Policy of Medical Action for Global Security (MEDACT, the UK affiliate of International Physicians for the Prevention of Nuclear War)

- A comprehensive test ban treaty
- Cutoff of the production of fissile and related material—military and civil plutonium, highly enriched uranium, and tritium
- A declaration of no first use of nuclear weapons
- Further progressive reduction of warheads and delivery systems, beyond START II, by all the declared nuclear weapons states
- Legally binding security assurances for the non-nuclear weapon states
- Standardisation of civil nuclear supplies (equipment and material) to non-nuclear weapon states, dependent on verifiable guarantees of use and enforceable by sanctions
- Signature and ratification, by an agreed date, of a convention making illegal under international law the production, testing, possession, and use of nuclear weapons under any circumstances

nuclear disarmament, will simply ratify the existing nuclear world order, at best perpetuating the status quo, but more likely ensuring the recurrence of crises such as that which recently convulsed the Korean peninsula.

Were the treaty to be extended unconditionally, the spread of nuclearism would continue. One does not

need prophetic powers to predict the use of nuclear weapons in the 21st century.

The international physicians' movement maintains that a different outcome is possible. The nuclear era is man made and can be ended by man. The proper course now is a finite extension of the Non-Proliferation Treaty with a critical new condition, namely a commitment to end the nuclear era with a binding treaty signed by the year 2000. Embodied in this document is a fixed and short time frame for eliminating nuclear weapons within the first decade of the 21st century. Without such an iron bound commitment to abolition, the nuclear powers will face a hydra headed monster in which dozens of countries will possess nuclear weapons.

A crossroads

The world is at a crossroads. As we make a moral reckoning at century's end, we need to ponder how it is possible that we have acquiesced to stockpiling weapons of mass extermination as the guarantors of a nation's security. We shrink in horror at the bestialities unleashed in Bosnia, Rwanda, and Chechnya, but these pale compared to the human savagery stored in nuclear weapons.

Will we bring in to the new century the diseased baggage of the old, or will humankind rise to a moral dimension by shedding genocidal weapons and at last giving peace a chance? Which will it be?

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Continuing medical education: a personal view

T M Hayes

Over many generations doctors have kept up to date in ways which reflect their own learning styles. The current fashion for formalised and policed continuing medical education may prove ineffective unless it is recognised that individual needs must be taken into account. Attendance at formal courses based on lectures and papers may not suit a large proportion of those who attend to acquire the necessary points to satisfy their royal college. The ability to show that health care teams are up to date should come from effective clinical audit, which should also identify local educational needs.

Medical education is in turmoil. The General Medical Council is rightly pushing universities to bring their undergraduate curriculums into line with the proposals that the council first made in 1980 (and they were hardly revolutionary then). Postgraduate education has seen greater changes in the past few years than in the 30 or so since the Christchurch conference of 1961, and with the implementation of the Calman proposals for a shorter structured training it will continue to change for at least the next five years. The third phase of medical education—continuing medical education or continuing professional development—has joined the turmoil in the past year or so, but some of the proponents of important changes in this area seem to be working from the premise that continuing medical education is new. Continuing medical education has been with us as long as there has been a medical profession. The provision of some central continuing medical education meetings has been recognised as a function of the royal colleges for decades and, in the

case of the older colleges, centuries. Locally organised continuing medical education started with the development of local medical societies in the 19th century and became an integral part of medical life throughout Britain with the establishment of postgraduate medical centres in the 1960s.

What is new in the current proposals for continuing medical education is the requirement by the royal colleges and faculties for increasing regimentation and central accountability for continuing medical education activities. The various proposals put out by the

"Continuing education should mean continuing self-education not continuing instruction."¹

colleges include formalisation of continuing medical education, making attendance (which is not the same as participation) mandatory, and recognition of "professional obligation" by inclusion in a list of specialists published by the college. Some colleges have suggested sanctions for doctors not complying with their diktats, such as removal of training approval from units where consultants have obtained insufficient points.

Why change?

The common excuse for these college proposals is that the public and politicians require doctors to be

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A menu of educational opportunities would allow doctors to take up options that fit with their own learning styles

competent. One royal college president in the introduction to his college's statement on continuing medical education said: "There has been increasing pressure on medical practitioners to demonstrate that they are subject to continuing education."² But is this so? Patients rightly want their doctors' performance to be up to standard, but performance is not the same as competence. To perform satisfactorily a professional certainly needs to be competent, but many things can come between that competence and his or her performance: resources such as time, staff, or facilities may be inadequate; the team may not function satisfactorily; and behavioural factors may restrict performance. Performance could be measured by clinical or medical audit, and this would provide a much better basis for assessing individuals' and teams' needs for continuing medical education than the decisions of central committees.

