Perceptions of research and evaluation in health promotion practice and influences on activity

J. South and S. Tilford¹

Abstract

This paper reports on a study undertaken with health promotion specialists working in the National Health Service in England. In-depth interviews were held with 25 people with the aim of investigating the place of research and evaluation in health promotion practice, the contextual factors that influenced such activity, and ideas about the place of research in future practice. Research for the purposes of evaluation was a core activity in specialist practice but research for other purposes was less often undertaken and while there was general interest to do more, it was not seen to be central to current roles. There was general awareness of the importance of evidence-based practice, of the debates surrounding appropriate evidence and methodologies to secure it, and commitment to evidence-based practice. At the same time it was acknowledged that most evaluation activity currently undertaken was insufficiently extensive or methodologically rigorous to have the potential to contribute to development of the evidence base. A variety of factors at the policy, health promotion unit and individual level served either to facilitate or to impede research and evaluation. The development of collaborative links with academic partners was seen to be an appropriate way of developing research in practice. Recommendations were made to build

Department of Applied Social Sciences, University of Bradford, Bradford BD7 1DP and ¹Centre for Health Promotion Research, Leeds Metropolitan University, Leeds LS1 3HE, UK new and imaginative relationships between practice and academic institutions, and to develop collaborative research bids to secure resources which would increase resources available for evaluation. Some actions in response to findings from the project have already been put into place.

Introduction

There has been a 25-year tradition in the UK National Health Service (NHS) of specialist health promotion practice. Specialists have had changing roles over this time, but in general they have catalysed, supported and facilitated health promotion activities. Although there are variations in the location and organization of health promotion practice in the NHS, most people work within specialist units. In common with other areas of the NHS, health promotion has come under increasing pressure to ensure that its practice is evidence based. The recent White Paper Saving Lives: Our Healthier Nation (Department of Health, 1999) has given the new Health Development Agency in England the function of commissioning and carrying out evidence-based health promotion programmes. While there has been a history in health promotion (and earlier in health education) of seeking to demonstrate effectiveness of activities, the evidence-based health care movement has triggered particular debates around the nature of health promotion evidence and methodologies for generating it. There have been criticisms of the lack of evaluations of health promotion using randomized controlled trial (RCT) designs and a call for more systematic reviews encompassing

well-designed studies (Peersman et al., 1999). At the same time there have been challenges to systematic reviews of evidence derived from experimental studies (Speller et al., 1997; Green and Tones, 1999) and calls for greater use of qualitative research in establishing the evidence base of health promotion (Learmonth and Cheung, 1999). There is an emerging consensus that the complex nature of health promotion demands a pluralistic approach to evaluation and even relatively enthusiastic proponents of systematic reviews propose that these should integrate quantitative and qualitative research (Peersman et al., 1999). Nonetheless the perceived need in the health sector for health promotion to generate evidence of effectiveness and enhance its credibility has made it difficult to gain acceptance for models of evaluation which differ from those underpinning evidence-based medicine. Currently the development of evidence-based practice is taking place in the context of these ongoing debates. In addition to uncertainties about the nature of evidence required to inform practice there are professional needs to access that evidence which does exist and to use it appropriately in designing practice. The barriers to practising evidence-based health promotion have been discussed (Wiggers and Sanson-Fisher, 1998). At the same time the importance to be given to evidence, alongside other factors, in deciding on the specific health promotion activities to implement has to be considered. These other factors include existing practice and the ease with which this can be changed, the importance attached to basing interventions on sound theory and in response to needs identified within communities, the value accorded to innovatory practice, and political factors which govern the commissioning environment (Tilford et al., 1998). The weighting to such factors will vary, but there appears to be growing emphasis on the importance of evidence of effectiveness relative to the other factors.

Training for health promotion practice includes preparation for what are seen to be core competencies of research and evaluation, although questions can be asked about the extent and nature of these activities in practice. For example, should specialists focus largely on accessing and applying existing research findings in their practice, or should they be endeavouring to make significant contributions to the research base, alone or in collaboration with others? While academic observers might have particular views of the place of research and evaluation in health promotion practice, the views of the practitioners themselves are of particular significance. The study reported here was designed to investigate current views of health promotion specialists about research and evaluation in their practice, the support and the barriers to the activities, and perceptions about their future in a rapidly changing health service context.

