Questioning design and method: is the tail wagging the dog?

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This paper aims to address three broad themes. An outline of the current UK primary/community health care research and development (R&D) agenda is presented and it is argued that in addressing this agenda greater diversity of research designs and methods to generate knowledge for policy and practice is needed. It is proposed that philosophical and disciplinary entrenchment, particularly within nursing, has led to over preoccupation with arguments about the epistemological basis of research approaches and methods as an end in itself and the research priorities and questions for health and health care that should drive such debates are often side lined or altogether ignored. The remainder of the paper addresses Meyer's proposition for the need for more participative practitioner-centred research within the context of community/primary health care. It is argued that while action research and other participative research methods have much to offer we need to understand and use the full range of research approaches and methods at our disposal, and where appropriate, develop new ones if we are to tackle the research priorities relevant to a large and diverse community/primary care R&D agenda.

Introduction

Within the context of the symposium theme 'Questioning Design and Methods' the following paper aims to address three broad themes. First, the current UK primary/community health care research and development (R&D) agenda is outlined. It is argued that in addressing this agenda there is a need for greater diversity in our use of research designs and methods to generate much needed knowledge for health and health care within the context of primary/community settings. The choice of research approach and methods must be appropriate to the purpose of the research and questions it aims to answer. Although seemingly self-evident it is proposed that philosophical and disciplinary entrenchment, particularly within nursing, has led to over preoccupation with arguments about the

epistemological basis of research approaches and methods as an end in itself and the research priorities and questions for health and health care that should drive such debates are often side lined or altogether ignored. The remainder of the paper will address Meyer's (2003) proposition for the need for more participative practitioner-centred research within the context of community/primary health care. It is argued that while action research and other participative research methods have much to offer we need to understand and use the full range of research approaches and methods at our disposal, and where appropriate, develop new ones if we are to tackle the research priorities relevant to a large and diverse community/primary care R&D agenda.

The Primary/community health care R&D context

At a national level, there has been considerable taking stock of the state of primary/community

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health care research in the UK. The publication of the Mant report in 1997 (NHSE, 1997) highlighted for the first time the need to expand the evidence base for primary care and to increase the research capacity and capability of the work force. Since this report, two other strategic reviews relevant to primary care research have been published. The strategic review of the NHS R&D programme (Department of Health, 1999) included a subgroup reviewing the needs for primary care research (NHS R&D Strategic Review, 1999) and more recently, the R&D Strategy for Public Health (Department of Health, 2001) has appeared. There are common themes running through all three reviews including:

- 1) recognition that the scope of the R&D agenda in primary/community health care is large;
- much more high quality research evidence relevant to primary/community health care is needed:
- the volume of research in the disciplines of nursing, therapy professions and pharmacy is very small;
- the research capacity of the primary care workforce is limited and needs supporting and developing;
- 5) user involvement in R&D needs to be greater;
- 6) the need for greater multidisciplinary and interagency collaboration in R&D, including closer partnerships between the academic community and NHS organizations;
- and, in recognition of the very broad scope of primary/community care – the need for a wide range of research approaches and methods (author's italics).

From a national policy perspective recognition of the need to expand the evidence base for primary/community health care and to increase the research capacity and capability of the workforce has triggered a number of government initiatives to engage and support practitioners in undertaking research. Examples include the development of primary care research networks and different levels of primary care/public health/nursing research award schemes through the Department of Health Research Capacity workstream.

The scope of primary/community-based health care practice is diverse and includes public health, reducing inequalities, the treatment and management of illness, rehabilitation and palliative care

(Figure 1). Additionally, the focus of primary/community health care ranges from individuals and families through to the implementation of community/population-based programmes and policies. Unsurprisingly, therefore, the R&D agenda for primary/community health care is large in scope. As part of the NHS strategic review for R&D the Primary Care Topic Review Group mapped out the existing research gaps (NHS R&D Strategic Review, 1999). These included:

- a basic science gap: insufficient relevant clinical and social research evidence is available:
- an effectiveness gap: effectiveness and costeffectiveness of care has not been widely evaluated;
- an applicability gap: too little is known about how to apply evidence from clinical trials to specific situations;
- an implementation gap: the implementation of evidence about effective care (where it exists) is variable.

