

EDITORIAL

Evidence-based health promotion

It was planned that this Editorial would introduce a special issue on evidence-based health promotion. A respectable number of papers were submitted but only three were finally accepted (Barlow *et al.*, Learmonth and Plonczynski). The remainder of the papers in the issue were accepted through the regular review process, although all, in differing ways, contribute to the theme of the issue. Reasons for the somewhat limited response to the call can be suggested: that the subject in question has 'gone off the boil', the issue coincided with a general pause in thinking before moving ahead in new directions or the increase in the number of journals has led to writers submitting work on health promotion evidence to a broader range of journals than hitherto. At the same time it might be argued that most papers in this research journal are concerned in some way with evidence concerns and the rationale for a special issue is less apparent than it is for some areas. Whatever the reasons, the impression is that, in general, active discussion of evidence-based health promotion is continuing. The Editorial will briefly comment on some of the main issues that have been addressed prior to introducing the papers which form this issue.

The core of debate on evidence-based health promotion has been around two broad areas—the kinds of evidence to be sought in establishing the effectiveness of health promotion and the appropriate methodologies for use in developing such evidence. Further to these are the questions of how to disseminate evidence to those who need to use it, and how those making decisions about practice draw on and implement evidence. While these questions have been pertinent throughout the history of health education and promotion, three general developments, *inter alia*, have been particularly important in energizing discussion in recent years.

- The development of general debate about methodology influenced, in part, by similar debates in those disciplines which have informed health education and promotion thinking. This debate

is well known and, presented simplistically, revolves around arguing the case for and against positivist and interpretivist approaches to knowledge development. Alternative standpoints on the issue have developed—at one extreme, strong defence of positivist enquiry, and, at the other, rejection of such enquiry and adoption of alternative approaches—whether interpretivist, constructionist or critical. Increasingly there has been a growing consensus around the adoption of methodological pluralism in the discipline as a whole (WHO, 1999). Triangulation within studies is widely proposed even though there are some cautions expressed (Blaikie, 1991; Milburn *et al.*, 1995).

- The evolution of health promotion from the earlier health education. This change has entailed a broadening of activity to embrace the policy arena and, while health education remains a component of health promotion, there have been varying degrees of movement away from individually focused health education interventions. The need to address the priorities identified in the Ottawa Charter and in subsequent WHO documents has posed new challenges for generation of evidence. Measuring empowerment, community participation and development of healthy alliances, while possible, is clearly more complex than measuring changes in health knowledge and health behaviours. For a subject which places value on the active participation of individuals and communities in health promotion interventions, and has empowerment as a valued goal there are also concerns about implementing and evaluating interventions through methods which threaten these values. There has, as a result, been growing emphasis on the use of participatory styles of evaluation, and also marked concerns expressed about involving individuals and communities in experimental studies.
- The initiative to implement evidence-based practice in health care and other areas of social welfare has generated very real pressure on health promotion to implement evidence-based health promotion. This led to an increase in the

number of systematic reviews of the type widely used in reviews of clinical studies and efforts to disseminate the evidence generated to those making decisions about professional practice. In turn, much comment took place on the relevance of orthodox systematic reviews to health promotion and, furthermore, concerns arose that in cost-conscious environments only those interventions for which there was review evidence would be supported.

These three areas are clearly not distinct and some will be more relevant than others to specific spheres of activity. People have differing interests in respect to the issues—the pure researcher is concerned to contribute to the evidence base within the discipline and may not be immediately concerned to address the needs of the users of evidence. By contrast, those involved in health promotion practice are addressing on a day-to-day basis the issues of what evidence is available, whether or not the evidence is appropriate to needs and whether demonstrably effective interventions can be implemented in the prevailing constraints. This is to exaggerate the differences between research and practice, and increasingly research funding in some contexts is dependent on applicants demonstrating a dissemination strategy and identifying the potential relevance of findings on practice. At the same time it remains fairly unusual to find any detailed discussion of the relevance of research findings to practice in many studies published in the literature and especially those which meet the inclusion criteria in systematic reviews.