Methodology

A qualitative approach was adopted based on indepth semistructured interviews with 25 health promotion specialists from one health region in England. In the first instance, interviews took place with 19 past students from Leeds Metropolitan University who had completed research training at Masters level during the period 1989-1997 and were in current employment in a health promotion unit. The selection criteria ensured interviewees had experience in specialist practice, and an understanding and knowledge of research. The time period chosen related to the date when the current pattern of research training was established. Following preliminary analysis of the data, a decision was made to conduct an additional six interviews to increase the coverage of units in the region and the number of participants in the sample with managerial responsibility at unit level. All units in the region, with the exception of two, participated in the study.

An initial interview schedule was drawn up and amended following piloting with three specialists from other regions. The interview schedule covered the following areas: postgraduate study, current role, definitions of research and evaluation, research activity, use of evidence, views on factors influencing research, and future directions. The same schedule was used for the final six interviews, but with increased emphasis on the place of

research in practice. All the interviews, with the exception of two, were conducted in health promotion units and lasted 35–75 min. The interviews were tape-recorded and later transcribed verbatim.

Thematic content analysis was used to analyse the data. Both researchers worked on all stages cross-checking emerging results. The interview data were systematically indexed using thematic categories and subcategories. The thematic categories included those emerging from open coding of the interview data together with field notes and those derived from the core questions or topics covered in the interviews. In addition, case summaries of each individual's training, current role and research career were prepared. Analysis commenced during data collection and on the basis of early analysis the need was identified for further interviews to gain saturation in certain categories. Following indexing of all interview transcripts, the next stage was a more detailed analysis of the data within categories, comparing themes across the interview data and observing patterns. A 'cut and paste' facility from a word processing package was used to assist this stage. Relationships between influencing factors were plotted with reference back to individual case summaries. The study drew rich accounts of research in practice which reflected a great diversity of views. No clear relationship was found between the views expressed and respondents' managerial responsibilities. Quotations, therefore, are not attributed to indivduals' roles as such labels would be inappropriate and may mislead. The quotations which have been used to illustrate the findings below are verbatim except where it has been necessary to disguise to protect anonymity.

Findings

This section will begin with brief information on the roles and responsibilities of respondents, and will be followed by material which addressed the relationships between research and evaluation, expectations to undertake these activities, the nature of research and evaluation activities undertaken in current roles, and views on health promotion research. This will be followed by consideration of the use of evidence in practice and the factors that were reported to support or impede research. The section will conclude with respondents' views on the place of research in current and future practice.

All the interviewees were located in, or working in close association with, units that provided a health promotion service and most of the units were located in larger health provider organizations such as community trusts. At the time of research, health promotion activities were broadly commissioned by health authorities from health provider units within the NHS but the extent to which activities were prescribed in a contract varied. Eight of those interviewed had commissioning and strategic roles.

Research and evaluation

We wished to know how participants in the study conceptualized the activities of research and evaluation and the relationships between them. Many respondents found this a hard question to respond to and did not feel confident in distinguishing between research and evaluation. Others saw a relationship between the two:

I think they overlap obviously and you're using the same methodologies and techniques in evaluation generally that you might use in research.

In describing the differing nature of research and evaluation, a number of aspects were identified. These are contained in Table I.

The expectations to undertake research and evaluation and the commitment to these activities were explored. In most, but not all, cases expectations to evaluate were reported although the strength of the expectation and the balance between internal and external pressures varied. In some cases health authorities expected routine evaluation of projects while others felt that managers and specialists within the unit were more influential on practice. A number referred to a general expectation as part of the professional role:

Table I. Perceptions of the differing nature of research and evaluation

Research	Evaluation	
Larger scale	Smaller scale	
Broader research questions	Narrower questions	
Focus: developing new knowledge and exploring possibilities for interventions	Focus: process and outcomes of interventions	
More structured	Less structured	
More likely to be generalizable	Less likely to be generalizable	
Greater depth	Less depth	
More academically rigorous	Less academically rigorous	
Output: academic papers	Output: shorter reports and briefings in practice contexts	
Occasional	Everyday part of practice	
Resource intensive	Less resources needed	
Needs outside support	Less need for outside support except where external evaluation required	

The expectation comes largely from a sort of professional expectation, you know, that historically we've always said we should evaluate.

A very small number felt that there was no direct expectation from within their units although there would be support if they wished to do so. Some units were currently developing a more selective approach to evaluation:

What I encourage everyone to do is to select at least one aspect of their work each year and undertake an impact evaluation on it and within that we encourage each person to take ownership of their own piece of work to decide which aspects it is important to look at.

