Continuing education for public health medicine – is it just another paper exercise?

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Summary

In 1993 the Conference of Royal Colleges and their Faculties called for its members to develop formalized continuing medical education (CME) programmes. Most colleges have adopted a narrow definition of CME and a mechanistic approach to monitoring participation. The Faculty of Public Health Medicine has responded differently by initiating a broader model of continuing professional development (CPD) which emphasizes the individual nature of continuing education. This paper explores the rationale behind this decision. Recent systematic reviews of the effectiveness of CME have demonstrated the need for relevance in any continuing education activity. This means relevance not only to learning needs but also to current work and the applicability of the knowledge. However, the effectiveness of traditional CME for all doctors and particularly public health physicians remains to be established. Thus the Faculty has moved towards a wider context of learning in the form of CPD incorporating an evaluative approach and aspects of adult learning theory. There remains a need for the links between audit and continuing education to be strengthened.

Keywords: continuing medical education, continuing professional development, evaluation, effectiveness

Introduction

Rapid and continuous development in medical practice necessitates that learning should not end with the completion of formal training programmes. Doctors will need a commitment to continued education and learning to maintain and develop the skills and knowledge gained during the lengthy formal training period. Arguably, this commitment to continued learning is part of the social contract which underpins a doctor’s professional status. In practice, continuing medical education (CME) has been offered and taken up on only an ad hoc basis.

Recently there has been a renewal of interest in this area both in the United Kingdom and internationally. In 1993 the Conference of Royal Colleges and their Faculties (CRCF) acknowledged this interest in CME by issuing a declaration, which called for all Colleges and Faculties to have a formalized CME policy in place by January 1994. Most Colleges and Faculties, including the Faculty of Public Health Medicine, have piloted or fully implemented policies in response to the Conference declaration.

This paper explores the reasoning behind the resurgence of interest in continuing education and examines how the profession has responded.

The new interest

The CRCF declaration can be seen as a reaction by the UK medical profession to three principal sources of new interest in continuing education: the first came from within the profession itself; the second stemmed from political pressure and the third was from the users of the profession’s services, both patients and managers.

Medical knowledge, and the literature which describes it, continues to grow exponentially. This poses an ever-increasing problem for the medical practitioner in keeping up to date with all that is important and relevant. The medical profession has perceived that effective continuing education techniques minimally should equip the practitioner with the information and the skills necessary to tackle this problem.
Internationally, the profession has shown a move towards more formalized recognition of continuing education based on credits for participation. Australia, Canada, and the United States have led the field, with Europe following. Significantly, the UK nurses have also been making progress towards a more formalized system for continuing education. These national and international manoeuvres have led to peer pressure on the UK medical profession, which had been reacting in piecemeal fashion until the CRCF declaration.

Political interest in continuing education for doctors has arisen within the most recent National Health Service (NHS) reforms. Continuing education was included in one of the Working Papers from the original White Paper and more recently has emerged as the third strand of initiatives aimed at regulating and improving the activities of the medical profession (clinical audit and the research and development initiative being the first two). The ultimate aim can be seen as one of increasing the accountability of the profession for its actions within an NHS driven by costs and effectiveness.

The expertise and knowledge of the medical profession is also now more readily questioned by the users of a doctor’s services. This consumerism has been heightened by the recent reforms and the Patients’ Charter; patients want to know, and feel that they have a right to know, that their doctor is competent. Commissioning authorities and managers want to know that the services that they are contracting for are being provided to the highest standards achievable, and the same is true of trust managers and others who employ doctors.

The response of the profession

The response of the profession to this new interest in continuing education has been directed at maintaining continuing education as a professional pursuit and ensuring that the profession is in formal control of any changes. This is exemplified by both the 1993 CRCF declaration on CME and the manner in which most of the Royal Colleges and Faculties have responded to it.

Examination of the responses reveals a fairly coherent response from all elements of the profession. There has been recognition that ad hoc CME was already taking place, and the responses appear to have been developed to incorporate this traditional pattern of participation. Thus the main element of the formalized CME response has been to record existing CME participation through credit systems similar to those introduced in Australia. Intercollegiate debate has focused on harmonizing the credits awarded for different CME activities. Minimum levels of expected CME participation have been set and possible sanctions proposed for those practitioners who fail to achieve these targets. Most colleges are also proposing to produce and possibly publish ‘white lists’ of those career-grade clinicians who have achieved the minimum CME requirements. Some Colleges are also debating linking CME with reaccreditation. Aspects of the evaluation and the effectiveness of CME have only recently reached the agenda for some, but not all, Colleges and Faculties.

