine years. In Professor Strachan's own area, Glamorgan, the rise in this period is as great as 36.11 per cent., as shown below.

ENGLAND AND WALES

Puerperal Mortality per 1,000 Live Births

1913	1923	1933
3.96	3.82	4.51

= Rise in last ten years, 18 per cent.

Total Maternal Mortality per 1,000 Live Births

1913	1923	1933
4.87	4.83	5.94

= Rise in last ten years, 22 per cent.

GLAMORGAN¹*Puerperal Mortality per 1,000 Live Births**Average for*

1911-24	1924	1933
5.67	5.04	6.86

= Rise in last nine years, 36.11 per cent.

Figures showing the total maternal mortality in Glamorgan are not available.

In certain districts within twenty-five miles of Cardiff maternal death rates of over 9 per 1,000 have been reached in recent years, and the rates for the industrial areas of Wales thus compare unfavourably with those of all other civilized countries, not excluding America.

Professor Strachan claims that these deaths are unpreventable, and criticizes the Report of the Maternal Mortality Committee for its claim that 50 per cent. could be avoided. The findings of the New York Academy of Medicine with regard to deaths in the State of New York² go beyond the English committee's estimate of 50 per cent., and claim that 65.8 per cent. of the deaths could be prevented.

These findings appear to be borne out by the fact that in many towns and districts in England, not to mention the whole of Holland, such deaths *are* prevented year after year. The low rates of many maternity hospitals, and of the nurse-midwives working for nursing associations affiliated to the Queen's Institute of District Nursing, are quoted in the Chief Medical Officer's Report (page 263), and shown to be under 2 per 1,000 in over 600,000 cases. The death rates of some large cities such as London (3.55) and Liverpool (3.41), and of many county areas, are consistently low.

In connexion with Professor Strachan's statement that the activities of the National Birthday Trust Fund in financing research in anaesthetics suitable for use in midwifery will result in an increase in the number of deaths, it is of interest to note that London and Liverpool have been foremost in providing anaesthetic relief to the patients in their maternity hospitals, and that the death rate in London has dropped from 3.8 to 3.55 since the widespread adoption of anaesthetics in both voluntary and county council hospitals in 1931. In Glamorgan, on the other hand, any form of anaesthesia is rare, except at the Cardiff Royal Infirmary, to which the National Birthday Trust Fund has supplied free, on request, 7,752 chloroform capsules since July, 1932, for the use of patients of Professor Strachan and his staff.—I am, etc.,

JULIET WILLIAMS,

Member of the Executive Committee,
National Birthday Trust Fund.

London, Jan. 27th.

¹ See Report on High Maternal Mortality in Certain Areas (p. 71), and the Official Health Report for 1933.

² See Report of the Public Relations Committee of the New York Academy of Medicine on Maternal Mortality in New York City (p. 32).

Anaesthesia in Relation to Maternal Mortality

SIR,—In the *British Medical Journal* of January 26th the professor of obstetrics of the Welsh School of Medicine refers to the work of the National Birthday Trust Fund to provide anaesthetic relief for poorer mothers, which the professor considers is likely to increase the maternal mortality. Recent work, however, has shown that such fear is unfounded.

At the Wellhouse Hospital, Barnet, where gas-and-air analgesia has been in use for the last fifteen months, there has been no increase in instrumental deliveries. In a series of 300 cases, 164 of which were primiparae, forceps delivery was found to be necessary in twenty-six cases. It has been the experience of many observers that women who are relieved of their pain are far less likely to come to forceps delivery than those women who are given no relief. In a recent report issued by the London County Council it was stated that there had been no increase of forceps deliveries as the result of the introduction of anaesthetics into the labour wards of their hospitals. Dame Louise McIlroy and Dr. Rodway, in their very able report on the alleviation of pain in 560 cases of spontaneous labour, find no ill effects from the proper use of sedative drugs and anaesthetics. They say: "We have found the duration, strength, and frequency of the pains increased in over 50 per cent. of cases" (after the use of nitrous oxide and oxygen).

There have been two very informative textbooks published on the subject of anaesthesia in labour, by Dr. Lloyd Williams and Dr. Neon Reynolds respectively. Dr. Lloyd Williams, after having made a very careful study of the whole matter, considers that labour is not prolonged in cases where gas and oxygen or gas and air is used (p. 37), and Dr. Neon Reynolds in his book states (p. 110) that in his experience "there is no prolongation of labour and no ill effects upon the mother or child, and no tendency to increased haemorrhage or suchlike complication," again after the use of gas and oxygen.

I quote only a few of the recognized authorities (and what has been said of gas and oxygen applies to gas-and-air analgesia), but there is very ample evidence at the disposal of the professor of obstetrics of the Welsh School of Medicine to show that he is unduly pessimistic in his assumption that the work of the National Birthday Trust Fund is likely to increase our maternal mortality. The maternal mortality in Holland, "where anaesthesia is insistently demanded," the professor tells us, is 2.6 per 1,000. It does appear to me, therefore, that the National Birthday Trust should have the whole-hearted support of our profession.—I am, etc.,

Barnet, Jan. 26th.

JOHN ELAM.

Training in Midwifery

SIR,—Nearly every day we see correspondence and articles in the papers concerning maternal mortality, and it is suggested, with some truth, that medical students are not given sufficient practical experience in midwifery before going into practice. I do not think it has been sufficiently emphasized that the difficulty of giving students experience is very largely due to the number of nurses who are taking the C.M.B. examination.

It is well known that there are 56,000 women on the midwives roll, and of these only about 15,400 are in practice, according to the returns made by local supervising authorities to the Central Midwives Board. The majority of those who hold the C.M.B. qualification therefore do not practise midwifery and only take the examination in order that they can put in for a special post, such as matron, sister, etc.