AIMS For a better birth...

# Research Roundup

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AIMS Journal, Autumn 2002, Vol 14 No 4



**Misoprostol trial stopped as too dangerous**

A synthetic type of prostaglandin, misoprostol, is widely used for inducing labour. Misoprostol is cheap, so it has advantages for poorer countries. Various dosages have been reported in the literature - from 25 micrograms to 200 micrograms. Obstetricians at the Harare Maternity Hospital in Zimbabwe did a randomised trial comparing two dosages - 50 mcg and 100 mcg[1]. In order to do this, 200 mcg tablets had to be cut into halves, or quarters, and the tablets inserted into the vagina. Women with normal pregnancies and no previous caesarean scar were asked to join the trial, and all gave informed, written consent.

The main reasons that these women were being induced were high blood pressure or being post-dates. (There is no definition of what the team defined as overdue). The induction rate in Harare is 7-10 per cent.

What the researchers primarily wanted to measure was differences in the time taken to deliver the baby. They needed 110 women in each group to obtain statistically significant results showing a two-hour difference. However, after a total of 127 women had been recruited, the trial was discontinued because of complications in the group who were getting the larger dose of 100 mcg.

Two of the 64 women in the higher-dose group had rupture of the uterus and four had stillbirths. No babies died in the 63 women who took the lower dose. Babies in both misoprostol groups had a high rate of admission to the neonatal unit (17-18 per cent), but there was no difference between the two groups. The rates of postpartum haemorrhage were also similar.

Misoprostol is known to cause excessive, frequent contractions of the womb (hyperstimulation). The babies were monitored in labour by intermittent auscultation (listening to the fetal heart at intervals) and the authors suggest that, if they had had continuous electronic monitoring, they might have been able to diagnose this more successfully.

The authors concluded that there is no basis for recommending a misoprostol dose higher than 50 mcg, and suggest the right dose is likely to be 25-50 mcg. In the women studied, there was no significant difference in the duration of labour or caesarean section rate.

The study was funded by the Swedish International Development Agency.

**AIMS comments**

Note the main outcome being measured in this study was how fast they got the baby out. Of course, if the process takes too long, there may be a risk of infection if membranes have ruptured or danger if the mother has severe hypertension. However, as our callers tell us, mothers may have very different views from doctors or institutions about the pace of labour. And in a busy hospital with 15,000 births a year, getting mothers through the delivery suite quickly may be seen to have advantages.

The ethics of a study often depend on what was known at the time the trial was carried out rather than when it was published. This research was done in 1998 and is now published over three years later. In the meantime, more reports have appeared about fetal distress, increased meconium staining, low Apgar scores, uterine rupture and postpartum haemorrhage with misoprostol, which the authors would not have known about at the time. Uterine rupture has even been reported with a small dose of 25 mcg, the dosage the American College of Obstetricians has been recommending since 2000.

Uterine rupture, which is rare, is most likely to happen in women who have a scar on the uterus, or who have had a large family so the walls of the uterus are thin. The large-dose group in fact had fewer children than the small-dose group, so they should have been at lower risk. Two uterine ruptures among 65 low-risk women is shocking, as is the death of the four babies - a mortality rate of 63.5 per 1000. The authors were certainly right to stop the trial.

As with other studies of induction, no one has measured other problems in the mothers, including psychiatric problems like depression or post-traumatic stress disorder. Nor is there any mention of what pain relief was used, and whether there were any differences in this regard between the two groups.

We are glad that the dangers of prostaglandin inductions are now being recognised since we have heard of some horrifying cases. But women are also reporting to us psychological damage from their experience of prostaglandin- driven labour as well as cases of uterine rupture. One of the many problems of childbirth research is that we so seldom see long-term follow-up studies of either mothers or children.

**Reference**

- Majoko F et al. No benefit, but increased harm from high dose (100 mcg) misoprostol for induction of labour: a randomised trial of high vs low (50 mcg) dose misoprostol. J Obstet Gynaecol, 2002; 22: 614-7

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**Anger after childbirth**

Researchers at the University of Tennessee School of Nursing did open-ended interviews with 10 women known to have felt anger after vaginal full-term births. The interviews were carried out by nurse graduates.