Is continuing medical education effective?

Little evidence exists that formal continuing medical education—that is, attendance at traditional courses and conferences—has a significant effect on performance or competence. In the state of Illinois continuing medical education became mandatory in 1978, and then the law was repealed in 1984. Studies of the effect of implementing then repealing this law showed that the doctors in Illinois noted no difference in their participation in continuing medical education before, during, or after these periods.³ The institutional suppliers of continuing medical education, however, who clearly had an interest in ensuring attendance at their events, believed that attendance increased after the law was introduced and decreased after it was repealed. Eighty two per cent of the suppliers and 81% of the doctors believed that repeal of the law had no effect on the quality of the care that they provided for patients. An epidemiological study in Kansas showed no relation between attendance at continuing medical education events and perinatal mortality or the use of certain surgical procedures.⁴

Davis and his colleagues analysed 50 randomised controlled trials of continuing medical education.⁵ Only eight of the 18 studies that examined patient outcomes showed any benefit from continuing medical education. Most of the 43 studies that examined doctors' performance showed some significant changes. However, as no evidence was presented on the magnitude of change some of the reported changes may not have been significant in any practical sense. Continuing medical education that was concerned only with disseminating information had little or no effect

on health outcomes and was less likely to alter the performance of doctors. The authors concluded that much of the criticism of formal continuing medical education is justified and emphasised that for effective education, learning needs had to be determined objectively. To find 50 satisfactory trials the authors had to review 777 papers. There is no doubt therefore that continuing medical education generates interest, but this interest may reflect the continuing uncertainty over the value of some types of continuing medical education.

Individual learning styles

Most doctors keep up to date largely through informal means that fit with their individual learning styles. The evidence from studies on the diffusion of information is that doctors change their practice as a result of information spread through interpersonal networks; findings are similar in other professions.⁶ Doctors learn most from contact with colleagues, bringing in specialists to consult, listening to junior staff, browsing through favourite journals, and reflecting on their practice. The most useful part of conferences and courses is commonly considered, even by ardent delegates, to be discussion in the bar in the evening or the "corridor effect."

Adults learn best when they recognise the need to learn and perceive the relevance of what is to be learned to their work. They should also participate in the planning of their education. All these requirements could be met when continuing medical education is designed in response to audit findings and is based largely in the workplace. Audit would also help in ensuring that doctors do not confine their continuing education to topics that interest them and avoid those that may not interest them but are needed to ensure a high quality service to patients. Specially designed courses at special centres to meet identified needs which cannot be met locally—such as training in laparoendoscopic surgery—would be needed, although these would represent a small part of continuing medical education.

The way forward

In an ideal world, therefore, doctors and clinical teams would be helped to identify their learning needs through audit and peer review; the Royal College of Surgeons has already enabled surgeons to undertake personal audit of one part of their work—the results of their operations can be compared with those of their colleagues. Having identified his or her educational need, the doctor—or the team—would be helped to plan his or her continuing medical education by a clinical tutor, college tutor, or other colleague trained in the educational principles underlying continuing medical education and aware of the range of educational facilities available. A menu of educational opportunities would allow the individual or the team to take up the options that fit with their learning styles. This might include any combination of, for example, local activities, attendance at appropriate meetings, participation in distance learning courses, visits to colleagues, reading programmes, and courses. Resources for such activities could be made available by the royal colleges and specialist societies—indeed, some are already available from these bodies.

The full educational benefits of clinical audit have not been reached. Kerrison *et al* said: "In practice the connection between postgraduate medical education and audit appeared to be weaker than envisaged in the policy statements."⁷ The opportunities to use audit as a method of both reassuring the public about doctors' performance and providing an assessment of educa-

tional needs should be taken up, and the development of a continuing medical education industry based on uncertain evidence of effectiveness, as has occurred in other countries, should be avoided. Linking audit and peer review to continuing medical education would allow anxieties about the effectiveness of continuing medical education to be addressed, would permit local ownership, and would allow doctors to choose learning methods that both meet their own educational needs and fit in with their personal learning styles. Such a link would avoid the need to introduce sanctions as, with audit as the monitoring instrument, participation and the attainment of satisfactory standards of performance would be documented. The emphasis on local provision would also help to overcome the conflict of interests that might arise when a royal college both approved or accredited continuing medical education programmes and also provided continuing medical education.

