

laboration within and between sectors while avoiding duplication. It would be ironic, wasteful, and confusing if NHS Direct developed independently of services provided by general practitioner cooperatives. Outside the NHS there must be an equally seamless integration with social services and other welfare agencies. Fortunately the recently announced second wave of NHS Direct pilot sites has a strong flavour of integration. The collaborating agencies include ambulance trusts, community trusts, cooperatives, health information services, health authorities, voluntary agencies, and research units, many of them working closely with social services.

Fourthly, a service that promotes access using technology will always risk helping those parts of the population who least need help. The service needs to be equally accessible to those without English as a first language, mentally ill people, and carers.

Lastly, NHS Direct has the potential to be much more than just a telephone help line—yet there is a risk that it will not be allowed to develop that potential. It should be the beginning of a range of systems that provide convenient, reliable, and interactive gateways to health and other welfare services. In reverse, NHS Direct offers the NHS the possibility of catering more directly for the special needs of particular individuals and groups and of promoting health rather than just responding to need. Self care in general, and support for self care (in the form of services such as NHS Direct), are extensions of the NHS, not substitutes. Moreover, fears that giving people alternative means of access increases demand inappropriately are largely unfounded.<sup>5 6</sup> More than just advice and telephone consultations can be offered. Managing chronic disease, dispensing prescriptions, and booking hospital appointments could all be possible. Why should book-

ing an appointment to see the doctor around the corner be more complex than booking a plane to see the family around the world?<sup>7</sup> The same analogy applies to professionals. Just as people can check their personal financial information from almost any bank machine around the world, so clinicians should be able to have rapid access to up to date accurate medical information via a simple interface. As NHS Direct may become Welfare Direct for the public, an analogous service could provide Knowledge Direct for the professional.

On the evidence available, we should keep developing and evaluating the “prompt, accessible and seamless” service that the government proposes.<sup>1</sup> More than any other health system in the world, the NHS is well placed to develop direct services as part of a fair gateway to collaborative welfare. With adequate support, evaluation, and integration, services such as NHS Direct can keep the founding principles of the NHS relevant for the next 50 years.

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- 1 Department of Health. *The new NHS*. London: Stationery Office, 1997. (Cm 3807.)
- 2 Smith R. The future of healthcare systems. *BMJ* 1997;314:1495-6.
- 3 Pencheon D. NHS Direct: managing demand. *BMJ* 1998;316:215-6.
- 4 Latimer V, George S, Thompson F, Thomas E, Mullee M, Turnbull J, et al. Safety and effectiveness of nurse telephone consultation in out of hours primary care: randomised controlled trial. *BMJ* 1998;317:1054-9.
- 5 Brown A, Armstrong D. Telephone consultations in general practice: an additional or alternative service? *Br J Gen Pract* 1995;45:673-5.
- 6 Troop N, Treasure J, Schmidt U. From specialist care to self directed treatment. *BMJ* 1993;307:577-8.
- 7 Hallam L. Access to general practice and general practitioners by telephone: the patient's view. *Br J Gen Pract* 1993;43:331-5.

## Changing practice in maternity care

*It's hard to know what works*

Papers p 1041

The tenet that clinical practice should be guided by rigorous evidence has become so ingrained that clinicians who are slow on the uptake are seen as not aware of the evidence, bogged down by tradition, or—worse—having selfish motives for ignoring evidence. Rarely is the evidence itself questioned. Yet, if evidence were a straightforward concept, there would be no reason for the two disciplines that appear to be governed by it, law and medicine, to be at loggerheads so often.

The evidence available does not necessarily reveal what you are interested in for a particular situation. Thus many reviews in the *Cochrane Library*, the gold standard of systematic reviews, devote no attention to adverse effects in assessing the effectiveness of health care interventions (Bastian H, Middleton P. *Cochrane Colloquium*, Amsterdam, 1997). Yet any intervention (be it advice, screening for disease, drugs, or surgery) that is likely to be beneficial for some people is also likely to harm others. Even if the evidence is clear on the effectiveness of an approach, it does not necessarily

reveal how to pursue that approach. For example, systematic reviews may show benefits of antibiotic treatment for preterm prelabour rupture of the membranes, but they do not show what to prescribe and for how long.<sup>1-3</sup>

The paper by Wyatt et al in this issue (p 1041), addressing how to enhance the use of evidence, itself demonstrates how “evidence” can fall short of being evidence.<sup>4</sup> Although this group used evidence's golden tool, the randomised trial, they chose the toss of a coin as the method of randomisation. This process should be secure, but there is good evidence that it is not.<sup>5 6</sup> Of the four outcomes addressed, two showed a statistically significant imbalance between intervention and control groups before the trial and two differed significantly in completeness of outcome assessment before or after the trial.

Thus, before the trial, vacuum extraction was used in 36.1% of women in intervention units and in 54.5% in control units (difference 18.2%; 95% confidence interval 11.2% to 25.3%). Appropriate suture material

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was used in 8.7% of cases in intervention units and 25.1% in control units (difference 16.5%; 11.1% to 21.9%). Assessment of outcome criteria, set at 30 births per unit, was incomplete for sutures at the onset for 3.6% of women in the intervention units and for 9.2% in the control units (difference 5.6%; 2.2% to 9.1%). After the trial it was incomplete for sutures in 5.6% of women in intervention units and in 10.0% in control units (difference 4.4%; 0.6% to 8.0%) and for antibiotic prophylaxis in 12.8% of women in intervention units and 23.8% in control units (difference 11.1%; 5.6% to 16.5%). Thus, there is only one outcome measure (use of corticosteroids) devoid of glaring imbalances in either a priori characteristics or ascertainment, but its assessment relates to no more than three births per participating unit.