The emergent theme was that women felt anger when their expectations of trust, power, control and being kept informed were not met. Women felt that the implicit contract with caregivers had been violated. They spoke of doctors and nurses who had been cold, uncaring and failed to establish a humanto- human relationship. "I had trust and they breached that trust and that made me angry too... that they would do that." At the very core of their anger was the violation of an implicit contract between the care provider and the woman. "I felt like I was robbed of what I wanted my first childbirth to be."

Several mothers talked about "drive-through medicine" and "drive-through babies". "They didn"t involve me in my care and they didn"t let me know what was going on."

Control and power were important issues: "From the very beginning, she was very overpowering and just took away everything that we wanted to do." "I didn"t have the strength to insist. So it"s like they took advantage of me because I was too involved in giving birth to object."

The findings in this study, which is the first specifically on anger after childbirth, correlate with a general study on women"s anger, which found that it is triggered by feelings of powerlessness, injustice and the irresponsibility of others who do not fulfil their obligations[1].

The authors conclude that the implications for nurses is that there is a need to educate pregnant women about labour and birth, to keep them informed and to treat them as full participants in the decision-making process.

"Nurses who cannot establish warm, caring relationships with patients or who are threatened by sharing decision making ... are probably not the best choices for a labour room nursing position, regardless of their ability to check cervical dilatation, read monitor strips, or perform other technical skills."

They also conclude that women may feel they are not entitled to negative feelings if they have had a healthy baby, and suggest that nurses should realise that gratitude and negative feelings about the birth can coexist, and that nurses should not feel defensive if women are angry.

**AIMS comments**

The women"s comments quoted in this article may have an American "voice", but they echo the views we have heard from hundreds of women in the UK over the years[2]. Something else is familiar. Their first emotion was fear. The anger came later. In so many of our letters and phone calls, we find that women only feel angry, or realise that they feel angry, after they have got over the shock and gone over the experience many times in their minds.

It is anger that often fuels their need to contact AIMS or make a complaint. Unfortunately, the anger is seen by Trusts, doctors or midwives as a sign of an unbalanced woman who is not seeing things the way they really were - someone who needs to be soothed and placated rather than having a serious complaint investigated. Sometimes, the development of anger, if used constructively, can be the beginning of recovery.

At AIMS, we have a problem with the use of the word "patients" for women doing something normal like having a baby, but the term is probably more acceptable in the US where nurses, rather than midwives, provide most of the obstetric care - nor do the authors discuss the possible problems of having nurse, rather than lay, interviewers on such a subject.

I am concerned when the authors say "conditions under which expectations were most likely to be unmet included those in which expectations were narrowly defined or even unrealistic", but do not tell us what those "unrealistic" expectations or "too narrow" definitions were. Judgements have been made, but we are not told the basis for them.

At least two of the examples given suggest possibly negligent clinical care: "I was alone and bleeding. My baby was ready to be born and nobody was there ... not only was the doctor not even at the hospital ... but my baby might have died." However, negligent care is not mentioned or explored as a possible cause for anger - yet it is certainly prominent in our postbag.

Nevertheless, small and imperfect though the study may be, it is good to see that anger following childbirth is now on the agenda; it is no longer a taboo subject, and we can talk about it.

## References

1. Mozingo J et al. "I felt violated": women"s experience of childbirth- associated anger. MCN, 2002; 27: 342-8
2. Denham G, Bultemeier K. Anger: targets and triggers, in Thomas S, ed. Women and Anger. New York: Springer Publishing, 1993

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## Female obstetricians choose vaginal birth

Only 15.5 per cent of female obstetricians in Scotland would want a caesarean birth for themselves if there was no medical reason for it. Most of those who would choose a caesarean had never had a child[1].

A questionnaire, which could be filled in anonymously, was sent to all the women working as obstetricians at registrar level or above. Of the 100 sent, 90 per cent replied: 77.8 per cent said they would not choose a section; 6.6 per cent were uncertain. One of the major facts determining whether an obstetrician would choose elective section for herself was whether or not she had children. More than half the group (53 per cent) were childless, and most of those who chose elective section had never had a baby (79 per cent); the rest (21 per cent) had had an elective section and had not experienced labour. Only 7 per cent of those who had had children chose elective section vs 26 per cent of those who had none.