Conclusions

It is and always has been a fundamental requirement for any professional to keep up to date in his or her profession. Like breast milk and a high fibre diet,

continuing medical education is without doubt good for use. Why then has activity erupted among those who wish to manage, control, and codify continuing medical education? Britain is rapidly moving down the road, well trodden in other countries, towards a rigid, formalised, and policed continuing medical education industry. Continuing medical education is in danger of becoming a behemoth, a lumbering, unbending monster, and this burgeoning industry is based on assumptions that remain unproved. A shift from centralised to local provision linked to peer review and audit will avoid these hazards.

- 1 Miller G. Continuing education for what? *Journal of Medical Education* 1967;42:320-6.
- 2 Royal College of Anaesthetists. *Continuing medical education*. London: RCA, 1993. (Report of a working party.)
- 3 Illinois State Medical Society. Mandatory continuing medical education. *Illinois Medical Journal* 1988;173:273-6.
- 4 Lewis CE, Hassancin RS. Continuing medical education—an epidemiologic evaluation. *N Engl J Med* 1970;282:254-9.
- 5 Davis DA, Thomson MA, Oxman AD, Haynes RB. Evidence for the effectiveness of continuing medical education. *JAMA* 1992;268:1111-7.
- 6 Rogers EM. *Diffusion of innovations*. 3rd ed. New York: Free Press, 1983.
- 7 Kerrison S, Packwood T, Buxton M. Monitoring medical audit. In: Robinson R, Le Grand J, eds. *Evaluating the NHS reforms*. London: King's Fund Institute, 1994; 155-77.

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Management for Doctors

The importance of quality: sharing responsibility for improving patient care

Fiona Moss, Pam Garside

This is the fourteenth in a series of articles dealing with issues arising as clinical practitioners increasingly take on managerial roles. The series is edited by Jenny Simpson, chief executive, British Association of Medical Managers. The book of the series is available from the BMJ Bookshop

In health care quality is usually understood in the context of "clinical quality" and an implicit distinction is drawn between managerial and clinical activity. The separate introduction and development of quality initiatives within the NHS has contrived to accentuate the different notions of quality that follow traditional "tribal" divisions within hospitals. Nurses often led quality assurance programmes, while doctors took up medical audit, and managers found that risk management programmes had something to offer their professional concerns. The recent directives to develop clinical audit go some way to addressing these divisions. But the onus of meeting the patient's charter initiatives has provided yet another separate focus for quality improvement within hospitals.

In other organisations quality improvement is often linked to the concept that quality should be a characteristic of the whole organisation. The process of quality improvement and quality control in the industrial and business world is dominated by the theory and application of total quality management (TQM). This approach to management developed after the second world war when Japanese industrialists, keen to compete with other economies, engaged American experts to advise on the application of statistical techniques to the production process. These advisers, who included W Edwards Deming and Joseph Juran, understood that documenting the technical quality or the specifications of components on a production line would not in itself produce lasting improvement in the quality of production. Instead, by introducing principles and techniques drawn from a wide range of disciplines, they advocated the development of an internal approach to quality improvement, where everyone in the organisation is part of a continual drive to do better. Together, these principles and techniques are described as TQM. The successful

results of the application of this approach to manufacturing by the Japanese are well known.

Much has since been written on TQM and its philosophy. Some of the characteristics of TQM are shown in the box. To doctors and others working in health care much of this may be interpreted as jargon: as an approach to quality that originated in the industrial world, it has little relevance to the work of health care where customers would often rather not have the need to seek our services. The disadvantage of the divided views and approaches to quality that are endemic within the NHS is that the potential capacity of any group alone to improve quality is limited. Any approach to quality improvement in health care, to have any chance of success, has to be integrated.

The principles of TQM are far reaching and its introduction into a hospital or community trust as a mechanism for quality improvement would require extensive project management. It would also require long term major organisational and cultural changes, and would not be seen to satisfy the many short term pressures to improve quality that trusts are now experiencing. Nevertheless, there are lessons that can be derived from a TQM approach to quality within an organisation that are essential for developing an integrated approach to quality improvement within health care. Instituting any aspect of TQM will require trust and understanding between managers and clinical staff.

In this article we look at the necessity of management skills in the pursuit of improved quality, including the quality of clinical practice, drawing on some of the lessons from TQM. The discussion is based on a case study that incorporates three separate scenes from one hospital. We do not aim to provide all the answers, but rather to suggest approaches to improving the quality of care through a wider organisa-

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