

toms while driving are not uncommon,<sup>8</sup> the chance of an accident is small and the risk of fatalities trivial.<sup>9</sup>

Asymptomatic individuals considered at high risk of significant arrhythmia fitted with prophylactic implantable cardioverter defibrillators can drive from one month after placement of the device, provided no tachycardia induced therapy is delivered. The results of the second multicentre automatic implantable defibrillator trial<sup>10 11</sup> are likely to widen indications for prophylactic use of implantable cardioverter defibrillators in patients with coronary artery disease and left ventricular dysfunction for primary prevention of sudden cardiac death.<sup>12</sup>

Cardiologists and general physicians may be fortunate enough to care for patients with obvious diagnoses of arrhythmia, rendering interpretation of fitness to drive guidelines self evident. However, most patients present with a nebulous history of palpitation, pre-syncope or syncope. Eventually half of all recurrent syncope reveals itself to be cardiac in origin, yet it is this group of patients in whom fitness to drive issues are most likely to be circumvented. Application of the licensing authority's approach to unexplained loss of consciousness is therefore mandatory in this context.<sup>3</sup>

Although the prime responsibility for informing the authorities lies with the patient, physicians have a duty of care to society that overrides right to confidentiality when the patient cannot or will not conform. Guidelines exist for ethically sensitive but robust management of such circumstances.<sup>3</sup> The patient must understand their legal obligation to inform the authority. If all reasonable efforts fail then physicians should inform the patient's next of kin, or if necessary disclose the information to the driving authority. Ultimate responsibility lies with the physician who knows the

diagnosis—a discipline of governance not widely understood or agreed.

Helen Binns *specialist registrar in cardiology*  
John Camm *professor*

Cardiological Sciences Department, St George's Hospital Medical School, London SW17 0RE

- 1 Department of the Environment, Transport and the Regions. *Tomorrow's roads: safer for everyone. The government's road safety strategy and casualty target for 2010*. 1.1 Road Accidents. [www.roads.detr.gov.uk/roadsafety/strategy/tomorrow/2.htm](http://www.roads.detr.gov.uk/roadsafety/strategy/tomorrow/2.htm) (accessed 20 November 2001).
- 2 Anderson MH, Camm AJ. Legal and ethical aspects of driving and working with an implantable cardioverter defibrillator. *Am Heart J* 1994;127:1185-93.
- 3 Department of the Environment, Transport and the Regions. *At a glance guide to the current medical standards of fitness to drive*. Swansea: Drivers Medical Unit, DVLA, 2001.
- 4 Myocardial infarction redefined—a consensus document of the Joint European Society of Cardiology/American College of Cardiology for the redefinition of myocardial infarction. *J Am Coll Cardiol* 2000;36:959-69.
- 5 Jung W, Ludervitz B. European policy on driving for patients with implantable cardioverter defibrillators. *PACE* 1996;19:981-4.
- 6 Jung W, Anderson M, Camm AJ, Jordaens L, Petch MC, Rosenqvist M, et al. Recommendations for driving of patients with implantable cardioverter defibrillators. Study group on ICD and Driving of the working groups on cardiac pacing and arrhythmias of the European Society of Cardiology. *Eur Heart J* 1997;18:1210-9.
- 7 Akiyama MD, Powell JL, Mitchell LB, Ehlert FA, Baessler C. Resumption of driving after life-threatening ventricular tachyarrhythmia. *N Engl J Med* 2001;345:391-7.
- 8 Kou WH, Calkins H, Lewis RR, Bolling SF, Kirrsch MM, Langberg JJ, et al. Incidence of loss of consciousness during automatic implantable cardioverter-defibrillator shocks. *Ann Intern Med* 1991;86:363-74.
- 9 Bansch D, Brunn J, Castrucci M, Weber M, Gietzen F, Borggrefe M, et al. Syncope in patients with an implantable cardioverter-defibrillator: incidence, prediction and implications for driving restrictions. *J Am Coll Cardiol* 1998;31:608-15.
- 10 Klein H, Auricchio A, Reek S, Geller C. New primary prevention trials of sudden cardiac death in patients with left ventricular dysfunction: SCD-HeFT & MADIT II. *Am J Cardiol* 1999;83:91D-97D.
- 11 Moss A, Cannon D, Daubert, Hall W, Higgins S, Klein H, et al. Multicentre automatic implantable defibrillator trial II (MADIT II): design and clinical protocol. *Ann Non-invasive Electro* 1999;4:83-91.
- 12 Jeffrey S. MADIT II halted early: ICDs cut sudden death in MI survivors. *HeartWire News*, 21 Nov, 2001. [www.theheart.org/documents/page.cfm?id=27067](http://www.theheart.org/documents/page.cfm?id=27067) (accessed 12 Dec 2001).