Of the profession-specific groups contributing to this review, one was nursing chaired by Fiona Ross, Professor in Community Nursing, St George's Medical School in London. Four nursing-related research programmes to address the research gaps identified above were recommended. These programmes were:

• Evaluating and measuring the effectiveness of

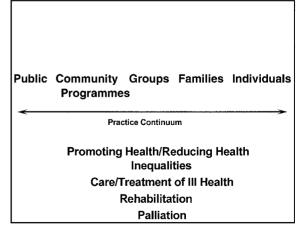


Figure 1 Scope of R&D in primary care/communiy settings.

primary care nursing interventions in health maintenance processes of individuals, communities and populations (effectiveness gap).

- Identifying the 'value added' contribution of nursing to reducing inequalities in health care (effectiveness gap).
- Evaluating different models of assessment and decision making used in primary care in targeting health inequalities (basic science gap, effectiveness gap and implementation gap).
- Exploration and explanation of the relationship between team-based information sharing and decision making with referral pathways and clinical, professional and organizational outcomes (basic science gap and effectiveness gap).

Undoubtedly, this is an enormous and challenging R&D agenda and it is clear that in addressing it no one stake holder group has a monopoly. Researchers from a range of academic disciplines, managers, frontline practitioners as well as service users and the public all have key contributions to make in building the research base for nursing and primary/community health care more generally. Equally, such a diverse R&D agenda clearly requires the use of a wide range of existing research approaches and methods as well as the development of new methodologies. The issue of different stakeholder perspectives and the need for 'methodological eclecticism' will be discussed further in this paper.

Horses for courses

Within the nursing and related literature there has been considerable debate in the last 20 years or so about the appropriateness of different research approaches or theoretical perspectives in the generation of research evidence. Two related issues in particular appear to have dominated such debates: whether qualitative or quantitative approaches provide the best information for nursing practice (e.g., Rolfe, 1998; Gournay, 1999) and the debunking of 'positivism', usually assumed to be synonymous with science (Closs, 1994).

A false conflict has been created between those who advocate quantitative methods (including randomized controlled trials (RCTS)) and those who espouse the use of qualitative (interpretative) approaches (Closs and Cheater, 1999). Neither position is helpful and rarely do arguments recognize explicitly that the need to use one approach over another (or indeed combined approaches) depends on the purpose of the research and the questions it aims to answer (within available resources). Focus groups cannot provide answers about the prevalence or incidence of a condition anymore than RCTs explain why few young men access screening or health promotion services. Furthermore, the focus of the research questions and subsequent research design/methods will vary depending on who are the intended users of the findings (patients/public, practitioners, managers, policy makers/politicians, researchers, financial sponsors). Arguing about quantitative versus qualitative research becomes even more suspect when placed within the context of a large and diverse primary/community health R&D agenda.

Within nursing the controversy about using natural science approaches for studying social phenomena mirrors a longstanding debate in the social sciences. Intrinsic to this debate is the philosophical conundrum: do facts have an independent objective existence or are they socially constructed? Discussing the relationship between science and nursing, Closs (1994) reminds us that 'while science is often criticised using the tenets of logical positivism, in the human sciences the underlying assumptions of positivism are as dead as the philosophical movement itself'. While the aim of positivism was to establish immutable cause and effect explanations, postpositivists assume the truth can be discovered only approximately and in a probabilistic sense (Ford-Gilboe et al., 1995). Furthermore, it is perfectly possible and often desirable to combine different theoretical perspectives within a research study or programme (Ford-Gilboe et al., 1995). By doing so, the rigour, value and relevance of the research may be greatly enhanced and new methodologies developed. In recognition of these benefits, a growing number of interdisciplinary and multidisciplinary research partnerships in the form of networks and institutions in the health sciences are now developing in the UK. The emergence of the Campbell Collaboration working in partnership with the Cochrane Collaboration to incorporate the findings of qualitative research in the interpretation of evidence from trials of the effects of health care provides another example of how 'trans-theoretical' and interdisciplinary synergy in the production of research evidence can be capitalized.

