One of the problems with evidence-based medicine is that the evidence sometimes (? often ?? usually) doesn't support our firmly-held traditional beliefs. Today's articles deal with practices that seemed like a good idea at the time but which subsequently were shown to be ineffective. In all cases, significant resources were spent on programmes that likely had little value and may even have been harmful. If only we could look into the future and know which of our current, firmly-held traditional beliefs are wrong and doing more harm than good.

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Randomized controlled trial of prenatal vaginal birth after cesarean section education and support program.

Fraser W, Maunsell E, Hodnett E, Moutquin J-M, and the Childbirth Alternatives Post-Cesarean Study Group.
(Am J Obstet Gynecol 1997;176:419-25).

This Canadian study randomized 1,275 women with a single previous uncomplicated Caesarean section to receive one of two forms of prenatal education regarding vaginal birth after Caesarean section (VBAC). The "verbal" group received special supportive classes to discuss the medical benefits of VBAC and to alleviate any concerns they may have had about choosing to attempt VBAC. The "document" group received only a written document discussing VBAC and referred the woman to her obstetrician if she had any concerns or questions. All women were recruited before 28 weeks gestation and all were asked to describe their initial degree of motivation for a VBAC on a visual analogue scale, by placing a mark on a line between one and ten centimetres stretching from "definitely no" to "definitely yes."

There were no significant differences between the verbal and document groups with respect to the proportion attempting VBAC (73 and 69%, respectively) or having a successful VBAC (53 and 49%). As has been noted previously, the woman's motivation was a strongly predictive factor for success. In the low motivation group (< 5 centimetres on the visual analogue scale), only 53 percent attempted VBAC compared to 87 percent in the highly motivated group. In the very low motivation group (< 2.5 centimetres), the verbal programme may have had some effect as 33 percent of these women had successful VBAC compared to 19 percent of the document group. However, the authors note the small numbers in this subgroup analysis, and caution against the validity of this finding, especially as a trend in the opposite direction was noted in the moderate motivation group (2.5–5 centimetres).

There is no doubt that increasing the VBAC rate presents a rare opportunity to decrease both costs and morbidity. It is perplexing that approximately 40 percent of eligible women still choose elective repeat Caesarean section. This study demonstrates the important role of patient motivation, and strongly suggests that the patient's desires are the principal determinant of the outcome. It was disappointing that a specialized programme to encourage VBAC was not able to overcome the effect of the patient's initial motivation. The most prevalent concerns leading to elective repeat Caesarean section are fear of pain, fear of failure, fear of harm to the baby with vaginal delivery, request for concomitant sterilization and convenience of scheduling. All of these issues should be amenable to being addressed in an educational programme, yet such a programme did not appear to help. The authors note the ethical conundrum of the clinician who is requested to perform an unindicated major surgical procedure. They also suggest the importance of future studies to gain a better understanding of the factors that determine patients' motivation and, thus, govern their decisions regarding methods of delivery following an initial Caesarean section.

Cost-minimization analysis of domiciliary antenatal monitoring in high-risk pregnancies.

Birnie E, Monincx WM, Zondervan HA, Bossuyt PMM, Bonsel GJ.
(Obstet Gynecol 1997;89:925-9).

For decades, the management of most complications of pregnancy included admission to hospital. The reasons usually included such soft factors as "fetal monitoring" or "supervised bedrest." Often, there was little evidence supporting the value of any of these manoeuvres. This present study was conducted in Holland. High risk women (diagnoses including diabetes, mild hypertension,

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post-dates pregnancy and fetal growth restriction) who would normally have been admitted to the antenatal ward were randomized to receive traditional in-hospital care (n=74) or were sent home for daily in-home monitoring by a trained midwife with weekly visits to the antenatal outpatient clinic (n=76).

The primary outcome measure was cost-effectiveness. Effectiveness was evaluated by assessing neonatal outcome using Prechtl scores (neurological assessment), birthweight, gestational age at delivery, Apgar scores and the need for resuscitation or ventilation. There were no differences in neonatal outcomes. The time from admission to the study until delivery was similar in the two groups. On average, the cost for antenatal care in the domiciliary group was $2,037 less per case than the in-hospital group. There was no transfer of expenses from antenatal to post-partum. Indeed, the rate of post-partum hospitalization was significantly less in the domiciliary group.

In Alberta, the arbitrary slashing of hospital budgets has necessitated economies of this sort. Fortunately, our institution of antenatal home care for women with high risk pregnancies predated the government's slash and burn philosophy. Our programme also includes diagnoses of preterm premature rupture of the membranes, placental abruption and threatened preterm labour as well as the inclusion diagnoses in the present study. This has markedly reduced the number of antenatal beds (and fiscal resources) required in our level II and III maternity units. We are presently in the process of a retrospective cohort analysis to document some cost-effectiveness parameters of this programme. Even now, a cruise through the antenatal wards often inspires the question of whether we are achieving any benefit from many of our antenatal admissions. There is always the concern about a possible harmful effect of unnecessary intervention, disruption of family life, etc. Without doubt, increasingly larger proportions of high-risk antenatal care will be shifted to an out-patient basis. We can only hope that future research will help to define even further the particular women who will benefit most from in-hospital care.

Induction of labor versus expectant management in macrosomia: a randomized study.

Gonen O, Rosen DJ, Dolfin Z, Tepper Rk, Markov S, Fejgin MD. (Obstet Gynecol 1997;89:913-7).

This is one of the growth areas in the saga of the increasing Caesarean section rates. In our quest for the medico-legally immaculate birth, some practitioners are offering (? advising) elective Caesarean sections for "macrosomia." Many others are advising induction of labour "to prevent further growth of an already large baby"—another "good idea" that may not withstand the test of a randomized control clinical trial. In this study, 273 women at > 38 weeks gestation with an ultrasound scan estimating fetal weight between 4,000 and 4,500 grams were randomized to immediate induction of labour or continued expectant management to 42 weeks gestation. It is of interest that women with fetal weight estimates > 4,500 grams were excluded from the study because they were advised to have elective Caesarean sections.

As expected, the interval from registration to delivery was longer in the expectant management group than in the induction group (5.1 days versus 18 hours) and the average birthweights were significantly greater (4,133 versus 4,063 grams). Similarly, the length of hospitalization and subsequent costs were higher in the induction group. However, there were no differences in the rates of Caesarean section (21.6% expectant versus 19.4% in the induction group) or the numbers of cases with documented shoulder dystocia (6 cases versus 5). There were two cases of transient Erb's palsy in the expectant management group, both of which completely resolved spontaneously and neither of which was associated with shoulder dystocia.

Clearly, there seemed to be greater costs and no advantages to a policy of immediate intervention based on ultrasound diagnoses of macrosomia. Perhaps the most notable findings of this study concerned the accuracy of ultrasound in making this diagnosis. When comparing actual birthweights in the induced group to the ultrasound predictions, the accuracy of ultrasound was excellent—six percent error. However, even with this accuracy, the ultrasound diagnosis of birthweight > 4,000 grams was a false positive in 38 percent of cases, which is compatible with other studies in the literature. These studies also show that approximately 40 percent of cases will be missed by ultrasound. Obviously, whatever criteria are used to define "macrosomia," the ultrasound diagnosis will be incorrect in a large proportion of cases. It would seem foolish to embark on such major interventions, particularly ones with little evidence to support their value and a high possibility of harmful effects, when the diagnosis is made on such tenuous grounds.