of Greeks and Italians to Australia and their presence has done much to encourage the widespread adoption of putatively low risk Mediterranean diets.

Victoria may yet have lessons for its British parent. Both share the tradition of a strong voluntary sector which, in Victoria, has found expression in health charities as determined to apply existing knowledge for prevention as to support the development of the new. But they, and many other organisations throughout society, also have the benefit of strongly supportive national policies and of state guaranteed funds on a scale that is not entirely incommensurate with the task of changing health determining habits: for a population the size of England's, the total yearly Victorian Health Promotion Foundation's budget is equivalent to around £140 million, and much of it goes to the voluntary sector. In England £0.25 million has been allocated in 1992 to fund preliminary voluntary sector work in support of the Health of the Nation initiative.⁴

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Medical Education

Teaching the teachers

Stella Lowry

This is the sixth in a series of articles examining the problems in medical education and their possible solutions

No proper review of an education system should ignore the role of the teachers. But in medical education the teachers are not easy to define. Many current debates about the future of medical education are going on among small groups of specialists, with no input from the vast majority of people who do the actual teaching. Many of the discussions are couched in educational jargon that effectively excludes many "jobbing doctors" who do so much of the teaching.

Medical teachers in Britain may be divided into three main groups: a tiny minority who are trained in educational theory and methods (who often are not medically qualified themselves), staff holding official "teaching" appointments but without formal teacher training, and NHS doctors who teach (in effect, most NHS doctors). Very few medical teachers have had any formal training in teaching methods or educational theory, but in this respect medicine is little different from most university courses in Britain. Medicine differs from many other professions, however, in the huge amount of teaching expected from all of its practitioners. This principle is enshrined in the Hippocratic oath (box) and emphasised in the new contracts for NHS consultants, all of which incorporate a teaching commitment.¹

Can anyone teach?

This tradition that teaching is part of being a doctor rather assumes that everyone can and should teach. It is not an attitude that would carry much weight in other educational circles, but it is easy to see its roots in the traditions of apprenticeship to a trade. The medical adage "See one, do one, teach one" is perilously close to

"I swear by Apollo the physician... that by precept, lecture, and every other mode of instruction, I will impart a knowledge of the Art to my own sons, and those of my teachers, and to disciples bound by a stipulation and oath according to the law of medicine...."

—Hippocratic oath

the mark, but Dr Jolyon Oxley, from the Standing Committee on Postgraduate Medical Education, thinks that such a system has some merits. In medical education there is a potential conflict between the desire to provide a broad educational experience and the need to ensure a technical training in how to be a doctor. Dr Oxley emphasises that the technical aspects are best taught by the people who do the actual job—"learning at the master's knee."

But there is growing consensus that the broader functions of a medical education, which are assuming greater importance in the undergraduate curriculum,² are not so easy to learn from someone untrained in educational method. The Committee of Vice Chancellors and Principals of the Universities of the United Kingdom has recently called for more training in educational methods for all university teachers.³ A national inquiry into the problems in medical education organised by the King's Fund identified the need for "professional expertise in curriculum development, teaching methods, and assessment" and for opportunities to be provided for regular training of academic staff,⁴ and Professor Ron Harden and colleagues, of the Centre for Medical Education at the University of

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Dundee, have identified staff development courses as an essential prerequisite for the successful introduction of major curriculum reforms.⁵

If doctors are to provide broad educational experiences for their students they must be trained to do so. Facilitating adult learning and developing self direction in students are skills in their own right. In a recent survey of consultant staff supervising pre-registration house officers in Yorkshire 79% admitted that they had had no training in educational method, yet three quarters stated that they would like it.⁶

What are the barriers?

Most doctors claim to enjoy training and want to do it well, but various obstacles to good teaching exist in our present system. Perhaps the most obvious is pressure of time. Few people are full time medical teachers, and service requirements, management responsibilities, audit, and research all compete with teaching for staff time. One respondent in the Yorkshire survey summed up the difficulties: "One has to recognise that the pressures on consultants are increasing steadily—workload, management, teaching, financial control, reduction of juniors' hours. . . . Consultants are bound to fall down on one of these."

