The physician as educator

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I will ... hold him who has taught me this art as equal to my parents and ... live my life in partnership with him, and ... give a share of precepts and oral instruction and all the other learning to my sons and to the sons of him who has instructed me and to pupils who have signed the covenant and taken an oath according to medical law ...

Extract from the Hippocratic Oath, 4th Century BC

Why should the College have chosen now to reaffirm the time-honoured principle that physicians should educate? Junior clinicians have traditionally learned their craft through apprenticeship, learning from and modelling themselves on their seniors. Physicians have always had an important place in medical education, and most of them have educational responsibilities throughout their careers. There has been no fundamental change in the value system of medicine and no new trial or meta-analysis that has somehow changed medical education. Educational theory suggests that some changes of emphasis are due, but traditional methods have not become obsolete overnight. There is renewed interest in medical education because there are new needs and opportunities. Education is also in the public eye, in the political arena, and under pressure. Ironically, some of that pressure has been created in the name of education.

The educational system under pressure

Many recent changes in clinical service delivery have been counter-educational. Team-working has given way to shift-working, with an emphasis more on defined individual hours of work than on shared professional goals. Learners may finish their shift with no debriefing on the critical incidents that shape their professional development, let alone from someone they know. The concept of educational supervision is laudable, but working lives are now so structured that apprentice and mentor meet as often by appointment (sometimes as relative strangers) as by rubbing shoulders in day-to-day work. The 'buzz' that comes from working up difficult clinical cases is overshadowed by the need to clear beds. Fast-tracking batteries of ill-understood investigations take precedence over the systematic collection of data and the generation and testing of diagnostic hypotheses. Consumer expectations of a consultant-provided service increasingly disenfranchise doctors in training.

It is not clear how far the new, more formal role of the physician-educator has been driven by those changes in clinical service or by educational ideology. It is wholly for the good to remind people that junior posts are training posts and that mentorship is pivotal — but some supposed enhancements of education give the opposite message. To take junior and senior house officers (SHOs) away from the workplace for abstract, didactic teaching that does not relate directly to the patients under their care devalues workplace learning and is educationally inefficient. House officers realise this, which is why attendance has to be enforced, but they are left to reconcile the work that piles up during protected study periods with their responsibility to be educated. Clinicians rush their ward rounds and have no time to discuss cases over coffee so as to have time to give lectures to their junior staff. Meanwhile, SHOs prepare for an examination that is seen to reward recognition of zebras more than the mucking out of horses.

It is too soon to evaluate the higher specialist training arrangements, but here the pressures undermining general professional training may have some paradoxical benefits. Registrars remain closely attached to consultant mentors and, in some hospitals at least, have clearly defined, continuing clinical responsibilities and a heavy case load. They are more confident than house officers, have a clear direction of travel, and are well placed to learn from clinical experience. A clearer focus on competencies, as opposed to experience, could assist them in that process.

Continuing education

Continuing medical education (CME) and the impending introduction of revalidation are most in the public and political gaze. Perhaps the pressure for accountability is to blame, but there are similarities with the trends in postgraduate medical education:

- moving education out from the workplace
- excessive emphasis on the acquisition and testing of theoretical knowledge
- removing responsibility from the individual by policing
- failure to respect individuality and to recognise that it is quintessential to professionalism.

Of course, individuality can sometimes go badly wrong, but does it happen often enough to bring all clinicians down to some lower common denominator? There is little evidence that taught CME influences clinical outcomes for the better, so it is certainly timely that the College is
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willing to consider giving CME credit for learning sparked off by cases under our care. Declarative knowledge is necessary, but by no means sufficient, for clinical performance. Experienced clinicians seem to practise from a highly individual interpretation of experience, rather than from some definable common core of knowledge, so are MCQ scores really what we should be measuring or are we being seduced by their measurability? Skills need constant refreshment and reinforcement. Does conventional CME pay little attention to them because they are more labour-intensive to teach and test than knowledge, or has our profession simply not woken up to the concept of transferable skills? And what about attitudes? They are at the heart of professionalism, but are likely to be squeezed out if measurability is what counts.

The naïveté with which we physicians approach our own learning shows that we have something to learn about education. There is a positive side to the argument. Physicians who bring modern educational principles to the workplace will serve their own educational needs in tandem with those of their learners, to the benefit of their professional satisfaction and clinical effectiveness.

The essence of medicine

The changes that have occurred in university medical schools deserve mention. Anyone with a university affiliation will say that the research assessment exercise rules all nowadays. New professorial appointments are investments in projected grant income and publications. This would be irrelevant to the present discussion except that:

- the biological sciences dominate research productivity and become ever more 'microcosmic'
- professional and educational leadership is traditionally vested in biomedical research leaders
- although over half their income is tied to education, universities have been slow to recognise education as an academic discipline in its own right with something important to offer to medical professionalism.

The General Medical Council expressed the dangers of disproportionate emphasis on the biological sciences in Tomorrow's Doctors, its far-sighted manifesto for change in undergraduate medical education. It can be argued that the limitations of science-based medicine have brought us to a crisis of confidence in our profession, demanding an urgent reappraisal of professional values.