The majority of the responses from the Royal Colleges and Faculties are narrow in scope and confined to the professional bounds of CME. They fail to take into account much of the vast literature on adult learning and what is known about the effectiveness of continuing education for the medical profession. The question needs to be asked, given the external vested interests in the competency of doctors, can the profession afford to follow this traditional pattern and format for continuing education, or should it be making more effort to be innovative and proactive?

Effective CME

The literature on both adult learning and CME is extensive and there have been some recent systematic reviews which have addressed the issue of effectiveness. The most important theme which emerges, from the published literature, is that of relevance. This means not only relevance to a perceived learning need, but also to the work that is currently being undertaken and the ability to see the applicability of the learning experience to real-life situations. From this central principle it is possible to work outwards to the various components of adult learning and CME which have been found to be effective and to define valid CME criteria, programmes, products and assessments.

Underpinning relevance is the requisite that continuing education is based around an individualized programme which includes identification and assessment of an individual’s learning needs on a regular continuing basis. This should ensure that there is a commitment to learning which is planned and systematic rather than ad hoc.

The assessment of learning need recognizes that an adult learner brings his or her own experience to a learning situation. As the objective assessment of learning needs is not easy and doctors do not necessarily have the skills for self diagnosis, they may select subjects of personal interest rather than topics of professional or organizational need. Techniques are available which can facilitate learning needs assessment. Self-assessment packages, which highlight deficits in knowledge, and practice profiling,
which details current work and relevant educational needs, have been used successfully. Closely related to this latter technique is the concept of portfolio-based learning, which is currently being evaluated in the United Kingdom by both general practitioners (GPs)\textsuperscript{42} and the nursing profession.\textsuperscript{12} The portfolios accumulate documentation of practice experiences, educational opportunities and profiles of demonstrated competencies. Isolated lists of competencies needed by specialist doctors can be compiled and their attainment assessed but the portfolios should ensure that the holistic aspects of learning are not neglected.

The objective assessment of learning priorities can also be facilitated by discussion with others. This can be done in an \textit{ad hoc} manner with colleagues and peers or specifically designated individuals such as 'buddies', 'mentors' or 'co-tutors'.\textsuperscript{1}

Much of this has been developed by Schon in his concept of the successful adult learner as a 'reflective practitioner'; one who reflects on learning experiences, current status and future priorities in consultation with colleagues and who can then negotiate an individualized curriculum for future learning.\textsuperscript{43}

The theme of relevance extends deep into the 'wheres' and 'hows' of successful learning and CME. It needs to be recognized that professional learning (some might say most learning) does not take place in conventional educational settings. The value of the workplace as a rich resource and prime motivator for adults' learning has been acknowledged by many authors.\textsuperscript{35} This forms the basis for the adult learning theories focused on experiential learning such as those of Knowles\textsuperscript{35} and Schon.\textsuperscript{43} This experiential concept is important for CME and must be appreciated by both the individual doctors and those who seek to plan and monitor CME schemes.

Much of what has been judged to be effective by the systematic reviews of CME demonstrates the clear relationship of relevance (often immediate relevance) to current work and effectiveness. There are four strategies which particularly stand out.

The use of individualized feedback related to current work, possibly incorporating the use of a co-tutor, and reminders, usually activated during the patient consultation, can have important effects. Both can provide very compelling reasons to change practice and serve to reinforce knowledge gained from other CME activities.\textsuperscript{44} Motivated individuals are needed for a successful intervention,\textsuperscript{45} and the permanence of the effect is not guaranteed following withdrawal of the intervention.\textsuperscript{46}

Computerized decision support systems are now being developed and evaluated. These utilize computers, within the clinical setting, which have a knowledge base of information to which the characteristics of patients can be matched. Patient-specific information can then be presented back to the clinician. These systems offer learning opportunities which are directly relevant to practice. Resulting improvements in physician performance have been demonstrated, but the effects for the patient are undetermined.\textsuperscript{47}

Outreach visits and academic detailing are individualized methods of providing information. Trained individuals visit practitioners at work and attempt to impart relevant information; it can also be combined with feedback on practice. Variable effectiveness has been demonstrated.\textsuperscript{48–51}