We can comment a little further on each of the above. The methodological debates have been fully documented and do not need to be reviewed further (Tones and Tilford, 1994; Macdonald *et al.*, 1996; Oakley, 1998; Scott, 1998). The nature of indicators for assessing health promotion interventions has also been fully considered (Nutbeam, 1998; Tones, 1998). Whether or not it is desirable that a broad consensus on methodological questions should be reached is open to question. Given the current complexity of what is undertaken in the name of health education and health promotion, both within

and across countries, securing such a consensus may not a high priority—unless the consensus is that diversity both of evidence and the methods of acquiring it should be accepted. While there is growing support for such a position, there are dissenters. There are strongly held ideological positions in health promotion, and associated with these there are clear positions on the nature of evidence, and how it should and should not be acquired. There are also contexts of practice which continue to prioritize evidence derived from particular types of studies, and this has to be acknowledged and addressed by those preferring to work in alternative ways. This can be the situation for health promoters working within health services. In other contexts, such as community-based projects, there is typically greater concordance about approaches to establishing effectiveness.

The emergence of health promotion from health education was associated with a time lag in changing the proportion of evaluated interventions focused on social rather than individual determinants of health, and in the generation of appropriate ways for measuring core concepts and principles of health promotion. There is evidence that this situation is changing as energy is given, for example, to the development of appropriate indicators for measuring complex concepts such as social capital, empowerment, the effectiveness of health promoting settings and the review of evidence on processes such as the formation of healthy alliances (Tones, 1992; Gillies, 1998). There are also a growing number of detailed theory-based models for use in evaluating health promotion interventions (Pawson and Tilley, 1997; Nutbeam, 1998; Wimbush and Watson 2000) and adoption of these models in evaluating new initiatives such as the UK Health Action Zones.

For a time much discussion, often heated, focussed on the nature of systematic reviews of evidence, and their strengths and, more frequently, their limitations for health promotion. Such reviews are not new in health education, but it is only recently that they have been subjected to so much critical assessment. It has been suggested that the focus on randomized control trials in discussions

has unnecessarily polarized debates (Davison, 1997). For example, the selection of studies for inclusion in reviews in health promotion reviews was frequently more varied than some commentators acknowledged. Nonetheless, a range of important critical points were widely raised about reviews including: the emphasis on positivist studies and methodological criteria appropriate to such studies, insufficient attention to the quality of interventions reviewed including their theoretical foundation, the lack of emphasis on the processes of implementation, the focus on limited health education interventions rather than the complex interventions which increasingly typify health promotion, the almost complete absence of population-based studies of social determinants of health in reviews, the short follow-up times in many included studies and the dominance of studies from the US. For many end users of reviews the lack of match between the type of interventions which have been evaluated rigorously and those which actually take place in most spheres diminished the utility of reviews. Suggestions were made for extending the criteria used in extracting data from reviews including full details of the quality of interventions as well as methodological elements, addressing the theory base and even using the lack of theory as a basis for exclusion, enhancing the attention to process information and including practical significance as well as statistical significance of findings (Tilford and Delaney, 1996; Speller, 1998). Following the completion of a series of reviews commissioned by the English Health Education Authority there was a period of examination of systematic reviews in health promotion and critical reflections by those who had carried out such reviews (Health Education Authority, 1997). Particular concerns addressed were the methodology of reviews and the relative failure of reviews to meet the needs of practitioners. More recent reviews have extended the criteria used and there is evidence of more attention to the theory informing interventions as discussed in an earlier Editorial (Green, 2000). It is not apparent that, to date, lack of theory is being used as a basis for exclusion of studies. That this merits consideration is suggested

from the review by Eiser and Eiser (Eiser and Eiser, 1997). They concluded that interventions which were informed by *any* theory were more effective than those which were not. This does not presuppose that all theories are of equal strength and there is scope for a more thorough going analysis of how to assess, with reference to specific interventions, these relative strengths.

It could be suggested that engagement with systematic reviews, assuming that they do have some relevance, has been premature in health promotion and has diverted attention away from more useful activity. Giving due weight to all the reservations that have been raised about systematic reviews, the early involvement has sparked off some fruitful discussion and there have, arguably, been useful outcomes. There has been useful sharing of views about review procedures with other areas of health care where the complexity of interventions bears some similarity to health promotion (Davison, 1997). Much creative discussion has been stimulated about appropriate ways for bringing together and summarizing the literature on health promotion, including rigorous ways of appraising and combining qualitative studies which are increasingly preferred by many and are particularly appropriate in the evaluation of many interventions. Careful attention to the quality of interventions has also been, if not directly an outcome from review experience, a development which has gone on in parallel. The kind of close scrutiny of papers that is entailed in reviews has led to proposals for minimal requirements in the reporting of studies (Tilford and Delaney, 1995; Lister Sharp *et al.*, 1999). Journal editors could consider rejecting articles that fail to report adequately on all aspects of their studies.