And so we try to have almost a hierarchy. I wouldn't say that we evaluate every piece of work that we do, but certainly we pilot new topics, new areas, new approaches, we would evaluate those.

The expectations to undertake research as distinguished from evaluation (as described in Table I) were, in general, very much lower and there was more variation in responses. Some respondents were positive about pursuing research while others expressed certain caveats about its applicability:

I think research is a good thing—providing the

research is related to what is happening on the ground and is then used.

Others questioned the appropriateness of undertaking research:

We're commissioned to deliver on things which are already seen to be effective.

We haven't got the capacity ourselves to do research because everybody's got a full brief. It's hard enough fitting in little bits of evaluation.

The nature and amount of research and evaluation activities undertaken were in line with the expectations reported. The largest proportion of activities were small-scale evaluations of mostly low-budget activities. A small number of more extensive evaluations were reported, but none that were designed to conform to the strict canons of experimental design. Few primary research projects were reported, more commonly from those units where there was a formal policy for developing research and evaluation. Some research activities were carried out by health promoters alone and others in collaboration. A few specialists were also involved in offering research support and evaluation training either within their unit or to other health professionals.

We were interested to know whether health promotion research was seen to be distinctive. Conceptions held could have implications for progressing health promotion research within the constraints of the NHS. Various comments were made throughout the interviews which reflected views about the nature of health promotion research but a direct question was also put. This appeared to be a challenging question and did not appear to have been thought about explicitly by some of the study participants. Only one person felt unable to make any response, while others expressed uncertainty, but did think 'on their feet' in the interviews. The majority of responses compared health promotion research to other health research, although the question asked did not actually invite this particular comparison. Responses spread out on a continuum from those responding that health promotion research was much the same as other research through to a small number who claimed distinctiveness. The following quotations illustrate the range of the views expressed:

I don't see any difference at all—same techniques, methodologies, disciplines apply.

The short answer is I do think its different. I'm not saying it's unique because I'm sure there are other professions that have similar conflicts.

And I think we almost need to have our own way of evaluating our own work which reflects what we are doing. Because at the moment I mean we are compared to other research, aren't we, and I don't think its very fair to compare us like that.

Yes because it's underpinned by certain principles—it's the principles we try to work on which would have certain values underpinning it—empowerment of individuals and communities.

Evidence-based practice

The interviewees were asked whether they felt their practice was evidence-based. In general the majority reported that their own practice, or work in the unit, was largely based on evidence although a minority were less confident: I would hope that everything we do can be linked to research, other people's research in one way or another. But it's probably a bit of a grand claim in reality it's probably not the case.

Some respondents conceived of evidence-based practice as drawing on sound research, while for others it was more broadly defined and could include theory, topic knowledge, accepted good practice and national policy. Most used academic literature as a source of evidence, although the processes through which it was drawn on varied with unit policies, project type, and individual skills and attitudes. Some reported that they routinely undertook a comprehensive search for literature before embarking on a project and a number of units had pulled together resource documents summarizing literature on effectiveness. In contrast to more systematic processes, many of the interviewees relied on a process of 'keeping up to date', through collecting literature in an ad hoc fashion. This approach was strongly associated with the development and maintenance of subject expertise:

Well now because I've been here for a while it tends to be based on what I'm already doing or what I've heard about during the year. I wouldn't say that come January I'm feverishly searching through literature. It tends to be an ongoing thing.

Use of evidence could vary according to the nature of the work with professional judgement often being used to select appropriate levels of evidence. Some respondents described areas where work was more likely to be based on health promotion principles and practice than research evidence. The nature of health promotion work often meant that evidence could not always be directly applied:

Quite often it's not about saying this is our initiative and we've got full control over it, how we plan it and what we do. Most of our work is much messier, most of it's much more about working with people on their agendas and actually trying to shape and influence it to be a bit more effective and health promoting.

Most respondents gave examples such as innovative work or pilot projects where practice was not evidence-based. There were also complaints about the lack of available evidence in specific areas. Concern and anger were expressed where work known to be ineffective was commissioned or local research findings were ignored.

Overall there was a recognition and acceptance that health promotion specialists were working in a climate in the NHS that increasingly expected evidence-based work and reliance on professional judgement was no longer enough. Reservations were frequently expressed about the difficulty of developing an evidence base in health promotion. Issues raised included the nature of evidence in health promotion and the difficulty of proving effectiveness, the need for wider acceptance of alternative methodologies for assessing evidence, the immensity of the task and lack of funding for health promotion research:

I don't see why we should be exempt from the need to prove our worth really in the same way as the rest of the health sector but the nature of the work means that evidence is sometimes harder to pin down to your intervention or your work.

