

Sir,

We enjoyed Jacobson *et al*'s discussion paper (July *Journal*) on evidence-based medicine (EBM) and general practice. However, we take issue with a number of their arguments.

First, the authors highlight difficulties in using medical literature, such as searching, critical appraisal, and the use of contradictory or inconclusive research. They use these issues as arguments that undermine the value of EBM. We would argue that, on the contrary, a strength of EBM is that it addresses these problems through systematic and explicit searching followed by structured critical appraisal. A sound solution to the problem of contradictory or inconclusive research is to refer to high-quality systematic reviews or meta-analyses whenever possible.

Secondly, Jacobson *et al* state that patients may have difficulties in interpreting data. There is now considerable interest in ways in which patients can participate in evidence-based decision making.<sup>1</sup> One of the most important consequences of EBM is that it is forcing us to learn ways of giving information to patients and to empower them to make decisions. One practical way to share information might be to use 'numbers needed to treat' (NNT).

Thirdly, the authors question the supremacy of the randomized controlled trial (RCT) and suggest that RCTs may not be appropriate for general practice. We would like to stress that for questions about an intervention, RCTs remain the most valid method of assessing benefit because they are the only sure way to minimize bias and confounding.<sup>2</sup> While we share their anxieties about the extrapolation of evidence that has been gathered in secondary care to primary care, more and more RCTs and systematic reviews are now being performed in primary care. Two good examples would be an RCT of the management of sore throat (an exemplar of the concerns raised by Jacobson *et al* of the triple diagnosis and 'contextual aspects' of general practice)<sup>3</sup> and a systematic review of the use of antibiotics for acute otitis media.<sup>4</sup> It is also possible to apply RCTs to complex and subtle disorders, for example patients with somatization disorder,<sup>5</sup> where important new evidence is now available about appropriate management as a result of an RCT.

Fourthly, Jacobson *et al* state that 'anecdote, context, patient stories of illness, and personal experience have an equally valid contribution to medical decision making'. While they can be equal for the patient, surely the doctor fails if he or she does not present the evidence to the patient (e.g. the evidence relating to the

efficacy of antibiotics in acute otitis media). How else can patients integrate evidence with their experience to make an informed and personal decision about their care?

Finally, we would like to emphasize that EBM does integrate with traditional clinical method and that it is not 'cook book medicine'.<sup>6</sup> EBM is not restricted to RCTs, but does allow for the use of other types of study design. We would also like to suggest that the teaching of EBM has educational value; skills in literature searching and critical appraisal are increasingly in demand and the latter is assessed in the MRCGP examination. The key in general practice, however, is problem definition: to ask the right questions that can then be tackled using the principles of EBM. It is worth remembering the definition of EBM: 'the conscientious, explicit, and judicious use of current best evidence.'<sup>6</sup> EBM can be applied to primary care, where it must be integrated with effective consultation, clinical skills and patient choice.

To conclude, we acknowledge that there are limits to EBM, and that the basics of EBM as often stated are an oversimplification of a number of complex issues, such as changing clinicians' behaviour, decision making within consultations, and the gap between research and practice. Nonetheless, the advent of EBM is an important stage in the development of effective clinical practice. The debate should now move from whether there is an unbridgeable cultural clash between EBM and general practice to the use of evidence as a rationale for health care delivery, and to the conduct of research into how EBM can best be implemented in clinical practice.

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Sir,

Jacobson *et al* (July *Journal*) present a measured response to recent debate on evidence-based medicine (EBM), particularly in regard to its place in general practice.<sup>1</sup> A similarly broad view of the issues involved for GPs, which recognizes the merits and limitations of EBM, is presented by Sweeney.<sup>2</sup>

As part of an MSc dissertation, submitted to Exeter university in April this year, I undertook a survey of all the 307 GPs on the Cornwall and the Isles of Scilly Health Authorities' list to determine their attitudes to EBM. An 82% response rate revealed an overwhelmingly positive attitude to this structured approach<sup>3</sup> to the clinical care of patients; four out of five GPs agreed that general practice is a suitable arena for EBM, and a similar number felt that all GPs should possess the necessary critical appraisal skills (CAS).

Among a range of (perhaps predictable) barriers identified<sup>4</sup> to the wider implementation of research evidence in our daily practice, it was evident that lack of CAS featured prominently: only 10% of colleagues had received any specific training in this technique. Since EBM appears to have a role in general practice, this shortcoming needs to be addressed from the outset, as has been recognized.<sup>5</sup> Surprisingly, time was not held to be a major problem: only 10% felt that the time involved was prohibitive and just 5% regarded time spent on EBM as being a poor investment.

