

Research Roundup

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- Who's on duty? registrars influence women's type of birth.
- What does "perinatal mortality" mean?
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Who's on duty?

A study from Birmingham shows that the kind of birth a woman has may depend on which registrar happened to be on duty at the time. The authors looked at records for women who had their first babies at Solihull Maternity Unit between 1992-4., during which time there were 12 registrars on the staff, plus a number of locums, who would be called by the midwife if obstetric advice or help was thought necessary. For most deliveries (89%) the registrar was the most senior person present. They came from eight different countries and had varying levels of experience in the specialty - from 1.5 to 7.7 years. Three of them already had passed the exam for membership of the Royal College of Obstetrics and Gynaecology (MRCOG).

At that time 17.9% of first time mothers in the hospital had caesareans and 25.1% had assisted vaginal deliveries. For assisted deliveries 18% were straight forceps, 3.2% were Kjellands forceps and 6% were ventouse (i.e. vacuum), and 18% were emergency sections.

The rate for doing caesareans before the second stage of labour varied between different registrars from 24% to 33%. The rate for straight forceps varied from 11% to 63%. For Kjelland's forceps from 0% to 31%, for ventouse from 6% to 48%, for caesarean in the second stage with no trial of assisted vaginal delivery from 1% to 8%, and for caesarean after failed trial of operative vaginal delivery 0% to 20%.

One registrar, for example, did 130 straight forceps deliveries and only 9 ventouse. Another did 52 ventouse and only 31 straight forceps. When it came to caesareans after failing an attempted vaginal delivery, one doctor had 10 such cases out of a total of 74 births. Another had no failed forceps/vacuum out of a total of 206 deliveries.

AIMS Comment

My apologies to our readers for not having reported this study sooner. It was published three years and I had missed it. It is worth writing up now because it is important for women. It shows that we need consultants to be around and to monitor the performance of different registrars - who come from a wide variety of backgrounds and training, and have varying levels of competence - and help to train them to improve particular skills. We worry about this because we have had a few cases where registrars showed alarming reluctance to perform particular procedures, and we suspect it is because they were lacking in confidence. Even more alarming are those with boundless confidence, but without the necessary skill.

Of course this tells us nothing about how many times registrars may or may not have given the midwife advice which enabled her to go on and help with a normal birth. Nor does it tell us about differences in outcomes - either for babies or mothers. What we need is closer monitoring and better training.

Reference

• Varawalla N and Settatree R, Does the attending obstetrician influence the mode of delivery in the standard nullipara? J Ob Gyn, 1988; 18: 520-3

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What does "perinatal mortality" mean?

It used to be thought that the rate of perinatal mortality (i.e. number of babies who are stillborn or die in the first week) was a good sign of the health of the population and the quality of the medical services.

Perinatal mortality rates have fallen in developed countries - but when we compare one with another, we may not be comparing like with like. Induced abortions for abnormality may reduce the number of babies who are born dead or die soon afterwards. Just as many - or more - babies die, but the perinatal statistics look better. So availability of abortions could affect the national rate.

Researchers in Denmark compared four countries: Ireland, Austria, France and Denmark, looking at the use of screening, number of abortions for malformation, and deaths of babies with malformations.

In Ireland, which does not have antenatal screening and forbids abortion, 44% of infant deaths are caused by malformation. In France, where women have three scans in pregnancy and abortion is allowed throughout pregnancy, only 23% of babies die from malformation.

However, the death rate for fetuses is highest in France.

Another factor that can affect the perinatal mortality rate is intensive care of sick babies. This can keep them alive more than one week after birth - so they do not figure in the perinatal mortality statistics. Policies on prolonging life for very sick babies also vary nationally - for example in Italy there are strong beliefs in protecting life, whereas in the Netherlands there may be more active intervention to end it. A seriously ill baby may be allowed to die in one country, but survive with cerebral palsy in another.

All this means that crude comparison of perinatal mortality rates can be misleading, and these rates have less value as an indication of the health of a nation.

Reference

• Garne E, Perinatal mortality rates can no longer be used for comparing quality of perinatal health services between countries, Paed Perinatal Epidemiol, 2001; 15: 315-6.

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More food in labour - fewer forceps/vacuum births?