The thing for us I guess is that because health promotion is such a broad subject and we're dealing with what fifty, a hundred different kinds of topic areas maybe, you're dealing with different settings, different ages really. Therefore the chances of getting a solid water tight base across that whole spectrum is going to take a long, long time, if indeed its possible.

Influences on research and evaluation

Context of practice

The impact of the wider context of practice was a strong theme emerging from the data. Tensions were reported arising from working within a health service dominated by the medical model of health. A strong theme was that health promotion was perceived to lack credibility. Achievements, the potential to affect change and the skills of specialists were often under-recognized. The credibility gap for health promotion was linked for some interviewees to issues around proving effectiveness in what was perceived as an essentially hostile environment:

We've got an uphill job to convince a lot of people, particularly in the medical world, that health promotion as a specialism is valid and needed and useful.

I think it's something about building up credibility in other fields. I don't know if this is fair but I don't think we have as good credibility as we could have with other professionals and that could be something about doing more evidence-based work, getting our work published, just raising our profile which we try to do but it needs to happen at a higher level almost doesn't it?'

All the interviews took place in a period of extensive policy change for the health service. Many interviewees were having to respond to organizational changes and new initiatives on health inequalities, and anxieties were frequently expressed over the future role of specialist health promotion practice.

Factors affecting research and evaluation activity

The interviewees were asked directly about barriers to research and evaluation activity. Multiple factors were identified and these were categorized into three groups (Table II). Of these factors, time, skills, individual motivation, unit culture and lack of funds were seen as significant barriers. The commissioning process and the wider issues of research funding were seen as having a direct impact on levels of primary research activity:

I think the barriers are in the way we're funded because we're supposed to be managing projects that make a difference and research in its pure sense, finding out the health needs for example,

Table II. Factors affecting research and evaluation activity

External context	Unit level	Individual
Policy context	Time	Skills
Commissioning	Unit culture	Attitudes (interest, confidence, motivation)
Research funding	Support	Knowledge
Work with other agencies Organizational change	Access to literature Access to specialist research support	

the health authority might say 'well we've done a lifestyle survey so actually that's not your role, the data's already there'.

Interviewees perceived a bias in funding towards biomedical research and a difficulty in obtaining funds for health promotion research. Where funds had been obtained this had acted as a positive driver for research.

Lack of time was described by many as the most significant barrier to both research and evaluation:

We have been guilty of sort of rushing through projects and not spending the time on evaluation. And that's not because any of the individuals don't recognize how important it is to evaluate, it's just the constant pressure to move onto something else.

Skills and expressed confidence in undertaking research and evaluation varied widely. Research skills were seen as important in enabling activity as was access to appropriate specialist support. Individual interest in research was seen by many respondents as a significant factor:

I think a lot of other people aren't that interested really—some are. But I think there's a lot of health promotion specialists, you know, they just want to get on and do it.

The majority commented on relationships between factors that had a direct and indirect effect on research and evaluation. Unit culture emerged as a key aspect and some reported operating in a culture focused on the delivery of interventions and where research did not easily flourish. Some interviewees did 'buck the trend', mainly in

instances where they had particular research interests. At the time of the interview some units were attempting to expand structures to support research and in one unit, designation of a specialist development post appeared to be enhancing the research culture.

Research into practice

In the first phase of interviews, there was general support for the need to evaluate but differing views about the relevance of other research activity within current professional roles. The question about the place of research in specialist health promotion practice was pursued more directly within the last group of interviews where the respondents had a strategic role and would have given fuller consideration to this issue. Comments are drawn from the whole range of interviews.

I think you have to have as part of your core skill set the ability to engage with, interpret and undertake research. I think that's absolutely fundamental, we wouldn't employ anybody who didn't have the capacity to live up to that skill set. You know, I don't see how you could practice as a health promotion specialist'.

I think there's the evidence base for health promotion which should inform the way in which we as a service work and health promotion specialists work. And there is the sort of more primary research, health needs assessment end of the work, which we would be encouraging the health authority, for example, to be commissioning and other agencies to undertake it and often providing the support for that to happen.

I see researchers in the sense of people dedicated to discovering new knowledge as separate from the role of health promotion specialists but a terribly important reference point for health promotion specialists. I think it's a mistake to think that you can do research on the hoof while you're doing the job. It's role confusion really'.