## Promoting evidence based practice in maternal care

*Would keep the knife away*

In maternal health care there is a recognised gap between evidence of effectiveness and clinical practice. Indeed, too often routine care is not evidence based and there is strong resistance to stopping harmful or useless procedures.<sup>1</sup> Unnecessary caesarean section and episiotomy are good examples of the mismatch between evidence and practice and of the complexities that change entails, as two articles in this issue illustrate.<sup>2 3</sup>

Unnecessary caesarean section is known to increase health risks for both mother and newborn child and adds burdens to healthcare budgets. There has been a sustained growth in caesarean section rates worldwide that has reached epidemic proportions in Latin America. A combination of factors contributes to this trend: providers' views on the safety of caesarean section,<sup>4</sup> obstetricians' convenience,<sup>5</sup> and the configuration of healthcare systems.<sup>6</sup> A fourth element is patients' demand for surgical delivery, a hotly debated issue, especially in Brazil.

Contrary to anecdotal evidence that portrays Brazil as a place where women demand caesarean section, two

recent articles show that providers, rather than patients, use women's alleged preference as an excuse to follow their inclinations.<sup>7 8</sup> However, Béhague et al now contradict these data in a study conducted in the city of Pelotas, southern Brazil (p 942). They show that women (predominantly the socially marginalised) actively seek a caesarean section as a strategy to pre-empt hospitals' poor labour care, including lack of pain control.<sup>2</sup>

The methods used by the authors of this paper are strong, combining epidemiological and ethnographic approaches within a large sample. However, unlike previous research, this study was conducted in only one city, which may result in less external validity. This is particularly relevant considering the geographical differences in caesarean section rates across Brazil.<sup>7</sup> Replication of these results in other places is necessary to further the debate, in the context of a broader controversy over the role of maternal choice in delivery method.

Informed choice is central to good quality care. Unfortunately, mothers' decisions on obstetric procedures are too often anything but true exercises of free will: women receive incomplete information, they voice

Papers pp 942, 945

BMJ 2002;324:928-9

their “preferences” while experiencing severe stress and pain, and (especially in developing countries) the social gap between patient and provider curbs their decision making power. The article by Béhague and colleagues adds another interesting element to the discussion on choice: in their study, patients preferred caesarean section not because of the advantages of such a delivery method but as an attempt to avoid the perceived poorer quality labour care, usually the norm at public hospitals with inadequate staff and budgets. In other words, the rationale for “choosing” a caesarean section was not derived from a positive attitude based on accurate information about the risks and benefits of the procedure, but to avoid negative “side effects.”

The almost universal use of episiotomy worldwide provides a good example of the difficulties involved in changing practices entrenched in routine care, even when the procedure produces no immediate benefit and there is no pressure from users or the healthcare system towards its use. Also in this issue Althabe et al confirm that episiotomy is routinely performed at hospitals across Latin America (p 945)<sup>3</sup>; The median rate is 92.3%. High rates prevail despite conclusive evidence about the short term benefits of a restrictive episiotomy policy and its reduced costs<sup>9 10</sup> and can be attributed only to providers’ lack of updated medical evidence and to barriers to changing practices.

To achieve the goal of providing women and families with the opportunity to become active players in their own health care, changes will have to occur. Firstly, technical quality and interaction between patients and professionals will have to improve; this includes explicitly offering women the chance to make informed health related decisions using effective instruments which in itself is a challenge.<sup>11</sup> To that end, women need to be empowered as both patients and citizens. Secondly, health systems need modifying, especially the availability of resources in public institutions. Thirdly, health providers need to identify ways to make updated evidence available to practitioners in a user friendly format such as the World Health Organi-

zation’s reproductive health library.<sup>12</sup> Finally, evaluating programmes to introduce positive change rigorously, and encouraging the publication of research findings from developing countries, even when the proposed strategies are disappointing, should be essential components of a research agenda aimed at improving women’s condition and health.