While work has to continue on defining the boundaries of evidence and ways for developing it, practice continues and there is scope for increasing the use of evidence in that practice. The importance of dissemination of evidence has been fully acknowledged in health promotion and by systematic reviewers, but appropriate methods to enhance uptake and use of evidence have not always been applied. A recent Bulletin (NHS CRD,

1999) on the effective implementation of evidence summarized findings from 44 systematic reviews and reviewed theories relevant to achieving change in professional behaviours. The reviews were not restricted to experimental studies. The Bulletin concluded that passive dissemination when used alone is unlikely to result in behaviour change, although it was useful for awareness raising. This is unlikely to be a surprise to anyone with an understanding of theories of behaviour change but much dissemination activity continues to rely heavily on passive rather than active models. The findings of this review also served to remind that while individual factors are important in getting evidence into practice, organizational, community and economic environments are also important. Most interventions designed to achieve dissemination were effective under some circumstances with interventions based on the assessment of potential barriers more likely to be effective as were multifaceted interventions when compared with single interventions. While the findings present no surprises, this Bulletin can be a useful point of reference in efforts to secure adequate conditions and resources for activities designed to enhance the implementation of evidence in practice.

The papers included in this issue pick up in more detail on a number of points raised above and contribute in differing ways to the literature on evidence-based health promotion. The first paper by Barlow *et al.* is of a single study and reports on the UK evaluation of an arthritis management programme. The intervention is based on a framework of self-efficacy theory and was delivered in community locations. The study used a randomized controlled design with participants in the control group receiving the programme after 4 months. Significant differences were found between people in the two groups after 4 months and the gains in the programme group were maintained at 12 months. The pragmatic and ethical reasons for offering the programme to the control group at an early point meant that no control was available at 12 months. There is a difficulty in achieving a balance between extending the follow-up period in studies to permit longer-term examina-

tion of outcomes and providing at the earliest possible time an apparently effective intervention to those in a control group. As the authors suggest, this programme could be tried out for other health areas. The next two papers by Shepherd *et al.* and Plonczynski report on systematic reviews—the former of interventions on cervical cancer prevention and the latter on motivation to exercise. Shepherd *et al.* focus on the 10 papers defined as most rigorous in their review. All but one were based on established theories of health behaviour change. The authors point to the fact that only two studies were based on theories that recognized that women lack power in social relationships and suggest a need for gender-sensitive interventions. In the context of the shifting emphasis from health education and health promotion the writers note the restricted nature of interventions that met criteria for their review. Plonczynski focuses on the lack of adequate reporting of the reliability and validity of the measures used to assess motivation for exercise. She also reviews the theoretical underpinnings of interventions in this field and suggests the need for integration of theory. Whitelaw *et al.* also pursue the issue of theory in presenting the results of a review of evidence and outcomes in Stages of Change research. This is a timely review which should encourage a careful look at the use of this theory which has been so rapidly and widely adopted. St Leger discusses the development of indicators to assess school health programmes and provides a useful five-point framework. It is good to see due recognition given to the wide involvement of stakeholders in developing indicators. This paper can usefully be compared with the work emerging from the European development of indicators for health-promoting schools. The final two papers have a practitioner focus. That of South and Tilford reports on a qualitative study of specialist health promotion practitioners views on research and evaluation in an English region. Practitioners were fully committed to the idea of evidence-based practice, but recognized the limitations in the current evidence base. They described the factors constraining their own contributions to the development of evidence and to implementing evidence-

based practice. Some of their findings are similar to those in a study by Wimbush (Wimbush, 1999). The final paper by Learmonth provides an overview of evidence-based practice in the National Health Service context in the UK and then examines in greater detail aspects of evidence-based practice. In analysing the policy document *Our Healthier Nation: Saving Lives*, she concludes that in none of five key areas examined was research evidence consistently transferred into policy.

This issue deals with aspects of practice as well as pure research—and no apology is offered for doing this. Health promotion is an applied discipline and while it is clearly important that pure disciplinary knowledge is acquired it is also important that this does not take place without regular reference to practice. While there continues to be a great need for the development of evidence for all areas of health promotion this will also need to be matched by research which examines the processes by which practitioners draw on evidence available, and assess and appraise it in the context of the network of factors that influence decisions about practice.

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