My survey also demonstrated reservations and realism: four out of five GPs agreed with the statement that 'good clinical practice is not always scientifically based'. It is unlikely that there is any danger that general practice will become 'evidence tyrannized'.<sup>6</sup> However, the most important single population characteristic I studied that determined a greater enthusiasm for EBM was membership or fellowship of the Royal College of General Practitioners.

While conducting my literature review, I came across the quotation 'Evidence, like beauty, is in the eye of the beholder' in an article published in a lesser (non-

peer reviewed) journal. Attributed to Oscar Wilde, I eagerly rushed to consult my 'complete works'. Unsuccessful in my attempts to locate this gem, I pursued the author, a GP tutor, and was disappointed to discover that even this quotation lacked an evidence base after he announced, 'I'm afraid I made it up!' Is this the real problem with EBM?

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Sir,

The discussion paper by Jacobson *et al* (*July Journal*) raises some interesting issues about the application of evidence-based medicine in general practice. While I entirely agree that the evidence from randomized controlled trials is not in itself sufficient to determine the management of individual patients in practice, it seems to me unwise not to keep up to date with the best evidence available so that this can be taken into account in making clinical decisions.

One of the purposes of publications like the *Journal of Evidence Based Medicine* is to pick out trials that are less open to bias and present them with a commentary from an expert. Time is too short to read everything that is currently published and I find this format very useful. Moreover, it is now available on CD-ROM (*Best Evidence*), which has the great advantage of allowing speedy searches to be carried out when seeking to answer questions raised in daily practice. Used in conjunction with the growing number of systematic reviews on the Cochrane Library (and the 130 000 randomized controlled trials listed with abstracts on the CD-ROM version of the Library), it is now possible to obtain more reliable answers to clinical

questions than ever before.

The essence of an evidenced-based approach to general practice is to ask questions generated by uncertainties in daily practice (of which there are many) and to search for answers to the questions using the most reliable evidence available. I have found this a good way to regenerate enthusiasm for day-to-day work, and much more rewarding than attending lectures.

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### Hospital admissions and quality of chronic illness care

Sir,

The increasing availability of routinely collected data provides tempting material for prospective researchers, but the quality and relevance of the data must be assured to make analysis useful. Paul Aveyard's paper (*July Journal*) demonstrates this point.<sup>1</sup> His hypothesis that there is a link between hospital admissions for asthma and the quality of general practice care as measured through routinely collected data is dependent on a number of unlikely assumptions.

While it might seem reasonable to postulate a link between the number of asthma admissions and the quality of general practice care, such a link has not been demonstrated. Of the 120 patients with asthma on an average GP's list, two to four are likely to be admitted with asthma each year. Is it likely that the overall care of the GP's 120+ asthmatics will be accurately reflected in the care of the two to four patients admitted? Aveyard focuses on three categories of routinely collected data to describe the performance of general practice. The validity and reliability of the first of these (chronic disease management annual reports) has not been examined. The new contract for GPs, introduced in 1990, required GPs to collect information on chronic illness care. GPs have not had the resources to ensure the accuracy of these reports, and health authorities have been unable to check them. It seems unwise, therefore, to assume that chronic illness reports give a good reflection of the quality of GP care without further examination.

Prescribing analysis and cost data (PACT) is the second category of routinely collected information to which Aveyard

refers in this paper. A high asthma preventer/reliever ratio in PACT has already been shown to be associated with lower rates of admission for asthma.<sup>2</sup> A low asthma preventer/reliever ratio in PACT is associated with lower socioeconomic status and may be an indicator of need.<sup>3</sup> It is not necessarily an indicator of lower quality care. High levels of reliever use and low levels of steroid use may be the result of low compliance with steroids, lower uptake of structured care, or lower uptake of return appointments. All of these are associated with lower socioeconomic status.

The third measure used by Aveyard — the Townsend score — is itself a measure of socioeconomic status. As has been shown before, hospital admissions for asthma are related to the socioeconomic status of the patient, which Aveyard's paper confirms.

The relationships identified by Aveyard deserve more examination, but it is unlikely that routine data of the sort he has used will throw any light directly on the quality of GP care. At best they may act as proxy measures after they have been compared with more direct assessments of GP quality.

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### Summative assessment

Sir,

Willis and Robinson (*July Journal*) raise issues concerning summative assessment in general, and methodological issues about our paper in the *May Journal* in particular.<sup>1</sup>

As a result of summative assessment there has been a 25-fold increase in GP registrars not reaching minimal compe-