Making substantial progress towards improving the quality of maternal health care is urgent: while we continue to discuss unnecessary surgical interventions, millions of women that require these procedures do not have access to them and risk their own and their children’s lives.

Ana Langer *regional director*

Population Council, Latin America and Caribbean Office, Escondida 110, Mexico City 04000, Mexico  
(alanger@popcouncil.org.mx)

Jos Villar *coordinator, maternal health research*

Department of Reproductive Health and Research, World Health Organization, 1211 Geneva 27, Switzerland

- 1 Villar J, Carroli G, Gulmezoglu M. The gap between evidence and practice in maternal healthcare. *Int J Obstet Gynecol* 2001;75:S47-54.
- 2 Béhague DP, Victora CG, Barros FC. Consumer demand for caesarean sections in Brazil: population based cohort study linking ethnographic and epidemiological methods. *BMJ* 2002;324:942-5.
- 3 Althabe F, Belizán J, Bergel E. Episiotomy rates in primiparous women in Latin America: hospital based descriptive study. *BMJ* 2002;324:945-6.
- 4 Al-Mufti R, McCarthy A, Fisk N. Obstetricians personal choice and mode of delivery. *Lancet* 1996;347:544.
- 5 Castro A. 1999. *Cesarean sections in Mexico: a qualitative study with women and health care professionals*. Mexico City, Population Council, 1999.
- 6 Murray SF, Pradenas FS. Health sector reform and rise of caesarean birth in Chile. *Lancet* 1997;349:64.
- 7 Hopkins K. Are Brazilian women really choosing to deliver by cesarean? *Soc Sci Med* 2000;51:725-40.
- 8 Potter J, Berquó E, Perpétuo IHO, Leal OF, Hopkins K, Souza MR, et al. Unwanted caesarean sections among public and private patients in Brazil: prospective study. *BMJ* 2001;323:1155-8.
- 9 Carroli G, Belizán J. Episiotomy for vaginal birth. *Cochrane Database Syst Rev*. 2000;(2):CD000081.
- 10 Borghi J, Fox-Rushby J, Bergel E, Abalos E, Hutton G, Carroli G. The cost-effectiveness of routine versus restrictive episiotomy in Argentina. *Am J Obstet Gynecol* 2002;186:221-8.
- 11 O’Cathain A, Walters SJ, Nicholl JP, Thomas KJ, Kirkham M. Use of evidence based leaflets to promote informed choice in maternity care: randomised controlled trial in everyday practice. *BMJ* 2002 324:643.
- 12 *The WHO reproductive health library 2002*. Geneva: WHO, 2002.

## Doctors’ knowledge about evidence based medicine terminology

*General practitioners may not know the jargon, but could use the knowledge*

Primary care p 950

In a report published in this issue (p 950) Australian general practitioners rated themselves and were then tested on their evidence based medicine skills.<sup>1</sup> The results are not encouraging. Fifty general practitioners in Australia rated their understanding of seven common terms from evidence based medicine from “It would not be helpful for me to understand this term” to “I understand this and could explain it to others.” On average, only 22% said they understood each term and could explain it to others. Worse still, in the subsequent structured interview only one general practitioner could provide a fully satisfactory explanation of any of the terms, and many of the explanations revealed considerable misunderstanding. The authors of the study argue that general practitioners need to understand these

terms to practise evidence based medicine and that there is little good research on how this can be done. For those working in evidence based medicine these results make depressing reading.

There are some problems interpreting this study. The authors attempt to validate self rating of evidence based medicine skills, but what they actually test is knowledge. The authors recognise that people who cannot demonstrate knowledge in a potentially intimidating academic environment may be more successful at using knowledge in real life. The ability to explain a term may not be the kind of knowledge required of general practitioners. The criteria for fully understanding each term were also quite challenging. It is possible to explain a term without providing all the stated crite-

BMJ 2002;324:929-30