In the context of implementing evidence-based practice specialists were seen to need the skills to access, appraise and apply evidence. Health promoters were, therefore, consumers of other people's research. A number of people proposed various roles which could be undertaken in relation to research—agenda setting, collaborating on projects, using specialist expertise to advise on research projects or secondment from current roles to take on projects.

Views about training for research in health promotion practice

There were differences in the extent to which postgraduate research training was seen as a preparation for research in practice. A number stressed the importance of staff completing the MSc to build up research expertise in their units:

I think a lot of funding goes to the medical sector for research, how much actually comes into health promotion? The only way we are going to get round to it is through the training issue, sending people off to do their own masters qualifications. That's how you're building the research capacity.

There was questioning of whether the skills learned on courses were easily transferred into practice. At the same time having up to date skills was seen as crucial to undertaking research activity:

I think the skills that are needed for research have to be honed and used all the time to keep at a certain level.

There was evidence that for many of those interviewed the research for the MSc dissertation was perceived as distinct and separate from other sorts of research activity undertaken in the course of

their jobs. There was a sense in which doing the MSc was perceived as a 'cul de sac' rather than as a stepping stone to becoming research active in health promotion:

And when I had finished I was quite keen to continue and I made recommendations about what further research might be. I was quite keen to take those things forward but just the pressure of time and almost no permission as well—you've done that and now you've got to get on with the job.

People interviewed identified a number of areas where they needed further research skills, including literature searching using computerized sources, critical appraisal skills, data analysis in quantitative and qualitative methods, and publication and dissemination skills.

Future directions

Respondents spoke of the need to generate funds for health promotion research and for a stronger national or regional lead for research, the latter point coming through particularly strongly from managers. Another theme emerging strongly from the data was the perceived gap between academia and practice:

I also have a suspicion that there's a very wide gap at the moment, or a pretty wide gap between academics and practitioners and ways of narrowing that gap perhaps need to be explored.

While universities were recognized as a source of specialist advice and training, there was strong support for an extension of their existing roles in terms of research support and collaborative links. Some respondents spoke of the need for more partnership working and 'healthy alliances' between universities, the health service and practitioners. A number proposed improved dialogue between the profession and academia, with some commenting on the importance of practice being able to generate research questions and these being followed through in academic contexts:

I think the transfer of ideas from the field is really, really crucial and that will then feed back more and more robust findings into health promotion as an activity.

Suggestions were also made for the development of forums within universities to facilitate debate and support those who were research active in practice.

Discussion

By adopting a qualitative methodology, this study was able to examine in depth the issues around research in specialist health promotion practice. Specialist practice of the form that exists in the UK is not found elsewhere. Many of the issues that were discussed with research participants are applicable to health promotion research undertaken in other contexts and by others involved in health promotion as part of other professional roles. As is the case in qualitative research, generalizability of findings is not claimed.

Participants in the study had different understandings of the relationship between research and evaluation. This reflected the distinctions made in the research literature. We have to ask if the different understandings have significance. Where research is conceived as a separate activity, with higher status than evaluation and there is a perception of lack of appropriate skills, primary research activity is less likely to take place. Where research and evaluation are seen as overlapping activities, with differing emphases, but drawing on similar skills, there is a greater likelihood that research will be undertaken. This is not to assume that it is appropriate for primary research to be a constituent of practice.

The balance of activities undertaken by people interviewed and the units where they were employed was rather different than expected at the start of the research. There has been a pressure for a number of years in the NHS to develop research as a component of practice of health professionals and this study was undertaken in the context of supporting such development in health promotion

practice. A small number of units already known to the researchers had actively developed both primary research and evaluation. The wider scope of this inquiry led to different conclusions; that the major focus of work is given to finding and drawing on existing research-based evidence and on evaluation of ongoing activities, in most cases on a relatively small scale. Some units had adopted a strategic approach to the development of research and evaluation. This consisted of seeking research collaborations, commissioning research undertaking a smaller number of more intensive evaluations. In general, there were frequent expressions of interest in undertaking a greater amount of research, although questions of whether it would be appropriate within the role were raised.

We were interested in finding out the extent to which health promotion research was seen to have special characteristics. The ideology of health promotion with a commitment to empowerment and to participatory styles of research can be seen to be at variance with particular styles of research. In the practice context, although there were a few who expressed such ideas about research, the majority of people were pragmatic—undertaking research as fit for purpose. There were, however, concerns about pressures to draw on systematic review evidence derived almost exclusively from experimental studies.

