

Outcome in low risk pregnancies


Commentary

In England and Wales home births are still uncommon, but their numbers are rising steadily. After falling to an all time low of 0.89% in 1987, the percentage of maternities occurring at home reached 1.94% in 1995. Despite this doubling, the numbers of home births in most districts are still small, making it difficult to monitor trends and predict the implications for services.1 Data are also in short supply at any level, apart from a survey of planned and actual home births in the Northern Region in 19932 and the National Birthday Trust’s as yet unpublished survey of planned home births in 1994.

The authors’ ingenious response to the lack of data for their own population was a retrospective analysis of computerised data about selected women who actually experienced hospital care. They interpret this cautiously, conscious that benefits and hazards of hospital care are different from those associated with home delivery, and that the outcome might have been different if the same group of women had planned to deliver at home. How does their analysis help us, what questions does it raise, and what further information is needed?

The authors were concerned to find that 5% of women in their extremely low risk group might have required transfer in labour and felt that this was a cause for concern. From a statistical perspective, however, their approach could be viewed as a screening procedure, with a relatively low rate of false negative results and thus a high sensitivity of 95%. Although it identified a group of women in which the rate of complications is low, it cannot by its very nature predict which individual women in the group will experience these complications.

People faced with the problems of planning services and providing care for women who need to transfer to hospital in labour and for babies born at home with problems might well find this statistical observation frustrating. On the other hand, emergency measures will always be needed anyway to deal with the usually more acute problems which can arise when labour or birth occurs outside hospital unintentionally. Previous surveys have found that about a third of births occurring at home were precipitate births to women who had booked to deliver in hospital, or to women who had made no arrangements at all.1-3 This has implications for the training of home birth practitioners and of ambulance staff, particularly paramedics.

The authors found that just over 5% of the babies born to women in their low risk group were resuscitated, but that only five out of 65 were intubated. This suggested that most could be cared for by appropriately trained midwives. They did comment, however, that the proportion resuscitated was higher than that observed in a Swedish study4 cited in the report of the BPA Working Party on Neonatal Resuscitation.5 It is difficult to interpret this difference, given that the comparison is based on retrospective data from two separate sources. A collaborative prospective study, using common definitions, would be needed to investigate whether the difference is a real one or an artefact of differences in practice or methods of data collection.

When it comes to specificity, the authors’ selection procedure leaves a lot to be desired as they acknowledge themselves. They use criteria which are far more stringent than are usually applied in practice, so much so that they筛 only 4%. Data do not estimate the proportion of women who did not satisfy their criteria but went on to have an uncomplicated delivery. It would not be surprising if this was quite high. They point out that the risk approach, although an imperfect indicator, is used in many booking clinics and may place “low risk” women into a “high risk” category.

The authors use two types of exclusion criteria. The first type is based on adverse events and other factors in the individual woman’s clinical background and her current and previous pregnancies. This is therefore specific to the women concerned. More importantly, some of the factors which may affect decisions about place of delivery do not arise until after initial booking, so it may be unduly restrictive to rule out home delivery categorically at that stage.

The second type of criterion is based on probabilities of adverse events among women in particular age, parity, height and social groupings. Thus primiparous women are excluded and the age and height criteria are very restrictive. Unsupported mothers are excluded, but not defined. These criteria were first put forward in the 1950s and 1960s to
allocate scarce hospital beds to women who either were at a higher than average risk of adverse outcome or who had poor housing and social conditions. Thus safety was not the only consideration. This calls into question their value in predicting adverse outcome among women delivering in settings outside hospital in the 1990s. Both the criteria and the way they are used should be reassessed. A particular issue is whether they are any use at all in the absence of information specific to the woman and events during her current pregnancy.

To monitor trends in home birth and its outcome, consistent contemporary data are needed about planned and actual home births and the timing and reason for any transfer. The statistics cited earlier come from birth registration which, by its very nature, does not distinguish between planned and unplanned births at home.

In theory, more detailed data should be available from NHS maternity systems, but this is not the case in practice. The Körner minimum dataset, defined for England and adopted in Wales and Northern Ireland, includes actual and planned place of delivery and reasons for change among its data items. Unfortunately, the data which actually get into the national system are incomplete and of poor quality, and they are not fed back locally. Rather than try to improve this, the NHS Executive is now planning to introduce a much more restricted maternity minimum dataset from which most key data items have been excluded. In Scotland, data are of a much higher quality, although attempts to include all births outside hospital are relatively recent. The other UK countries should follow Scotland’s lead and ensure that national data are published and comparative data are available locally.

Even with good will and adequate resources it would take some time to achieve this. In response to the Cumberledge Report, staff have to plan services now and this paper has provided some useful pointers for service planning and staff training.

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