Anecdotal data would suggest that the informed user or patient can have influence on practice if they are presenting or challenging information directly in the workplace. This has been seen with the change in UK childbirth practices over the last 20 years,\textsuperscript{18} and was powerfully demonstrated in Switzerland with hysterectomy rates.\textsuperscript{52} Limited effects have been seen when trials of patient education techniques are coupled with other activities such as academic detailing and workshops. Current research using the Shared Decision Making Programme may give more evidence about the effectiveness of influencing physician behaviour via the patient.\textsuperscript{53}

The provision of information is one of the most traditional and, one might say, ubiquitous methods for CME. The reviews have shown that here again relevance is of prime importance. The traditional methods of printed materials,\textsuperscript{37,48} journal clubs\textsuperscript{54} and didactic teaching\textsuperscript{42} rarely have a significant effect when used in isolation. There is increasing interest in workshops and small group discussions, but these are ineffective when there is no facility to put the information into practice.\textsuperscript{55} However, workshop-based interventions which employ practice rehearsal strategies have proved to be effective for both physician and patient.\textsuperscript{56} This ability to see something in action and to be able to try it out is seen as an essential element of changing clinician behaviour.\textsuperscript{57} It also explains why the use of local opinion leaders (or influential individuals) to take up innovations early and demonstrate their usefulness has been shown to have some effect in trials of CME.\textsuperscript{58,59}

The varied and uncertain effectiveness of the provision of information in the form of guidelines also demonstrates how essential relevance is. Nationally produced guidelines, though usually seen as more scientifically valid, are less likely to have a significant impact than those guidelines produced locally with the involvement of the relevant clinicians.\textsuperscript{60}

Incentives and sanctions have been discussed and proposed for some of the formalized CME programmes.
This does not sit easily with the theme of relevance and there is little published about their effectiveness. Observations would suggest that financial incentives can be effective, but such measures may increase the use of both appropriate and inappropriate procedures.

Combining strategies for CME can strengthen the effects of the interventions. As Davis et al. put it, 'there appears to be a direct relationship between the intensity of the intervention and the number of studies with positive outcomes'. Combined strategies may be effective because more than one obstacle to change can be addressed simultaneously. This will help those physicians who are experiencing more than one barrier to change and also deal with the fact that different physicians experience different obstacles in changing practice.

The lessons for public health

The studies on CME interventions and the systematic reviews of the effects are encouraging in that most interventions can have some effect, but there are none that are universally effective - 'there are no magic bullets'. The studies have mainly involved straightforward activities, such as prescribing, which are much easier to examine and to produce a measurable effect on than more relatively complex behaviours such as clinical management. Most effects have only been measured in the short term and are usually those that are easiest to measure, i.e. physician behaviour, rather than outcome for the patient, public or organization.

Little of the CME literature and, in particular, none of the research in the systematic reviews is concerned with the knowledge or behaviour of public health physicians, and almost all of the published research is based in North America. However, there are important implications for public health medicine.

The practice of public health medicine is rarely straightforward and thus presents a difficult challenge for those who wish to study the effectiveness of educational activities aimed at public health physicians. However, this does not mean that the evaluation of the effectiveness of educational activities should be ignored.

Public health physicians are adult learners and therefore the major theme of relevance which emerges from work both on adult education and CME should hold true for them. Experiential learning, which values professional practice as a source of knowledge and requires reflection on learning experiences and future needs, should prove both attractive to and effective for public health physicians.

Activities which seem superficially attractive, such as the isolated provision of information, are less likely to be effective than combinations of strategies. The opportunities for incorporating the results of audit, possibly using feedback techniques, into continuing education programmes need to be explored. The public health physician needs to take responsibility for his or her own educational requirements in organizational contexts; imposition from elsewhere is likely to lead to educational opportunities which are wasted owing to lack of relevance.

A strong question which emerges from the literature is whether a policy to extend CME alone will be sufficient for doctors. CME focuses on maintaining and updating professional knowledge and skills. This is a narrow focus for many doctors, particularly public health physicians, working in the changing and challenging world of health care. A much wider context of professional learning is embraced by the concept of continuing professional development (CPD). CPD is defined as the self-development of professional knowledge which includes essential reference to the personal, social and political aspects of medical practice. CPD can include reference to career progression, organizational, managerial and policy frameworks and the culture and values of health care professionals. CPD, unlike CME, can be a multiprofessional activity.