Evidence-based practice?

The evidence-based climate in the NHS was reported to be acting as an influence on practice. Overall there was an acceptance of the need to use evidence in the context of professional practice, although assessment of the extent to which this occurred varied. In many units there were shortcomings in the rigorous process of systematic retrieval and appraisal of evidence, reflecting studies with other professional groups (Davison, 1997; McColl et al., 1998; Parahoo, 1998; Accounts Commission for Scotland, 1999). A more strategic approach to building an evidence base for health promotion was suggested by several respondents. The newly formed Health Development Agency in England (Department of Health, 1999) may provide the necessary lead.

Many specialists in the study expressed unease about the ability of health promotion to meet the demands of an evidence-based NHS and questioned the priority given to certain types of evidence, notably that derived from gold standard RCTs. The poor credibility of the profession within a health service dominated by the medical model appeared to be inextricably linked to the difficulties of proving effectiveness. Nettleton and Burrows [(Nettleton and Burrows, 1997), p. 41] in a qualitative study of health promotion specialists reported similar findings and concluded that: 'the image and lack of an evidence base for health promotion are fundamentally interrelated as they tend to feed off each other: the lack of an evidence base leads to a poor image; a poor image means the spotlight is on demonstrating effectiveness'. The need for wider acceptance of alternative methodologies in developing an evidence base was articulated, echoing debates in the health promotion field (Labonte and Robertson, 1996; Speller et al., 1997; Green and Tones, 1999). It is interesting to note that similar debates are taking place in other professions, such as social work (Orme, 1997) and general practice (Owen, 1995; Jacobson et al., 1997).

With the development of the evidence-based movement, a growing number of studies have investigated different health professionals use of evidence and barriers to the implementation of research (Lomas and Haynes, 1987; Grol, 1992; Funk et al., 1995; Cavanagh and Tross, 1996; Bero et al., 1998). Many of the findings such as attitudes to research, use of evidence and the need for skills, resonate with the findings reported here. In our study, health promotion specialists recognized the value of research evidence in planning interventions but taken together with other factors. These included the planning of theory-based interventions, the use of professional expertise, the need for innovative work, and the necessity to incorporate community values and ideas. Nutbeam (Nutbeam, 1996), in a similar vein, suggests that use of evidence might vary according to whether an intervention is planned, responsive or reactive. Much of the debate on evidence-based health

promotion has remained at a theoretical level and further research is needed in order to fully explore how health promotion professionals utilize research evidence in their practice. There is clearly scope for the development of models of evidence-based health promotion which acknowledge the legitimacy of different influences on decision making (Tilford *et al.*, 1998). Even the founders of evidence-based medicine [(Sackett *et al.*, 1996), p. 72] are emphatic that evidence-based medicine 'requires a bottom up approach that integrates the best external evidence with individual clinical expertise and patients' choice'.

The practice of research

Health promotion specialists in the study were engaged in primary research and evaluation, although, as discussed earlier, the range and extent of the activity varied greatly. Multiple factors were found to influence research activity, reflecting the findings of another study (Loughlan and McAlpine, 1998). Factors relating to the organizational and policy context were prominent influences but that may in part be attributed to the timing of the interviews in a period of widespread change in the NHS. The prevailing organizational culture in many of the units, which was focused on service delivery, could be seen as a significant constraint impacting on some individuals' pursuit of research aspirations. Unit culture is likely to be a product of a number of influences, both internal and external to the unit. Those identified in the study included management values and priorities, the mix of individuals' skills and attitudes, research training for practice, and professional expectations. A research culture has been defined in a qualitative study of nurses and their managers as 'a whole system where research is perceived more favourably and used more proactively by the majority of practitioners' [(Le May et al., 1998), p. 429]. The lack of a research culture in the NHS has been highlighted by a number of authors (Peters, 1992; Walshe and Ham, 1997; Le May et al., 1998), but the extent to which specialist health promotion practice has, or should have, a research culture is a matter for further debate.

The place of evaluation in health promotion practice and the importance of drawing on evidence to inform development of work were unchallenged, but this study raises questions of whether primary research should be a core element of practice. Three models of research in practice can be seen as fitting with data.

- Integration. Specialists develop and maintain research skills to be utilized within routine practice for small-scale research projects and drawing on external support for larger projects.
- Partnership. Specialists engaged in maintaining a dialogue with researchers, initiating or responding to invitations for collaborative research activity and acting in a consultative capacity to research projects.
- Consumers. The activities of research, other than small-scale evaluation and health promotion practice are kept distinct. Specialists draw on research evidence as necessary and may commission research and larger-scale evaluation.

