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A key medical decision maker: the patient

New decision making aids should help patients make the decisions

Primary care pp 490, 493

Many medical decisions fall into a grey area where the optimal choice for an individual patient may be unclear and where reasonable people might choose differently. Common examples include elective surgical procedures, such as lumbar discectomy or resection for benign prostatic hypertrophy. Drug treatment may pose similar choices when treatment offers both appreciable benefits and appreciable risks. Hormone replacement therapy in postmenopausal women is an example, as is anticoagulant therapy in patients with non-valvular atrial fibrillation. Decisions about such treatments are made daily in clinical practice, and there is considerable evidence that patients want more information and greater involvement in them. In general we do a poor job of providing information, though this week's *BMJ* includes studies of two examples of a new generation of interactive methods of patient information that holds promise of improvement.[1 2]

Decision aids are more than handouts

Although physicians often describe the nature of decisions to their patients, they less often discuss risks and benefits and rarely assess patient understanding.[3] Though invasive procedures require "informed consent," it usually takes the form of seeking patient agreement with a recommendation, rather than quantifying the risks and benefits of alternative approaches. When well informed, patients often make different decisions from their physicians. Based on hypothetical scenarios patients appear less likely to want antihypertensive therapy than physicians, particularly when baseline cardiovascular risks are low.[4] In a randomised trial patients given a well balanced decision aid chose anticoagulation for atrial fibrillation less often than those receiving routine care.[5]

The printed material in doctors' offices (from commercial publishers, consumer groups, and professional societies among others) is often inadequate.[6] Patients often find that it is too simple or too technical; excludes discussion of treatments they are interested in; and offers too little information on treatment efficacy, self management, and prevention. Specialists find that many materials offer false impressions of treatment effectiveness, emphasising benefits and minimising risks.[6] Higher quality materials, incorporating formal decision aids, might facilitate better treatment decisions as far as patients are concerned.

A new generation of decision aids differs from older patient education materials in several ways. These new aids make choices explicit, rather than implying a preferred course. They use the best available evidence (generally from systematic reviews and randomised trials) to quantify the benefits and risks of alternative approaches. Most are interactive, allowing patients to obtain information tailored to their own age, disease severity, and comorbidity. Typically they make use of media in addition to print. The examples described in this week's issue used interactive computer technology, permitting patient commentaries, animated graphics, and other visual aids (pp 490, 493).[1 2] However, decision aids need not rely on high technology. Other effective aids have used simple charts, graphics, and audio narration.[5 7] Randomised trials suggest that these tailored interactive approaches engage attention and transmit information better than the traditional "patient handout."[7 8]

A systematic review suggests that this new generation of decision aids improves patient knowledge, reduces decisional conflict, and stimulates patients to play a more active part in decision making without increasing their anxiety.[9] Reduced decisional conflict means that patients feel more comfortable with their choices and decisions are more congruent with their personal values. The aids have little effect on patient satisfaction and a variable effect on the decisions made. They have often reduced preferences for more intensive forms of elective surgery (with equally good outcomes),[9–11] but increased preferences for vaccinations.[9] A Cochrane review on this topic is currently under way and is expected late in 2001.[12]

Using computers and the internet

This week's articles make a useful step towards studying decision aids in primary care, rather than specialty settings. The study on postmenopausal hormone replacement suggested that computer based interactive decision aids were highly acceptable to both patients and physicians in primary care and reduced decisional conflict.[1] Much the same conclusion was drawn about a decision aid for benign prostatic hypertrophy.[2] No clear differences on patient choices emerged, nor were there clear differences in use of health services or costs. Unfortunately, neither study had enough statistical power to identify important dif-

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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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