

Editorial

Evidence-based health improvement

The new UK Primary Care Trusts have been given an important health improvement role. They will be required, as were the now disappearing health authorities, to make and implement health improvement plans. In doing so, they will need to undertake an assessment of local health needs and to consider the evidence base underpinning different approaches to health improvement.

Although they may disagree about the usefulness of the approach in informing their practice (Patterson and Stewart-Brown, 1999), health professionals working in primary care, particularly GPs, are now well versed in evidence-based medicine. They accept the pre-eminence of the randomized controlled trial as a means of avoiding the very real problem of investigator bias. They appreciate the need for valid and reliable measures of outcome to determine treatment impact, and they are familiar with systematic reviews and meta-analyses. This knowledge, however, may not stand them in very good stead when it comes to assessing the effectiveness of health improvement initiatives.

The optimum methods for research into interventions designed to improve health, as opposed to preventing or treating disease, remain the subject of debate (Thorogood and Coombes, 2000), but a World Health Organisation Working Group (WHO, 1998) has recently issued a very clear statement to the effect that, in the field of health promotion, RCTs are likely to be 'inappropriate misleading and unnecessarily expensive'. A recent new publication from the World Health Organisation Europe (Rootman *et al.*, 2001) provides the background and justification for this statement, making an important contribution to the debate. It is unlikely, however, that this will be the last word on the matter.

Health professionals working in UK primary care services are unlikely to want to read all that has been written on this subject, but they may want to understand what the debate is about, and why it seems so difficult to reach consensus. They may

want to know if the different parties have adopted entrenched positions for no good reason, or whether there are some genuine irreconcilable differences at the heart of the problem. One significant difference would appear to be in understanding of the nature of health and health improvement. Those working in the field of health promotion draw on a positive, holistic model of health, one that is based on the understanding that emotional, social and, in some definitions, spiritual well-being are integral to health. In this model, emotional and social stress are held to lead to physical health problems and premature mortality. Emotionally supportive and trustworthy relationships are held to protect against disease, and believing that one can have an influence on the world in which one lives and works is an important prerequisite for health. There is a large body of research to support both these beliefs (see for example Marmot and Wilkinson, 1999; Wallerstein, 1992; Wilkinson, 1996). This health promotion model links in well with research into patient-centred care. This is now showing that health professionals who are able to establish a supportive relationship with their patients, who take account of their needs and circumstances, and work in an empowering way have a greater impact on recovery from disease and on health than those who practise in an authoritarian way (Dixon, 2000; Stewart *et al.*, 2000).

Both these strands of research suggest that it is possible for professionals to practise in such a way that they have a positive impact on disease, whilst damaging broader aspects of health. Knowing this evidence base, those with an interest in health promotion are reluctant to accept evidence from trials using a negative 'absence of disease' model of health, one that concentrates on biological causes of specific diseases and takes no account of the impact of emotional and social well-being on health.

Why are RCTs poor at capturing these pheno-

mena? Partly because there is a paucity of well-validated and widely-respected outcome measures that capture health in its broadest sense. Partly because those who have learnt how to practise (either health promotion or clinically) in an empowering, supportive way become unwilling and unable to practise in any other way. Trials therefore need to randomize participants to be seen either by a supportive, empowering professional or by one who does not practise in this way, introducing a large number of potential biases and confounding factors related to other differences between the different professionals. This design also assumes that it is relatively simple to identify professionals who do, and those who do not, practise in this way. These skills, although often readily identifiable to patients and the public, are less easy for colleagues to identify. There is no professional qualification to establish that someone does or does not work in this way, and the skills can be partly present, or present some days and not others. In order to overcome these problems, cluster trials are run in which half of a group of professionals is randomly allocated for special training in empowering and supporting. This approach assumes that the necessary skills can be acquired in a relatively short period of time, whereas the evidence suggests that their acquisition may depend on personal development that takes time to achieve.

These are not the only difficulties faced by evaluators of health improvement initiatives. Both research and practice in health promotion have shown that more than one approach is likely to be necessary and that different approaches are likely to be synergistic. Such multi-strategy initiatives usually involve multiple agencies requiring interagency collaboration, which may in itself require considerable skill to deliver. Some agencies may be more committed than others and the different parts of the initiative may therefore be implemented to a different extent. Health promotion initiatives have also been shown to work better if those who are delivering the intervention, and those who are receiving it, play a part in its development (Rootman *et al.*, 2001). Participation is therefore another important attribute of successful health promotion initiatives. This makes health promotion initiatives impossible to standardize. Evaluation has also been shown to work better if those on the receiving end of the intervention play a part in the design of the study. All these aspects of health improvement research are antithetical to

Primary Health Care Research and Development 2002; 3: 69–70

RCTs which work best when the intervention and study methodology is entirely controlled by the researchers.

Evaluation is essential, and health improvement initiatives should not be put in place without evidence that they are effective. There are plenty of examples in the literature of well-meaning interventions which have not had the desired effect, and some that have had an effect in the opposite direction. Those whose future role includes the development of health improvement plans in primary care will, however, not be able to rely on RCT evidence to decide which initiatives they should and should not support. They will need to develop knowledge of the strengths and weaknesses of a range of different research methodologies and of different approaches to establishing an evidence base. They will also need to be able to identify and appraise research in which the impact of initiatives is measured on health in its widest sense, taking emotional and social, as well as physical well-being into account.

Sarah Stewart-Brown

Director,

Health Service Research Unit
University of Oxford, UK

References

- Marmot, M. and Wilkinson, R.G. 1999: *Social determinants of health*. Oxford: Oxford University Press.
- Patterson, J. and Stewart-Brown, S.L. 1999: What are general practitioners attitudes towards evidence-based medicine, and are these changing? *Journal of Clinical Excellence* 1, 27–34.
- Rootman, I., Goodstadt, M., Hyndman, B., McQueen, D.V., Potvin, L., Springett, J. and Ziglio, E. 2001: *Evaluation in health promotion: principles and perspectives*. WHO Regional Publications, European Series No. 92, Copenhagen: WHO.
- Stewart, M., Brown, J.B., Donner, A., McWhinney, I.R., Oates, J., Weston, W.W. *et al.* 2000: The impact of patient-centred care on outcomes. *Journal of Family Practice* 49, 796–804.
- Thorogood, M. and Coombes, Y. 2000: *Evaluating health promotion: practice and methods*. Oxford: Oxford University Press.
- Wallerstein, N. 1992: Powerlessness, empowerment and health: implications for health promotion programmes. *Behaviour Change* 6, 197–205.
- WHO European Working Group on Health Promotion Evaluation 1998: Health Promotion Evaluation: recommendations to policy makers. (EUR/ICP/IVST 05 0103). Copenhagen: WHO Regional Policy for Europe.
- Wilkinson, R.G. 1996: *Unhealthy societies: afflictions of inequality*. London: Routledge.