This conflict of interests would not be so bad if teaching was seen to have an equal claim with the others on doctors' time, but too often it is pushed into last position in the list of priorities. This was clearly identified in the consensus statement from the King's Fund: "Until teaching is recognised to be an important professional activity (comparable in status to clinical service, research and management) it is unrealistic to expect those involved to devote the necessary time and effort to planning and implementing any new curriculum."⁴

During my researches for this series I did not meet a single person who thought that teaching excellence receives adequate recognition in the medical world. No doctor could hope to be appointed to a job or advance his or her career, even in a so called teaching hospital, on the basis of teaching skills alone. Teaching experience is often ignored in applications for medical posts.

Assessing teaching quality

The problem of ensuring that teaching receives equal weighting with research and administration is not unique to medicine. The Committee of Vice Chancellors and Principals' report suggested that part of the explanation for paying little attention to teaching skills in appointing university staff is that many people believe that it is hard to measure teaching ability. But the report concluded that undue emphasis is placed on inquiries about research experience in the mistaken belief that it is easier to assess a candidate's research abilities.³

The report did, in fact, identify ways in which teaching skills could be assessed. Among other things it suggested that teachers should be assessed on the clarity of their teaching objectives; the quality of their notes, handouts, and visual aids; qualitative assessments of their performance in lecturing, fieldwork, etc; the volume and range of teaching they undertake; the range of assessment techniques they use; managerial responsibilities and innovative approaches that they take on; and the number of invitations they receive as guest lecturers and speakers elsewhere.

An interesting experiment was conducted recently at McMaster University, Hamilton, Ontario, to see whether teaching tasks could be quantified sufficiently to form the basis for financial reward.⁷ On the assump-

tion that any reward system should be public, consistent, and reflect the values of the faculty, the researchers devised a questionnaire based on paired presentations of 10 common educational tasks. For each pair eight longstanding members of the medical school staff were asked to indicate which task represented the greatest intellectual challenge and which the greatest amount of "hassle." There was remarkable consistency among subjects in the rankings obtained, and also the suggestion that tasks like teaching interviewing skills—which are difficult to recruit staff for—received high hassle scores. The researchers concluded that such an approach might be extended to develop ways of rewarding people fairly for the educational tasks they undertake.

Solving the problem

A pressing need in reforming medical education is to redress the imbalance between teaching, research, and administration. Not everyone can or needs to excel at everything, and unless people are allowed to concentrate on what they are good at we may be wasting valuable resources. The Committee of Vice Chancellors and Principals' report suggests that more flexibility should "allow staff to be used considerably more effectively than under the present system, where research is considered the prime and often only road to reward and promotion and hence staff expect that the balance of their tasks should be broadly the same for all."³

At present funds are allocated to universities by the Universities Funding Committee on the basis of the research grants and scientific papers generated by departments. Some attention should also be paid to the amount and quality of teaching that goes on. The inclusion in NHS consultants' contracts of a formal commitment to teaching is a step in the right direction in that it acknowledges that most doctors teach to a greater or lesser extent. Having established that principle, however, we should move on and demand greater flexibility in interpreting that commitment.⁸ Within a department it must be possible for people who have particular interests and aptitudes for teaching to take on a greater share of the load. Nor should we expect the very few who do not want to teach to continue to do so when they might be more usefully employed in management, audit, service, or research tasks.

Status for teaching

Allowing doctors to choose whether to spend time in teaching, or research, or management will work only if all of the options are seen to be of equal importance. Dr Colin Coles, from Southampton, emphasises the importance of staff development for those who want to pursue teaching interests.⁹ He also thinks that we must develop a culture that demands certain standards from all teachers and accords high status to the few who choose to develop their teaching skills further. Reward does not have to be financial—there is already considerable kudos attached to being an examiner for the major postgraduate colleges and faculties, and we should try to find ways of extending such attitudes to other teaching responsibilities. We should develop systems to reward teaching excellence, both on a daily basis and, possibly, through schemes like the merit awards. We must also ensure that teaching is seen to be important, and a simple way to start is to insist that all doctors must document their experience when applying for jobs and that all appointments committees should ask about it.