People wishing to examine evidence before bowing to its aureole—which is what pursuit of evidence should promote—can find only one set of data, in figure 3, that is detailed enough to be assessed independently. This figure shows, firstly, the significant difference at baseline between intervention and control units mentioned above. Secondly, 22 of the 25 units had a rate of use of ventouse extraction at baseline that was either at or outside the 95% confidence interval for the average (36% to 55%). Twelve of these units (8 intervention and 4 control) had base rates at or below the 95% range; all had a higher rate at follow up. Of the 10 (3 intervention and 7 control) above the range, all but 2 (1 intervention and 1 control) had lower rates at follow up. Thirdly, of the 25 units, 6 had rates at follow up that differed 10% or less from the base rate: 3 were intervention and 3 were control units. Of the 19 others, 13 (7 intervention and 6 control) were more than 10% higher at follow up and 6 (2 intervention and 4 control) were more than 10% lower. This certainly questions the relevance of the statistically significant increase in the rate of ventouse extraction reported to be associated with the intervention.

Rather, the figure shows that the rate of childbirth interventions can vary considerably from one time to another irrespective of whether or not the people who allegedly control these rates have been made aware of

the evidence about these interventions. It also indicates that assessing 30 maternity care procedures per unit is not likely to reflect practice in that unit adequately. This is not surprising as most people would dismiss consecutive series of no more than 30 common procedures, such as operative delivery and episiotomy, as appropriate indicators of practice.

Of course, it would have been surprising if the authors had found a marked effect of their visit to a lead obstetrician and midwife. Indeed, the evidence on the outcomes that they addressed had been available electronically and in well publicised full<sup>7</sup> and abridged<sup>8</sup> texts for several years. Lead practitioners who had any serious interest in considering the evidence would surely have sought it out well before this study's intervention. Perhaps it is too simplistic to expect that merely exposing practitioners to evidence will change practice—however intensive the exposure. Clinical practice changes all the time, but the momentum of change, and what drives it, are poorly understood. For some, change goes too fast, for others too slow, and for those who want to have a significant impact on it, the methods for achieving it are still far from clear.

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- 1 Mercer BM, Arheart KL. Antimicrobial therapy in expectant management of preterm premature rupture of the membranes. *Lancet* 1995;346:1271-9.
- 2 Egarter C, Leitich H, Karas H, Wieser F, Husslein P, Kaidler A. Antibiotic treatment in preterm premature rupture of the membranes and neonatal morbidity: a metaanalysis. *Am J Obstet Gynecol* 1996;174:589-97.
- 3 Kenyon S, Boulvain M. Antibiotics for preterm premature rupture of membranes. In: *Cochrane Library*. Cochrane Collaboration; Issue 3. Oxford: Update Software; 1998.
- 4 Wyatt JC, Paterson-Brown S, Johanson R, Altman DG, Bradburn MJ, Fisk NM. Randomised trial of educational visits to enhance use of systematic reviews in 25 obstetric units. *BMJ* 1998;317:1041-6.
- 5 Keirse MJNC. Electronic monitoring: who needs a Trojan horse? *Birth* 1994;21:111-3.
- 6 Schulz KF, Chalmers I, Hayes RJ, Altman D. Empirical evidence of bias. *JAMA* 1995;273:408-12.
- 7 Chalmers I, Enkin M, Keirse MJNC, eds. *Effective care in pregnancy and childbirth*. Oxford: Oxford University Press, 1989.
- 8 Enkin M, Keirse MJNC, Chalmers I. *A guide to effective care in pregnancy and childbirth*. Oxford: Oxford University Press, 1989.

## Sticks and stones

*Changing terminology is no substitute for good consultation skills*

As children many of us learnt the old rhyme “Sticks and stones may break my bones but words can never hurt me.” As we grew older we discovered that the adage was untrue. For most of us whose profession involved interacting with other people it became obvious that clumsy or inapposite use of language could cause pain. An attempt to avoid such pain has provoked Hutcheon and Cooper to suggest that distress in women who have miscarried would be reduced if changes were made in the language used by their professional carers (p 1081).<sup>1</sup> The writers recommend that the word “abortion” should be avoided because the lay public interprets it as applying to a termination of preg-

nancy. The authors cite alternatives that could be adopted in journal papers and medical records. These recommendations seem harmless enough. But are they likely to be effective if implemented? And do they represent the most effective intervention available?

A miscarriage is an example of a common event which is rarely a medical emergency and from a biomedical perspective may be viewed as a normal variation of early pregnancy, but the mother may view it entirely differently.<sup>2</sup> Furthermore, perceptions may differ radically from woman to woman depending on knowledge, expectations, and previous experiences. How a consultation is conducted may affect whether a

*Letters* p 1081

*BMJ* 1998;317:1028-9