Of the obstetricians who had given birth, 67 per cent had had vaginal births, 7 per cent had had elective sections, 17 per cent had had emergency sections, and 9 per cent had elective and emergency sections. None of the women who had had a vaginal delivery would choose an elective section, and most of the obstetricians who had already had a caesarean would not choose an elective section either.

This study had a higher response rate than the widely publicised study of 75 London obstetricians, where 31 per cent said they would choose an elective section[2], and a survey of those outside London, with a 54 per cent response rate, which found that 21 per cent of female obstetricians would choose a section[3]. A survey of midwives, in contrast, found that almost all would choose a vaginal delivery - 129 out of 135[4].

The authors remind us that emergency hysterectomy in labour, though uncommon, is still 18 times more likely in women with a previous caesarean scar.

The Scottish obstetricians who would choose a section all gave avoidance of damage to the perineum as the main reason. But a recent study has shown that it is pregnancy, rather than the type of birth, which causes long-term problems with the pelvic floor. However, forceps and vacuum deliveries could cause incontinence problems.

Although most would not choose sections for themselves, more than half (54 per cent) said that women should be allowed to choose an elective section if they wanted one.

The authors conclude: "Women should be encouraged by the fact that a group of female obstetricians who have personal experience of labour and vaginal delivery would all choose this option over elective caesarean delivery."

**AIMS comments**

This study shows more reluctance among Scottish female doctors to choose a caesarean for themselves compared with London and other obstetricians. However, the London survey merits caution since we have met two London obstetricians, known to be radical feminists, who said they had never received the questionnaire, although it was supposed to have gone to everyone.

In interpreting these studies, we have to remember that these studies were carried out at different times during 1997-2002 (unfortunately, authors do not have to give the dates the questionnaires were circulated). The answers obstetricians give may well be affected by the most recent medical publications they have read about risk. The earlier London study was carried out not long after the publication of a study on faecal incontinence after vaginal delivery that gave gloomy predictions. Since then, there has been more emphasis on pregnancy alone as a risk factor for damage and, in the last two years, publications on long-term risks from caesareans have increased, giving a more balanced picture.

**References**

1. Macdonald C et al. Scottish female obstetricians" views on elective caesarean section and personal choice for delivery. J Obstet Gynaecol, 2002; 22: 586-9
2. Al-Mufti R et al. Survey of obstetricians" personal preference and discretionary practice. Eur J Obstet Gynaecol Reprod Biol, 1997; 73: 1-4
3. Groom K et al. Temporal and geographical variation in UK obstetricians" personal preference regarding mode of delivery. Eur J Obstet Gynaecol Reprod Biol, 2002; 100: 185-8
4. Dickson MJ, Willett M. Midwives would prefer a vaginal delivery. BMJ, 1999; 319: 1008

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### Insurance problems close birth centre

New Jersey"s only freestanding Birth Centre, where 8400 babies have been born, is to close after 20 years because their insurance company has ended their coverage for malpractice liability. The midwives have their own individual insurance, but the landlord insisted that the Centre have its own policy, which would have cost $325,000 a year - a sum they could not afford.

The Centre will still offer ante- and postnatal care. The midwives will still do deliveries - but in a hospital.

### AIMS comments

The problem of insurance for midwife deliveries is all too familiar. Providing non-interventionist midwifery care in hospitals is difficult because the obstetric culture "creeps under the door", as we know from the statistics in other midwifery units. It will be interesting to see what happens to the statistics after the location change.

### Reference

- News item. Birth, 2002; 29: 292

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### Killed by fatal scalp electrode

The following mishap, reported in a Dutch/Belgian study of breech births, took place between 1984 and 1986.

"A single case of mortality in the birth weight category of 2500g or more occurred during labour and was caused by puncturing a prolapsed umbilical cord by a fetal scalp electrode. This fetal error [sic] occurred during the unjustified replacement of an electrode, which became detached just before the diagnosis of cord prolapse was made; an exotic trauma which with competent management should have been avoided."

