ferences in costs and use, in part because these tend to be much more variable among patients than scores on symptoms, function, or satisfaction.

Providing decision aids by the internet would make them more readily available and less expensive than the interactive personal computer technology used in these trials.[1 2] The internet makes graphics, video, animation, and interactivity easy to incorporate. Web based programmes should be easier to update and could be accessed both in patient homes and doctors' offices. High use could maximise impacts and minimise costs per patient.

Aids need updating and money

Nevertheless, many questions remain. How can we ensure that presentations are objective and balanced, rather than designed to lead patients to a particular conclusion? How will programmes be continuously updated, and who will support this work? Most decision aids have been developed with grant support because they represented innovations. If they become routine they will have little attraction to research funding agencies, and the costs of developing and maintaining them will have to be borne by health systems more broadly. Are these aids best used in primary care, in specialty care, or at the time of referral? Might they have different effects when used at these different locations? If such questions can be addressed we might expect to have better informed patients, a more meaningful consent process, and more consistent practice patterns. But for now the revolutionary contribution of these new aids lies simply in making it clear that there often is a choice.

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The safety of acupuncture

Acupuncture is safe in the hands of competent practitioners

Papers pp 485, 486

For many patients attracted to complementary medicine its safety has been one of its principal appeals. Complementary methods, including acupuncture, are seen as less invasive, more natural, and less liable to adverse effects than more orthodox forms of treatment. Critics of complementary medicine have, however, often castigated it as being dangerous, sometimes in the same breath as ridiculing complementary methods for their lack of effectiveness and scientific support. For many years, certainly until the mid-1980s, these debates were little more than exchanges of usually entrenched and unwavering opinion on either side.[1] Now we begin to have some evidence.

The early literature on the safety of acupuncture consisted entirely of case reports. Rampes and James summarised all case reports between 1966 and 1993, finding 395 instances of complications.[2] Many were minor, such as bruising or fainting, but 216 were serious, including several cases of pneumothorax and injury to the spinal cord. Only one death due to acupuncture was reported, in which a needle penetrated the pericardium. As the acupuncture was self administered, however, this perhaps falls outside the usual definition of adverse events, straying into the territory of domestic injury or deliberate self harm. In 1995 a survey in Norway found that 12% of doctors and 31% of acupuncturists had encountered adverse effects of acupuncture in their practice, including pneumothorax, nerve injury, infections, nausea and vomiting, and fainting.[3] However, there was little indication of the period over which events were reported or the frequency with which complications occurred. More recently further cases of potentially life threatening complications have been reported.[4]

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Important though such case reports and informal surveys are in flagging up problems, they are limited by the absence of denominator information. Assessing the degree of risk requires knowledge of both frequency and severity of the hazard.

Complications are rare and transient

Two reports in this week's issue are the first to systematically examine both the rate and nature of adverse effects of acupuncture (pp 485, 486).[5 6] Both suggest that the rate of complications is remarkably low and that most complications are transient, lasting two weeks at most. In total the two reports cover over 66 000 treatments given by doctors, physiotherapists, and traditional acupuncturists, with little obvious difference in either the type or rate of complications between the different groups.

What limitations do these reports have? Firstly, as with any incident reporting system, the actual incidence of adverse events is probably higher than reported. Nevertheless, these studies were of relatively short duration and it is reasonable to suppose that most adverse events reported by patients would have been passed on by the practitioner to the investigators. Anonymous reports were permitted, thus reducing any disincentive to reporting serious events. The surveys are restricted to immediate complications of treatment, so longer term deleterious effects on the patient's condition or interactions with concurrent treatments would probably not have been identified.

The absence of serious adverse events is reassuring, but it is important to note the characteristics of the population surveyed. The participants in these surveys would all have received training in acupuncture and be members of professional associations who have chosen to give a high priority to professional standards and patient safety. With many of the earlier case reports, from around the world, the training and experience of the acupuncturist was unclear. Rampes and James pointed out that many of the problems in their case series could easily have been avoided by a competent practitioner.[2]

Evidence of benefit is rare too

The conclusion that acupuncture is a very safe intervention in the hands of a competent practitioner seems justified on the evidence available. Certainly the dangers of many orthodox procedures are greater, though no easy comparisons can be made. The considerable risks of hospital treatment are becoming apparent,[7] but the nature of the conditions treated, the interventions themselves, and the settings are different. A better comparison might be primary care, but the risks of adverse effects in this setting are largely unknown. Rates of adverse drug reactions or prescribing errors in primary care have varied from 0.5% to 6% at community pharmacies.[8] While the risks of acupuncture cannot be discounted, it certainly seems, in skilled hands, one of the safer forms of medical intervention.

Yet simply comparing treatments on the basis of their associated risks gives a limited perspective. The balance of risk and benefit is the key for patients and for those regulating or funding health care. As White et al point out, for many conditions the balance of risk and benefit for acupuncture remains to be determined.[5] Depressingly, the conclusion of many recent systematic reviews has been similar to the first reviews carried out 15 years ago: conflicting findings and too few studies of too small a size to draw firm conclusions.[1 9 10] Nevertheless, trial methods in acupuncture have improved substantially in the past decade, and there is some positive evidence emerging for its efficacy in treating headache and nausea and vomiting.[11 12]

Most encouragingly, the surveys reported today represent a serious and systematic attempt by acupuncture practitioners to address the issue of patient safety, paralleling the emergence of wider patient safety initiatives in many countries. We have moved a long way from the sterile and hostile debates between critics and advocates of complementary medicine and can look forward to a time when any proposed treatment is evaluated on the basis of its efficacy, risks, likely mechanisms, acceptability, and cost effectiveness regardless of its provenance.

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