While recognizing that in comparison to biomedical disciplines and the social sciences, nursing has a less developed research base, a preference towards using qualitative research inquiry appears evident. There is some justification for this assumption, at least within the context of primary/ community health nursing. In 1997, the Mant report (NHSE, 1997) concluded that in relation to nursing 'publications are largely restricted to qualitative discussion papers based on case studies'. More recently, in the UK, the Research Assessment Exercise (RAE) 2001 panel for nursing highlighted a lack of diversity of research approaches in submissions for nursing research overall (www.hero.ac.uk/rae/overview). Concerns were raised about the paucity of evaluation or clinical research to test new ideas for treatments and services, including assessments of the impact of care or services on patient outcomes, in comparison to the volume of descriptive work undertaken. Elkan et al.'s (2000) systematic review on the effectiveness of domiciliary health visiting provides a further benchmark on the current health of primary care/community-based nursing research. The overwhelming majority of the controlled trials reviewed were from North America, making extrapolation to the UK healthcare system difficult. Many interventions were multifaceted, thus the independent effects of home visiting on outcomes was difficult to assess and most studies focused on those at risk of adverse outcomes, hence applying the results to those at differing levels of risk was not possible. Finally, the majority of trials included in the review had methodological limitations and were under powered. The reviewers concluded that there was a need for more studies with rigorous experimental designs to evaluate the effectiveness of home visiting by UK health visitors, including economic evaluations.

While qualitative research related to nursing is abundant, there appears to be general antipathy towards quantitative research and the conduct of trials in particular (Cullum, 1997). The emergence of the 'evidence-based practice movement' has polarized positions further by what has been perceived to be the proclaimed supremacy of the RCT as the best source of evidence. RCTs have their uses and their limits in common with all research designs. If appropriate, practical and ethical, an

RCT should be used for assessing the effectiveness of health care interventions as it is the best means currently available for evaluating whether an intervention works (Closs and Cheater, 1999). It may tell us nothing about the appropriateness and acceptability of the intervention being assessed, or why it did or did not work. This information is crucial for practice and the organization of services and these dimensions may be most appropriately evaluated using qualitative methods, either embedded within a well designed trial or as a separate study.

RCTs are often criticized for ignoring important contextual factors such as the characteristics of the practitioners, settings and patients, aspects that can be crucial to determining the success of an intervention, thereby limiting generalizability (Black 1996; Closs and Cheater, 1999). This is a valid criticism although to some extent, these issues can be taken into account in the design and execution of a trial. For example, we carried out a multicentre RCT in thirteen community trusts to evaluate the effectiveness and cost effectiveness of two methods for improving the care provided by community nurses for patients with urinary incontinence (Cheater et al., 2001). We collected documentary and qualitative information to identify features of the management culture of each of the participating trusts, elicited information from study nurses on their perceptions of the barriers to improving their practice at the individual, team and organizational level, and undertook a series of postintervention qualitative interviews with study nurses to find out information about the process of implementation, including their perceptions of what worked and what did not work during the process. This information collected in parallel to the trial provided us with valuable contextual detail that helped to inform both the interpretation and the generalizability of our findings.

Rolfe (1998) dismisses randomized controlled trials as sources of evidence on the grounds that if a treatment effect is demonstrated not all individuals will respond, and some may deteriorate. The difficulties of applying trial evidence, or indeed any robust research derived from population-based studies to individuals is well recognized (Haynes, 1993). Well designed RCTs can provide information about which interventions are likely to produce better outcomes but cannot tell us precisely for whom (Jadad, 1998). Practitioners assess the

worth of the evidence for their practice on the basis of determining the extent to which the research question matches their own question, the quality of the trial, the magnitude of the effect (clinical significance) and whether the study sample and context of care resembles their own. Consistent findings from several high quality RCTs (ideally in the format of a systematic review or metaanalysis) will increase practitioners' confidence of the value of a specific intervention within the context of their own practice. However, even when the research evidence about the risks and benefits of a particular intervention is clear from a population perspective, practitioners do not necessarily know what is in the best, personal interests of an individual or their family. The information can only guide practitioner and patient/client decision making about the best possible courses of action within the context of the individual's personal and family circumstances and the probability of a 'good' outcome and any side effects or risks (based on current knowledge at the time). Rolfe argues that individual clients/patients are unique and as such advocates 'practitioner-based' single case research as an alternative approach to generating knowledge for the practice. Single case research, including RCTs of individuals ('n-of-1 trials') produces individual rather than generalizable (in a probabilistic sense) findings (Jadad, 1998). In the context of a therapeutic relationship, particularly where the available research evidence is derived from very different populations or in the absence of research, single case research can be a helpful tool for the practitioner. However, as a way of building a body of systematic knowledge for practice, Rolfe's individualist approach appears unwieldy and ultimately, unworkable, particularly when taking into account the diversity of care and generalist nature of the roles of most community/ primary care-based practitioners. Aside from the issues of practicability and generalizability mentioned above, it is doubtful that Rolfe's approach to building the evidence base for nursing would meet any generally accepted criteria for reliable knowledge. Knowledge has three crucial attributes: it must be in the public arena and subject to external scrutiny, it must be consensible (understood); and it must be consensual (agreed) (Ziman, 1978; Closs, 2003). It is unclear how knowledge generated using the single case research approach would meet any of these criteria.