### AIMS comments

In the same study, the authors report two iatrogenic deaths of premature babies of 24 and 25 weeks caused by too-early induction of labour with prostaglandins.

**Reference**

- de Leeuw J et al. Mortality and early neonatal morbidity in vaginal and abdominal deliveries in breech presentation. J Obstet Gynaecol, 2002; 22: 127-39

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**The pain of having stitches**

In the research done on which thread and which ways of stitching are likely to give the best results in women after childbirth, no one has asked women what they think about having stitches.

Researchers at Bristol questioned 68 women who needed stitches about how painful it had been. For pain relief in hospital, women may be given a local infiltration of lignocaine or of Entonox (gas and air) and, for those who had epidurals in place, a "top-up". Nearly half the women (31) had epidurals at the time.

Three sets of women were questioned by midwives at different times: one group was asked shortly after giving birth while still in the delivery suite; the second was asked on the postnatal ward soon after the birth; and the third was interviewed when they were at home six to eight days later.

Some 16.5 per cent said they had had "distressing", "horrible" or "excruciating" pain while being stitched; 32 per cent said they had had no pain, and nearly 33 per cent had had mild pain.

Women with epidurals reported much less pain than those without. In describing the type of pain and how they felt, 24 per cent with epidurals described the pain as "sharp" compared with 81 per cent of those without, 17 per cent said it was "stabbing" compared with 67 per cent of those without, and only 7 per cent described it as "cruel" compared with 30 per cent of those without.

The sooner women were questioned after the birth, the less pain they reported. The women questioned after they got home gave the strongest reports of pain.

**AIMS comments**

We are grateful to the authors for tackling this important subject- at last. They also followed the ethical recommendations in the joint charter prepared by AIMS and the NCT on research in maternity care: women were told about the trial in late pregnancy and given a chance to think about taking part

beforehand.

The question of pain relief for women who need stitches and do not have an epidural needs urgent research. Unfortunately, the sample is small (only eight were questioned while still in the delivery suite) and, although they collected information on ventouse, forceps and breech deliveries, and different degrees of tear, it was not possible to do a further breakdown of the data.

Not only do the authors not clarify whether the women simply filled in written questionnaires or answered questions put to them by the midwives, they do not comment on any possible problems caused by midwives collecting the information rather than lay people with no connection to the maternity service.

The researchers have also collected information on pain. This is of major importance, but we know that there are other aspects of the birthing experience that contribute to a woman"s satisfaction or trauma - including attitude of the staff and amount of privacy. A larger, more comprehensive study is needed.

The finding that women gave stronger reports of pain after a longer delay and when they were out of hospital is not surprising to us. We have always been against women being asked to comment while still in the clutches of the hospital - especially when the staff is asking the questions. But we also find that women need time to assimilate and think over what happened during the birth - whether good and bad - before they can start expressing their views properly. This is not the first study to show that women are more willing to make critical comments about their maternity care after a longer delay.

**Reference**

- Sanders J et al. Effectiveness of pain relief during perineal suturing. Br J Obstet Gynaecol, 2002; 109: 1066-8

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**VBACs forbidden**

The biggest hospital in Des Moines, Iowa - the Mercy Medical Center - will no longer provide vaginal births to women who have had a previous caesarean because of concerns over legal liability and patient safety, according to the hospital"s spokeswoman. Apparently, the anaesthetists cannot guarantee their immediate availability if a VBAC mother needs an emergency section in labour. Juries have awarded more than one hundred million dollars for brain-damaged babies in such cases.

The decision was strongly opposed by a nurse-midwife at the hospital who said they are putting their liability interests above the health and wellbeing of mothers and babies. Mothers may feel coerced into having unnecessary surgery.

Two other hospitals in Des Moines will continue to do VBACs, and the Mercy medical staff says they may reverse their decision if they can find a way to do VBACs safely.

**AIMS comments**

This is yet another case of insurance companies and legal fears distorting the provision of maternity care. What we hope the mothers of Des Moines will realise is that a hospital that cannot provide emergency anaesthesia for a VBAC mother is not safe for any mother. Emergencies arise for reasons other than the mother having had a caesarean scar. That is the primary issue the hospital has to tackle.

**Reference**


- News item. Birth, 2002; 29: 293


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