WHERE TO BE BORN?

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The past seventy years have seen a fundamental change in the circumstances in which women give birth. In 'Where to be born - the debate and the evidence', we have reviewed the way policies have evolved and the validity or otherwise of the arguments put forward in support of these policies. This article highlights some points from the review.

Before the 1914-18 war, probably less than two per cent of births in England and Wales took place in hospitals and other institutions, while in 1985 the corresponding figure was 99 per cent. How did this change come about?

Legislation passed in 1907 and 1915 made local authorities eligible for grants to provide maternal and child welfare schemes which could include maternity homes. Maternity policies were developed further after 1919 when the Ministry of Health was set up. It had a division of maternal and child welfare staffed entirely by women and headed by Dr Janet Campbell.

Although it was under pressure from some quarters to encourage the building of large obstetric hospitals, the Ministry took the view that only a minority of women with special problems required hospital care. Instead, it encouraged a move towards institutional birth, but for reasons which were not solely medical. For women whose housing conditions were unsatisfactory it recommended that local authorities should provide maternity homes. These were to be run by midwives and would not need specialised medical facilities. Thus the motivation for providing these institutions was a rising awareness of poor housing conditions in the housing crisis which followed the war.

Hospital care was advocated only for women with complications. At the time, however, maternity hospitals had the reputation of being dangerous and had high maternal mortality rates. This was both because of unsafe obstetric practices, particularly in some of the small cottage hospitals which were increasing in number, and also because of the risk of infection from puerperal sepsis.

Puerperal sepsis had been a cause for concern for some considerable time. Towards the end of the nineteenth century some of the 'lying-in' hospitals, including Queen Charlotte's in London, had introduced antiseptic and aseptic techniques, and as a result their maternal death rates began to fall. In most places, however, the in-patient death rates remained higher than those for the same hospitals', 'outdoor departments', from which midwives went out to deliver women in their own homes.

Was the maternity hospitals' reputation of being dangerous still justified in the early decades of this century? Did this mean that the hospitals were still more dangerous? Official reports which tried to answer this question identified long-standing statistical and methodological problems which have important implications for the present day debate about place of birth.

In an official report on maternal mortality published in 1915, Isabella Cameron, a doctor who subsequently joined the Ministry of Health, commented on the poor quality and lack of comparability of the available statistics. She suggested that the high death rate from eclampsia and puerperal fever in hospitals arose because hospital care was selectively sought for women with these conditions. Later on, in 1932, a Ministry of Health report by Janet Campbell, Isabella Cameron and Dilys Jones suggested that: 'criticisms are not seldom made of the high maternal death rate which occurs in maternity hospitals. This is largely explained by the fact that the proportion of difficult cases is large and also, by the reception of emergency cases, many of them actually moribund on admission.'

These processes, which resulted in women at risk of dying in childbirth being selectively referred to hospital, still bedevil statistical analyses which attempt to evaluate the relative safety of different places of birth. The main difference is that, after the fall in maternal mortality, which happened from 1935 onwards, perinatal mortality became the main concern. It is notable that the shift from home to hospital birth took place without any serious attempt to look at the statistics which were available, improve these data, collect them in ways which would allow policies to be evaluated, or to do any original research to test specific hypotheses.

How was it decided who should deliver in hospital? The approach in the 1950s and 1960s was to define 'vulnerable' groups by idenyifying women in age and parity categories with high maternal and perinatal mortality. Women in these 'vulnerable' groups were given priority for delivery in hospital and the extent to which they did, or did not do so was monitored by the Ministry of Health in successive Chief Medical Officers' reports.

The Cranbrook Committee recommended in 1959 that: 'sufficient hospital maternity beds to provide for a national average of 70 per cent of all hospital confinements to take place in hospital should be adequate to meet the needs of all women in whose case the balance of advantage appears to favour confinement in hospital.'

Neither the Cranbrook Committee nor subsequent committees which put forward policies for hospital delivery made any systematic attempt to evaluate the varying patterns of maternity care in consultant obstetric units, general pratitioner maternity units or at home. In particular, there has never been a randomised trial to assess differences in mortality and morbidity among mothers and babies cared for in these different settings.

By 1970, the numbers of maternity beds had risen and the birth rate had fallen. In that year, the Peel Committee recommended that all births should take place in hospital on the grounds of 'greater safety of hospital confinement for mother and child.' It produced no direct evidence to support this, but instead pointed to the way that, nationally, the increase in the proportion of hospital births had been accompanied by a fall in perinatal mortality. This was challenged by Marjorie Tew of Nottingham University, who showed that regionally, changes in hospitalisation did not match changes in perinatal mortality.

Ten years later the House of Commons Social Services Committee recommended a further phasing out of home deliveries, which by then accounted for only 1.2 per cent of all births. It did so on the grounds of an apparent rise in perinatal mortality among births at home. Close inspection of the statistics and the findings of a special survey of all births at home in 1979 suggested that mortality among planned home births was very low. The numbers had become so small, however, that they were overshadowed by deaths among the births which took place at home by accident. These were mainly births to women who had rapid premature labours and so could not reach hospital as planned, and women who had made no arrangements at all for their birth.

The survey was, however, unable to identify births where women planned to deliver at home but were transferred to hospital because of complications during labour. As in 1915, it is still impossible to identify these on a national basis although it should, in principle, be possible to do so once Korner maternity systems are fully implemented.

Marjorie Tew has written extensively about home and hospital birth and her work is discussed in detail in our review. While we question some of the ways in which Marjorie Tew has interpreted the few data which do exist, the most prominent feature of the debate on place of birth is the absence of data to answer the important points she raises about possible iatrogenic effects of obstetric care in hospital. The available evidence, in our view, neither supports nor disproves her claims that hospital care is dangerous.

What conclusions can be drawn from the patchy evidence which does exist? There is certainly no evidence that the safest policy is for all women to give birth in hospital, and the policy of closing small obstetric units on the grounds of safety is not supported by the information available. The home births survey referred to above showed that perinatal mortality among births to the select group of women who had planned deliveries at home was very low, particularly among women with previous births. There has, however, been no direct comparison between the outcomes of births in different hospital settings and at home.

As the epidemiologist Archie Cochrane said on this subject in his book, 'Effectiveness and efficiency', 'it is surprising how successive committees have been content to accept trends as something God-given which must be followed, instead of demanding a more rigorous analysis of causality'.

Rona Campbell, Alison Macfarlane. Where to be born? The debate and the evidence. Available, price £ 2.00, from: National Perinatal Epidemiology Unit, Radcliffe Infirmary, Oxford OX2 6HE.