Dr Jolyon Oxley of the Standing Committee on Postgraduate Medical Education warns that we must

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Most NHS consultants have a teaching commitment, yet few receive any training in educational method

not reach a stage where teaching is done "only by the professional educators." He thinks that it is more important to convince doctors that "teaching" is a broad term and covers much of what they do every day and to ensure that they receive adequate training and support to carry it out well. Even if we encourage some doctors to specialise in medical education, most of the day to day teaching will remain the domain of jobbing doctors. We must ensure that they receive ample opportunities to improve their skills and monitor their progress.

The Standing Committee on Postgraduate Medical Education is due to report soon to the secretary of state for health on how staff in NHS teaching hospitals can be helped to teach better. Among the likely recommendations are the provision of proper staff development courses in teaching techniques; providing protected time and resources for teaching; and better planning, management, and evaluation of teaching methods.¹⁰

St Bartholomew's Hospital Medical College, London, now insists that all new appointees should attend at least one approved teaching course in the year after taking up a post. Although the college makes no further formal demands, staff are encouraged to take part in regular updating courses. Ideally, all doctors should participate in regular ongoing appraisal and training to ensure that they are providing a good service to their undergraduate and postgraduate students.^{11 12} The job of training future doctors should be too important to leave to chance.

Sticks and carrots

Colin Coles suggests that the "carrot and stick of reward and reappraisal should be introduced more widely in medical education," with rewards for good teachers and help and, if necessary, penalties for bad ones. Already some medical schools have made progress in implementing such schemes.

In 1978 a committee was established at the University of Washington School of Medicine, Seattle, to develop a programme for evaluating teaching in the school.¹³ The committee identified two important functions of such evaluation—to improve teaching and to help to make more informed decisions about staff promotion. The committee's recommendations led to the introduction of formal rating forms on which students graded staff performance in terms of organisation, clarity, and enthusiasm. These assessments were found to have high interrater reliability.¹⁴ A system of peer review was also introduced to make qualitative

judgments about teaching abilities. Members of staff inform the peer review committee of their teaching responsibilities and of any educational research, staff development courses, or local or national initiatives on teaching that they have attended. A protocol for peer assessment by observing teachers at work was also designed. The scheme, which took three years to devise, is now used in decisions about staff promotion, and since its introduction the average ratings for staff members have improved.

He who pays the piper . . .

Such innovative schemes are not confined to the United States. Helen Pearson, lecturer in medical education at the University of Leicester, has introduced a scheme whereby SIFT money (service increment for teaching; the additional resources provided by the NHS to help offset the extra costs of providing health care in a teaching hospital) is allocated to hospital departments in proportion to the amount of actual teaching that students receive. Students fill in detailed diary records of the teaching each week, recording the setting, time spent in direct teaching, additional time during which students were "learning something" although no formal teaching was going on, grade of the person running the teaching session, etc. Students fill in diaries on a rota basis, with regular cross referencing to check on the accuracy of the entries. In 1991 information was recorded on 3500 student days in the third year alone.

During an introductory lecture the students are reminded that they are entitled to their teaching, and compliance with completing the diaries is high. The data collected allow the medical school to calculate the time actually spent on teaching at each site. SIFT money is then allocated in proportion to the direct costs of teaching in each unit. The scheme was introduced in April of this year with recommendations to the hospitals about allocation to individual departments. From 1993, however, the departments will receive their money directly, after the fund has been top sliced to pay for the hospitals' infrastructure costs.

The data allow the medical school greater control over the teaching going on in the hospitals. One unit lost over £50 000 when the scheme was introduced, because it was found to be doing much less teaching than had been estimated. Information is also collected about the quality of teaching received, and although this has not yet been formally used in allocating money, one department did have part of its grant withheld for several months until it introduced clear teaching objectives.