The methodological challenges of evaluations of the impact of complex health or social interventions or policies, particularly in areas such as health promotion and public health are well recognized. These issues are especially pertinent for nurses, health visitors and midwives leading family-centred health programmes, multiagency initiatives and community development projects (Elkan et al., 2000). For example, how can we disentangle the effects of one programme or intervention from others, or identify what sections of the population benefit from which elements of an intervention? Methodology in this area is developing in recognition of these challenges and new frameworks for evaluation are beginning to emerge. For example, the Medical Research Council has developed a framework to guide researchers undertaking RCTs of complex interventions (MRC, 2000). Other evaluation frameworks, for example, the 'theories of change' approach (Judge, 2000) and 'realistic evaluation' (Pawson and Tilley, 1997) focus less on establishing causality and concentrate on asking the questions 'what counts as success, what works, for whom, in what circumstances and why?' Such designs usually use mixed methods, such as the collection of routinely available data, documentary analysis, nonparticipant observation, case study, surveys and interviews.

Constructive and well informed debate regarding different theoretical perspectives underpinning research is intrinsic to the academic development of nursing and other health care disciplines. Some understanding of the theoretical basis of how knowledge is produced using different research approaches is necessary. However, these discussions need to take place within the context of a much greater awareness of the research priorities and questions we need to be tackling if we are serious about expanding our research base for nursing otherwise we run the very real risk of the tail wagging the dog. We need research approaches and methods which provide us with relevant and complementary information to the totality of evidence (professional expertise, experience and user preferences) upon which decision making; the organization and delivery of services and health policy should be based. Directly or indirectly, the purpose of primary and community health care research is to improve the health and wellbeing, and to reduce inequalities, in individuals and the population as a whole. Wrangling over the use of so called 'postpositivist' or interpretative paradigms or quantitative versus qualitative methods is unhelpful if it serves only to blinker us from seeing or asking the research questions that so urgently need answering.

More participative practitioner-centred research

As discussed earlier in this paper, research questions are defined in different ways depending on the perspectives of the stakeholder (e.g., policy maker, service user, practitioner, researcher, manager). The 'practitioner-centred' model of research advocated by Meyer (2003) and Rolfe (1998) recognizes explicitly the value of practitioners in defining and generating research. Undeniably, practitioners are key stakeholders of research (both as consumers and producers) and as such have important roles in identifying and addressing the research questions or problems that emerge during their day-to-day working in primary and community care settings. Furthermore, as Meyer (2003) points out, practitioners familiar with the complex and multidimensional nature of everyday practice may produce research that is more relevant, accessible and credible locally. Practitioner-generated research is also more likely to take into account the local context and may be more influential in leading to changes in the practice. Unquestionably, these are persuasive reasons why practitioner-generated research should be encouraged and supported. Does the 'practitioner-centred' model advocated by Meyer (2003) and Rolfe (1998) offer a way forward in this endeavour?

The 'practitioner-centred' model of research

Meyer criticizes the current, dominant model of generating research for practice as elitist. She argues that as most research is undertaken by academics, practitioners' expert knowledge is largely ignored. Similarly, Rolfe (1998) suggests that this 'elitist' model of research generation has served only to perpetuate the 'theory-practice' gap, producing findings that are largely irrelevant to the needs of practitioners. It is undoubtedly true that