The public health medicine response

The Faculty of Public Health Medicine was obliged to respond independently to the declaration from the CRCF. The Faculty response has been slower than those of some of the other Colleges and Faculties but this has had advantages. It has allowed the Faculty to learn from the experience of others and, in particular, the Faculty has been able to examine some of the areas which have not been addressed in most of the other initial responses, e.g. the assessment of learning needs and evaluation.

The Faculty response builds on work that was initiated before the national CME declaration. Of particular importance was the national survey of CME in public health medicine from 1992 and the CME work which was beginning in Scotland. These foundations and the published literature have enabled the Faculty to produce two reports and begin the implementation of a scheme which focuses on evaluation, effectiveness and reflective learning.

Three essential elements to the Faculty initiative differentiate its response from that of most other colleges.

First, the Faculty has opted, after much discussion, for a CPD scheme. For a specialty such as public health
medicine, educational experience must encompass more than purely an update of medical knowledge, and thus CPD is seen as the way forward. It seems that other specialties are also now making this decision, encouraged by the Standing Committee on Postgraduate Medical and Dental Education (SCOPME) and its promotion of CPD. However, there remain those within the medical profession who see CPD as a purely managerial tool and CME as all that is necessary for the practice of medicine.

Second, the Faculty has initiated a pilot diary scheme (started September 1995). This incorporates the monitoring of wider educational experiences in an effort to fulfil the expectations of the CRCF declaration. However, the diary also attempts to ensure that relevance is incorporated into the recorded educational experiences. This is done by encouraging the assessment of learning need and reflection on and evaluation of anything considered to be an educational activity. The diary offers a broad framework to ensure that public health physicians view continuing education as their own responsibility and not as something that is being imposed. There is also the intention that this approach will allow an individual portfolio of learning experiences to be accumulated. Some of these concepts will be entirely new to the practising public health physician, who may be accustomed to educational activities arriving in convenient packages clearly labelled CME. The scheme will be evaluated during 1996.

The third element is the establishment of the new CPD Unit at the Faculty, which has attracted an initial funding for two years from the Department of Health. Most Colleges and Faculties have a CME or CPD office which is responsible for the monitoring of CME participation. The Faculty is unique in having a CPD Unit which has a primary remit for research on educational methods and effectiveness with a secondary responsibility for monitoring. Every effort should be made to exploit this resource effectively for the benefit of the specialty and the profession.

The future of CPD in public health medicine

There is a risk of extolling the virtues of the Faculty response prematurely, and there are problems; for example, the diary, as a research exercise, is necessarily mechanistic and complicated at present. However, the diary represents the first stepping stone on the way to escaping the credits-bound model for diary keeping and to developing a reliable portfolio of learning. It is also true that the Faculty response has shown greater innovation than has been seen among most of the medical profession. This innovation may reflect the fact that the Faculty has a smaller constituency with which to deal and thus the logistics of innovation in CPD do not seem too overwhelming. Whatever the explanation, there remains the opportunity for the Faculty to act as an opinion leader in the educational field and to demonstrate to the rest of the profession the principles of experiential learning and reflective practice.

The evaluation of learning experiences needs to be developed, and some of the data from the diary will begin this work. Evaluation is not a simple task, as the published medical literature bears out, and can be performed from different perspectives; for example, is it effective for the individual involved, the organization, the patient or the population? Other professions are also struggling with the concept of CPD and its effectiveness, and there may be important lessons available in the non-medical literature. The CPD Unit has begun work on how to access this information and to develop it into evaluation for public health medicine.

The links between audit and education need to be strengthened. It has been suggested that audit findings should be the main driving force behind the continuing education of clinicians. It is perhaps more helpful to see continuing education and audit as overlapping circles; knowledge gained in educational experiences can inform audit as much as audit demonstrates educational needs. For public health medicine there are also lessons from audit which need to be considered in the implementation of any permanent CPD scheme. Audit has lost momentum within public health medicine, and, although links with CPD may bring audit into focus again, CPD needs to maintain its current impetus and separate identity.

References

1 Standing Committee on Postgraduate Medical and Dental Education. A working paper for consultation on continuing professional development for doctors and dentists. London: SCOPME, 1994.
3 Miller GE. Continuing Education. What it is and what it is not. JAMA 1987; 258: 1352-1354.


Oxman A. No magic bullets. A systematic review of 102 trials of interventions to help health care professionals deliver services more effectively or efficiently. London: North East Thames Regional Health Authority, 1994.


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