Each department takes part in a six monthly review of its teaching quality based on the diary records, and Dr Pearson thinks that eventually the school would be able to move teaching contracts to where the good teaching is. The scheme has made it clear to managers that the teaching contracts represent a substantial part of each hospital's budget, and Dr Pearson says that most managers are now very anxious to work with the medical school to ensure a good service for the students.

Conclusion

Almost all doctors are teachers to some extent—involved in formal or informal training or supervision of students, junior staff, and other professionals. But, perhaps because everyone does it, teaching has a traditionally low status in the medical world. Changes in the sort of education required by students mean that a more professional attitude to teaching must be developed.

We can no longer assume that because someone can

do the job they can teach the skill. We must train staff to teach as effectively as possible and should encourage them to see this as an important part of their job. We must also encourage a few enthusiasts to specialise further, taking responsibility for coordinating teaching in their departments. This must be seen as a specialist task, on a par with other administrative duties and research commitments. Proper financial reward should go to those who undertake this important task. Teaching excellence should be rewarded, and there should be real penalties for individuals or units if they fail to fulfil their teaching obligations.

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London after Tomlinson

Managing change: the human aspects of the NHS

Eva Lauermann

This is the ninth article in our series looking at the issues highlighted by the Tomlinson report into London's health care and medical research and education.

Whatever ministers actually decide about London following the Tomlinson report, the changes are likely to be largescale and affect many staff and patients. Therefore how well those changes are handled becomes crucial to their success. The NHS has much to learn from other industries and organisations that have been through similar changes. Firstly, there needs to be an overall strategy for the change, rather than individual units trying to manage their own parts of it in an ad hoc way. Secondly, how well those made redundant are treated is an important factor in maintaining the morale of those who stay behind. For those affected by changes the NHS needs to provide full information, imagination, time, emotional and practical support, and money. Though decisions need to be made quickly, their implementation should take as much time as is necessary.

The changes identified by the Tomlinson report are of such a magnitude and involve so great a culture change that the planning and decision making will need to be made with a great deal of care and integration. The great danger is that each individual hospital or other part of the NHS affected will endeavour to tackle its own immediate problems without any awareness of help from practices elsewhere. The size of the changes demands that all parts of the NHS (at least in London) pull together to provide a coordinated response.

Parallels with British Airways

This article explains in more detail why establishing effective strategies for change is so important rather than leaving everything to ad hoc decision making. It draws on extensive experience of managing similar change in the private sector—namely, at British Airways, whose pilots and cabin crew in some ways resemble doctors and nurses. In particular, there are parallels between pilots and doctors. Both groups are highly skilled, they hold positions of great responsibility for other people's safety, and they have a public image to maintain. Both groups strongly identify with their professional bodies and tend to feel more allegiance to their profession than to their individual employer. In many cases they also have private

businesses outside their mainstream employment (many pilots run small businesses in their spare time).

At the beginning of 1991 British Airways decided it must reduce its workforce by 4500 within six months. The reductions were at all levels, including pilots and senior managers.

A traumatic change of this kind obviously raises major issues for the policymakers and the managers who have to bring it about. Equally, it raises major issues of a different sort for the individuals directly affected. How can the individual prepare best to manage the personal impact of the forthcoming upheaval?

For policymakers the key point to recognise is that the way that people whom the organisation wishes to lose are treated is paramount, not just for their sakes, but also for those whom the organisation wishes to keep. There is extensive empirical evidence to show that if people who are leaving are treated well the quality of the service or product is maintained. This is particularly true for staff engaged in delivering a service.¹ Studies of turnover and productivity following changes support this. If the actions taken are brutal not only does the performance of the remaining staff deteriorate but the level of staff turnover also increases dramatically once good times return. As a previous personnel director of ICI once said, treating people well makes good moral sense—and even better business sense.

Need for a coherent strategy

On the policy side, the Department of Health and the NHS (Management Executive) need to create a coherent strategy for implementing the changes. The critical questions such a strategy needs to answer include:

- What policies to adopt? For example, will there be enforced redundancy? If so, what criteria will be used?
- What support will there be for redeployment and retraining: budgets, resources, relocation?
- What role will the human resources function perform?
 - In counselling?
 - In providing information?

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