Enough, then, of criticising the status quo. What should be the approach of the physician-educator? To answer this, we must have a view of the whole task of medicine, as well as of educational method. In his now classic study, Donald Schon set out to define professionalism by observing the supervision by apprentice-masters (including an architect, a psychotherapist and a town planner) of their trainees. He demonstrated the limitations of the 'technical rationalist' view of the professional, which would see the doctor as a sort of technologist who applies stock solutions to a range of clearly defined situations. In contrast, he found that professionalism was an ability to tackle an inherently 'messy' and multidimensional situation, and to define a problem amenable to his/her experience and expertise in order to find a solution. He noted a dynamic interplay between the professional and the problem being tackled. The educational dimension of Schon's work is that professionals learn by stepping back and taking stock of their experience (reflection-on-action). This cyclical process of learning driven by experience is a dominant theoretical model of how adults learn.

The importance of Schon's work is that it warns against too simplistic a view of medical competence, and puts 'on-the-job' learning and the whole professionalism of the physician (including the moral dimension) educationally centre stage. The complexity of medicine was nicely captured in the phrase 'only half of patients have evidence-based problems'. Those planning compulsory CME and revalidation will have to resolve the tension between the aspects of medical competence that can be measured and those that matter to patients.

Towards workplace learning

There was never a more fertile educational environment than the clinical workplace. The questions raised in this editorial could be ignored when education by apprentice-ship could proceed at its own pace in a haphazard fashion, but now we are in a new era of cost-constraint and accountability. The institutional response has been to introduce systems and structures, some of which are counter-educational. My central thesis is that high-quality education must, as it has always done, start and end in the workplace. How can that be achieved? First, we must recognise that education and excellent clinical care are concordant. A randomised clinical trial has shown that patients value having time spent discussing their care in their hearing at the bedside, provided that clinicians show sensitivity in their choice of language. An accompanying editorial made a plea not to allow old-fashioned, Oslerian bedside teaching of clinical method to be driven out by medical technology and efficiency pressures 'before it becomes a lost art'. In a recent survey, US residents took as their best role models clinicians who spent more time conducting teaching rounds, and who stressed psychosocial issues, particularly the doctor-patient relationship.

Teaching 'at the sharp end' of clinical practice seems to have a clear practical, moral and educational justification. Can we build on it? If modern educational theory has taught us one thing, it is that we should talk about 'learning' rather than 'teaching'. Most readers of this article will have learned some degree of computer literacy, but not through a lengthy theoretical course conducted away from the keyboard in 'cyber-speak'. They saw the potential of information technology, bought a computer, wrestled with it, sought expert help, and finally began to master it. Doubtless, the process would have been less painful with a little
more supervision and support, but ‘there’s no gain without pain’. Adults learn best when their interest is triggered and they take charge of their own learning. The modern physician-educator needs to provide learning opportunities, and to stimulate, support and help learners find their own way. Re-entering Hippocrates. Evidence-based medicine has been one approach, but it has had mixed fortunes, being decried in some quarters as a new orthodoxy which threatens the autonomy of the clinician. It deserves our support as a strategy for self-directed workplace learning that fits cleanly into busy clinical practice, apprenticeship and mentoring, and promotes the autonomy of the learner.

Training educators for the task

The College is currently taking a ‘physicians as educators’ initiative. I am definitely not enlisting Hippocrates to say that there is no need for it. Indeed, there are many aspects of principle and practice that it could cover. Through a change in the Manchester undergraduate medical curriculum to one designed to promote self-direction and autonomy, I have learned that teachers (and learners) who are strongly conditioned by a didactic educational experience must be introduced to adult learning principles, and usually find them a revelation. Physicians could be trained to teach skills. It was found that two-thirds of consultants in my own teaching hospital believe that interpersonal communication is a transferable skill and many have now learned to teach it. They could learn to use clinical skills’ laboratories to prevent patients being exposed to trainees who are completely untrained in practical procedures. Problem-based learning, evidence-based medicine – or whatever other method is chosen to promote cognitive learning – is a study skill with a clear, defined and interesting role for the tutor. Even role modelling could be enhanced by showing physician-educators how to assimilate Schon’s principles into their practice.

Conclusion

The physician-educators of the new Utopia will not, at first sight, look much different from those of today. However, their case load will not be crushingly heavy, and they will have the time and emotional energy to reflect on their practice alone or with their learners. They will learn through and about their patients, and receive credit for that learning. The ethos of education will be strong within their professional values, and patients will benefit from it. All will accept education as a core responsibility. Some will develop their careers in it. For them, the opportunities for scholarly activity, professional recognition and academic reward will be rich. Physicians will receive a training in education appropriate to their level of educational responsibility. Some will work for diplomas or degrees. Through their training as educators, they will understand their own expertise and learning processes well enough to pass them on. They will be respected for the breadth of their expertise. Learning will pass up and down the same channels of command as clinical decisions. Education will be firmly rooted in real clinical experience, though more explicitly than at present. Viewed in this way, Utopia is not far off.

‘Physicians as educators’ is a step in the right direction. However, without some relief from the pressures and conflicting priorities that are being imposed on physicians, Utopia will be indefinitely postponed.

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