the 'ivory tower' image of research persists, attributable in part to limited joint working between academic and NHS communities. The volume of high quality research to support nursing practice is undoubtedly small but evidence suggests that even when relevant information for practice does exist, information overload (making sense of the available research) poses a significant barrier for practitioners (Griffiths et al., 2001). Based on Rolfe's (1998) concept of 'practitioner-centred research' Meyer suggests we need an alternative approach through which the value of practitioners' experiential knowledge is acknowledged and made explicit through personal reflection and reflexivity. As advocated by Rolfe (1998) (discussed above) she argues for a model of research in which practitioners generate or verify research in their own settings using methods of either single case experimental design, reflective case study or action research. Indeed, she suggests that this should be the preferred model for knowledge generation for nursing practice. Developing closer links between research and practice through greater engagement of practitioners in research and stronger partnerships between the academic community and the NHS is uncontentious. The development of posts such as researcher/practitioner, practice development facilitator (and practice development units) and nurse/midwife consultants in nursing have tried to align research activity more closely with practice with varying degrees of success. Evidence from the RAE 2001 research panel for nursing highlighted many examples where joint working between the university sector and the NHS was still underdeveloped (www.hero.ac.uk/rae/overview). Historically, within nursing, funding streams in higher education and the NHS have militated against the development of sustained research activity within and across the two sectors. Unlike nursing, for example, career structures for doctors have long supported the simultaneous pursuit of academic research activity alongside practice. Recently, the need for greater awareness of, and participation in, research by all practitioners working in community and primary care settings has been recognized explicitly and several national initiatives have been implemented to support such activity (NHSE, 1997, Department of Health 1999).

It is important to recognize that research 'participation' reflects a continuum of activity (Figure 2).

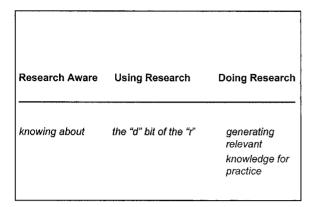


Figure 2 The continuum of activity reflected by research participation.

Now all practitioners are expected not only to be aware of research evidence relevant to their field of practice but also to use it appropriately to inform their decision making, service planning and delivery. These are the fundamental principles of evidence-informed practice and are associated with their own set of challenges (Haines and Donald, 1998). However, these activities are related but different from generating research evidence. The verification of evidence within the context of the practitioner's own setting, recognized by Meyer (2003) within the 'practitioner-centred' model, is a different enterprise to generating research, although the activities are not necessarily mutually exclusive. For example, action research advocated by Meyer (2003) provides a framework through which research findings may be generated and used to support changes in practice in a cyclical process of reflection, planning, action, evaluation and further reflection.

Rolfe (1998) rejects externally generated research evidence as largely irrelevant to the needs of practitioners. In the pursuit of democratizing knowledge it is highly questionable whether it is desirable or realistic to expect every practitioner to generate their own research for practice upon which their decision making is based. Rolfe's (1998) proposition for 'practitioner-centred' research supports a particularly individualistic approach to research generation although how such knowledge is scrutinized and verified externally, disseminated and shared is unclear. In other words, how does locally, contextspecific research contribute to, and build on, a wider, systematic body of knowledge for nursing practice.

The practitioner-centred model for research fails to acknowledge the size, diversity and complexity of the R&D agenda for community/primary care practice. Practitioners alone cannot, realistically, generate the research evidence to support their day-to-day decision making anymore than academic researchers can afford to ignore the involvement of practitioners in their research. Furthermore, the model does not distinguish explicitly between the different, but complementary perspectives of different stakeholders in the generation of research for practice. The priorities of the NHS are concerned with improving health and meeting the needs of the public through the delivery of high quality services. As such, practitioners as well as Primary Care Trust board directors and managers want timely research-informed information that will address their immediate local priorities and concerns and support decision making. They assess the worth of the available research evidence on the basis of its rigour, relevance to their local context, benefits and costs. In parallel, we also need research activity that answers those questions (clinical, theory-driven or methodological) that may not have obvious relevance for the immediate concerns of practitioners or current policy but will contribute to a sustained and growing body of knowledge of the impact of nursing on health care in the longer term.

Furthermore, the practitioner-centred model of research appears to take no account of the limited capacity, knowledge and skills in the nursing workforce to undertake high quality research. This is essential if we are actively to contribute to addressing the R&D agenda for primary/ community care. The size of the research agenda is too large and the funding and time too scarce for nurses and other stakeholders to be undertaking research of dubious quality. The need for expanding current research capacity and capability is not an insignificant issue for primary/community health care (NHSE, 1997) yet the proposed model does not address the fundamental issue of how practitioners will be adequately supported in carrying out their research in the practice.