In practice these models might co-exist within a single setting with the emphasis dependent on priorities, type of intervention, funding opportunities, and the skills and interests of the individual. The support needed, however, to develop 'research in practice' would differ; the first model would require provision of research support focused on developing skills and facilitating research within units, while the partnership approach would be directed to building collaborative research arrangements and developing research skills demanded by collaborations, and providing secondments for practitioners to pursue research interests. The consumer model requires the skills of accessing and appraising existing research evidence and also skills in commissioning research from others.

Research training for practice

The nature of research and evaluation being undertaken by participants in this study and their views about the place of these activities in the context of their professional practice raises questions about the nature of preparation for research in postgraduate health promotion courses leading to masters'

qualifications. While the courses in the UK vary, most provide students with a broad grounding in research methodologies, main data collection methods and modes of analysis associated with quantitative and qualitative research styles, evaluation issues and the design and implementation of a small-scale research project which forms the basis of a masters dissertation. Although there has been a small review of research training (Postgraduate Health Education Lecturers Forum, unpublished), there has been a major expansion in the number of courses, and a research study is needed to review current provision and the views that courses hold about the purposes of their training. Comments offered, while drawing on knowledge of a number of courses, are not based on research beyond this specific study, and are designed to stimulate preliminary discussion and debate. The main questions relate to the relative emphases given to primary research and evaluation in training, and also to the extent to which people are adequately prepared for accessing and reviewing the evidence base. While the research skills developed on courses are applicable equally to primary research and to evaluation there are important aspects of evaluation which may not receive sufficient attention if we recognize the centrality of evaluation in future practice. At the same time if health promoters are, to a considerable extent, consumers of research undertaken by others, very thorough preparation for accessing and critically reviewing research evidence is called for. Furthermore, if commissioning of research and engaging in collaborative relationships is also a growing practice, then students need to be adequately prepared for such activities. While the common research-based dissertation is appropriate as an academic qualification, it is less clear that it is the best preparation for the research and evaluation which is typical in the average practice setting. Overall it is probably not the case that major changes are needed in the training contexts but the emphasis given to components of such training would merit review. The importance of strengthening practice-academic links was frequently mentioned in the study. While such links

are developing through research collaborations and through commissioned research, stronger links between courses and practice in aspects of the research training could also make a useful contribution.

Conclusion

This study revealed that research for the purposes of evaluation was a core activity in specialist practice, but that other research activities were less commonly undertaken. While there was a fairly widespread interest in undertaking more primary research, it was acknowledged that this was not central to the current role, although it would be appropriate to seek research secondments or make contributions to collaborative projects. There was a clear recognition of the importance attached to the development of evidence-based practice within the current NHS context and commitment to this goal. At the same time there was awareness of the debates around appropriate evidence for health promotion, methodologies for developing it and the current shortfalls in evidence. While a range of evaluation activities were being undertaken, it was uncommon for evaluations to be sufficiently extensive and methodologically rigorous that findings could contribute in any significant way to the development of the evidence base. Participants recognized that much evaluation in practice was ad hoc and not very good quality, thus compounding the problem of lack of evidence of effectiveness. To address this issue and build the evidence base for health promotion would require increased research funding and a more coordinated approach to evaluation, possibly through the development of collaborative bids across localities.

If health promoters are to become predominantly consumers of research evidence rather than producers of it, the content and the emphases in the content of the research component of professional health promotion practice training needs some review. Participants in the research project already had a number of links with academic partners, but a clear need was expressed for extension of these. Recommendations from the study are to explore

new and imaginative ways to build relationships, increase the exchange of ideas between academic institutions and practice, and to share resources. A research network is currently being set up in the Region where the research took place, and one of its objectives will be to look at the recommendations proposed here and how they can be pursued collaboratively.

Acknowledgements

The authors would like to thank all those practitioners who participated in the study and the reviewers for their comments. The study was funded as part of a programme of work supported by the NHS Executive, Northern and Yorkshire Region.

References

Accounts Commission for Scotland (1999) *The Implementation of Evidence-based Healthcare in Scottish Healthboards*. Accounts Commission for Scotland, Edinburgh.

Bero, L., Grilli, R., Grimshaw, J., Harvey, E., Oxman, A. and Thomson, M. (1998) Closing the gap between research and practice: an overview of systematic reviews of interventions to promote implementation of research findings by health care professionals. *British Medical Journal*, 317, 465–468.