Earlier studies in Holland have shown that most obstetricians and midwives allow women to eat and drink in labour. In a recent study, a group of obstetricians and midwives were asked to follow women having their first child and record what advice they were given, and the women themselves were asked to fill in a questionnaire after giving birth. Only half the doctors and midwives who were asked took part in the study, which followed 211 women. 64% of the women had spontaneous deliveries, 27% had vacuum or forceps and 9% had caesareans.

Most of the women - 66% - had not been given specific advice about eating or drinking in labour, but those who were given advice followed it. Most women (63%) had no intake other than clear fluids with no calories after labour began. Women usually followed the advice they were given. Those advised not to eat (usually higher risk women who might need a caesarean) were unlikely to do so. But those who were advised to eat were more likely to do so.

The most interesting result from this study is that women who had food or a drink containing calories had more spontaneous births (71% v. 61%), although the numbers did not reach statistical significance (i.e. could have arisen by chance). In those who had no intake of food, or drink with calories, a significantly higher number of instrumental deliveries - 24% v. 12.5%.

AIMS Comment

The design of this study does not prove a causal effect of food or calories in reducing vacuum and forceps

deliveries (or any other complication) - although the possibility is there. Only a prospective randomised trial could do that. The study does not say whether all or some of the women gave birth in hospital.

Despite the apparently favourable attitude in Holland towards eating and drinking and labour, we don't know how free women really felt to choose, and there is still talk in the study of women being "allowed" to eat. The limited questionnaire to women did not ask them what they thought about access to food and whether it made a difference. The study tackles an important subject but comes up with little of value - as could have been predicted by its design - more's the pity.

When women tell us about their home births, where they are more free to follow their own instincts, we often ask them what they ate and drank, and when, and a wide variety of food seems to be wanted and enjoyed in the earlier stages. Women who have experienced labours with, and without food, assure us of its benefits, especially if they had a long labour.

Food in labour has been banned because of the risk of regurgitation if a woman needed surgery and an anaesthetic. Anaesthetic techniques are now safer, and most women have spinal rather than general anaesthetics anyway. Sadly, positive hard evidence of risks and benefits for nutrition (or lack of it) in labour is lacking, yet this is a crucial basic subject for progress of normal labour. When we think of the numerous research projects and huge amounts of money that have been devoted to many interventions in labour, we think this is scandalous.

Reference

• Scheepers H, et al, Eating and drinking in labor: the influence of caregiver advice on women's behaviour, Birth, 2001; 28: 119-123

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Higher IQ in breastfed low birthweight babies

Yet another study - this time from New Zealand - shows advantages of breast milk - this time for very low birthweight babies.

Babies who weighed less than 1500g. at birth were followed up to 7-8 years old as part of a long-term study. Mothers were asked whether they had provided breast milk, and for how long the babies had been breastfed. This information was checked with hospital records. Children's IQ was tested. The researchers then looked at the relationship with no breastfeeding, less than four months, four to seven months or eight or more months breastfeeding.

Both verbal IQ and performance IQ increased both with breastfeeding and duration of breastfeeding. On average children who were breastfed for eight months or longer had verbal IQ scores 10.2 points higher and performance IQ scores 6.2 points higher than those who did not have breast milk.

Mothers who were better educated, lived in two parent families, had more money, were white and did not smoke, were more likely to breastfeed for longer. However, even after adjusting for these factors, there was still an IQ advantage for those who were breast fed, and it increased with duration of feeding.

AIMS Comment

This adds to the huge list of studies showing the benefits of breast milk and breastfeeding. The only people who seem unaware of any of this work are social workers. We are having an increasing number of cases of mothers who are breastfeeding or want to breastfeed who are separated from their babies sometimes at birth.

In one case social workers simply threw away the breast milk a mother had expressed and delivered to the Department of Social Services every day. She, like a number of other mothers, now has her baby back - only after a hard fight, but it was too late for the child to get breast milk.

It is my experience that this is all part of the drive to get more babies for adoption, which is having disastrous consequences on families.

Reference

• Horwood L, Breast milk feeding and cognitive ability at 7-8 years, Arch Dis Childhood Fetal Neonatal Ed, 2001; 84: F23-F27.

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