Perhaps the most problematic aspect of the 'practitioner-centred' research model proposed stems from a lack of clarity about what constitutes knowledge for practice and how research evidence contributes to decision making. Both Meyer (2003) and Rolfe (1998) express concerns that the tra-

ditional research approach has largely ignored or devalued the individual practitioner's expertise. Nurses and doctors frequently voice this concern in the context of debates about evidence-based practice (Sackett et al., 1996; Closs and Cheater 1999). This is based on a misunderstanding that if an intervention has been shown to be effective, then it must be applied blindly in every case. As discussed by Meyer (2003) Sackett et al.'s (1996) definition of evidence-based practice recognizes that research evidence is just one factor that influences decision making in individual situations. Ideally, the best available research evidence informs the practitioner and the patient/client about the options that are available, together with any associated risks and benefits. Of course, in reality this is easier said than done. Undeniably, nurses' decision making is a complex activity and we are only beginning to understand the many influences that can potentially influence the process. Decision making is rarely a simple process requiring only the rationale assessment of the alternatives (if any) which then leads to a clear course of action. Within primary/community health settings, most decisions are made in the context of a relationship, based on knowledge of the individual or family over time. Individual values, beliefs, attitudes, experience, patient or family pressure, the opinion of colleagues and the availability and costs of the intervention may all influence how nursing decisions are formed. Professional knowledge is more than understanding the research basis underpinning practice – as Meyer (2003) points out it includes the daily application of that knowledge through reflecting on the outcomes of different actions. However, the outcomes of the process of reflection and reflexivity are neither the same as, nor constitute a different form of research evidence for practice.

Professional expertise and judgement is essential to the delivery of high quality nursing practice, but it is not research evidence. Conflating professional expertise and experience with research evidence is to obscure the importance of individual experience. Experienced nurses are receptive to the subtlest cues from patients/clients which allow rapid and expert care to be delivered. It is the explicit recognition of practitioners' 'tacit knowledge' derived from practice that Rolfe argues is at the heart of the practitioner-centred model for generating research. However, experience is not always a guarantee of excellent practice; even experienced nurses may hold personal opinions which have no grounds of factual basis that may lead to inappropriate care and unnecessary suffering (Closs and Cheater, 1999). Experience is unquestionably of great value but it is not always reliable and experts do disagree (Closs and Cheater, 1999). Convincing evidence must be in the public domain, available to anyone who wishes to consider it. The process by which the evidence was produced must be clearly stated, so that it can be subjected to proper public scrutiny and its value considered. The process of practitioner-centred research is described as 'systematic self-critical enquiry made public' (Rolfe, 1998: p. 75) but precisely how this is achieved in practice is unclear. The extent to which individuals can introspect accurately about what influenced their decisions is questionable, hence the validity of this method as an 'alternative' approach to generating research for practice must be seriously questioned. Indeed, while Meyer (2003) accepts the underlying rationale for Rolfe's (1998) approach to practitioner-centred research, she questions its heavy reliance on professional introspection. Defining tacit knowledge as the same as research is conceptually wrong but this neither devalues professional experience or judgement nor undermines the outcomes of reflection and reflexivity so fundamental to developing practice. Neither does it ignore the modulating effects of tacit knowledge on the interpretation of research findings in individual decision making, nor indeed the way in which practitioners' experience is used to identify research priorities and questions from practice.

Practice-centred research

Building on Rolfe's (1998) initial ideas of practitioner-centred research, Meyer calls for a more participative, 'practice-centred' model of research that focuses less on the individual practitioner but 'focuses on understanding change as it naturally occurs in the field'. She argues that action research, based on principles of democracy and collaboration, offers an ideal framework through which practitioners are supported to undertake, use and implement research within their own work settings. It also offers opportunities, less evident in other research approaches, of aligning research, education and practice more closely. Action research

already has a fairly long history within nursing and community development. Furthermore, its value was recognized explicitly in the recent R&D strategy for Public Health (Department of Health. 2001). A number of the NHS-funded primary care research networks have also adopted an action research framework through which practitioners and researchers work together as equal partners, and there is widespread ownership of research activity (Thomas and While, 2001). Action research appears to have much to offer the primary/ community health care R&D agenda, its participatory focus offering practitioners opportunities to influence and engage in research relevant to their practice. We need to beware though, of viewing it as a panacea. It is one approach that will be appropriate for some sorts of research but not others.

Conclusion

Practice-centred research, as advocated by Meyer (2003), including action research, has a place in supporting the community/primary care R&D agenda.

However, we cannot afford to become methodologically wedded to one research approach to the exclusion of others given the enormity of the R& D agenda. We need to understand and use the full range of research approaches and methods at our disposal, and where appropriate, develop new ones if we are to tackle the research priorities relevant to the large and diverse community/primary care R&D agenda.

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