Cavanagh, S. and Tross, G. (1996) Utilizing research findings in nursing: policy and practice considerations. *Journal of Advanced Nursing*, 24, 1083–1088.

Davison, T. (1997) Evidence-based medicine and psychiatry: myth or reality? *MPH dissertation*. University of Glasgow, Glasgow.

Department of Health (1999) Saving Lives: Our Healthier Nation. The Stationary Office, London.

Funk, S., Tornquist, E. and Champagne, M. (1995) Barriers and facilitators of research utilization. An integrative review. *Nursing Clinics of North America*, **33**, 395–407.

Green, J. and Tones, K. (1999) Towards a secure evidence base for health promotion. *Journal of Public Health Medicine*, **21**, 133–139.

Grol, R. (1992) Implementing guidelines in general practice care. *Quality in Health Care*, **1**, 184–191.

Jacobson, L., Edwards, A. G., Granier, S. K. and Butler, C. C. (1997) Evidence based medicine and general practice. *British Journal of General Practice*, 47 (420), 449–450.

Labonte, R. and Robertson, A. (1996) Delivering the goods, showing our stuff: the case for a constructivist paradigm for health promotion research and practice. *Health Education Quarterly*, 23, 431–447.

Learmonth, A. and Cheung, P. (1999) Evidence based health promotion: the contribution of qualitative research methods. *International Journal of Health Promotion and Education*, **37**, 11–15.

- Le May, A., Mulhall, A. and Alexander, C. (1998) Bridging the research–practice gap: exploring the research cultures of practitioners and managers. *Journal of Advanced Nursing*, 28, 428–437.
- Lomas, J. and Haynes, B. (1987) A taxonomy and critical review of tested strategies for the application of clinical practice recommendations: from 'official' to 'individual' clinical policy. American Journal of Preventive Medicine, 4, 77–94.
- Loughlan, C. and McAlpine, C. (1998) Skills and support in the application of research to health care in a NHS trust—a needs assessment survey of Stirling Royal Infirmary. *Health Bulletin*, **56**, 725–732.
- McColl, A., Smith, H., White, P. and Field, J. (1998) General practitioner's perceptions of the route to evidence based medicine: a questionnaire survey. *British Medical Journal*, 316, 361–365.
- Nettleton, S. and Burrows, R. (1997) If health promotion is everybody's business what is the fate of the health promotion specialist? Sociology of Health and Illness, 19, 23–47.
- Nutbeam, D. (1996) Achieving 'best practice' in health promotion: improving the fit between research and practice. *Health Education Research*, **11**, 317–326.
- Orme, J. (1997) The case for research in practice. In McKenzie, G., Powell, J. and Usher, R. (eds), *Understanding Social Research. Perspectives on Methodology and Practice*. Falmer Press, London.
- Owen, P. (1995) Clinical practice and medical research: bridging

- the divide between two cultures. *British Journal of General Practice*, **45**, 557–560.
- Parahoo, K. (1998) Research utilization and research related activities of nurses in Northern Ireland. *International Journal* of Nursing Studies, 35, 283–291.
- Peersman, G. V., Oakley, A. R. and Oliver, S. (1999) Evidence based health promotion? Some methodological challenges. *International Journal of Health Promotion and Education*, **37**, 59–64.
- Peters. D. (1992) Implementation of research findings. *Health Bulletin*, **50**, 68–77.
- Sackett, D., Rosenberg, W., Muir Gray, J., Haynes, B. and Richardson, S. (1996) Evidence-based medicine: what it is and what it isn't. *British Medical Journal*, **312**, 71–72.
- Speller, V., Learmonth, A. and Harrison, D. (1997) The search for evidence of effective health promotion. *British Medical Journal*, **315**, 361–363.
- Tilford, S., Godfrey, C., White, M., Nicholson, F. and South, J. (1998) Evidence-Based Health Promotion: Commissioning Interventions for the Prevention of Smoking in Young People: A Pilot Project. Centre for Health Promotion Research, Leeds Metropolitan University.
- Walshe, K. and Ham, C. (1997) *Acting on the Evidence: Progress in the NHS*. Birmingham: The NHS Confederation.
- Wiggers, J. and Sanson-Fisher, R. (1998) Evidence based health promotion. In Scott, D. and Weston, R. (eds), Evaluating Health Promotion. Stanley Thornes, Cheltenham, pp. 126– 145.

Received on April 8, 2000; accepted on August 7, 2000