Sorcery and apprenticeship

Malcolm C. Bateson
consultant physician
Bishop Auckland General Hospital
Malcolm.Bateson@cddft.nhs.uk

In the remote past medicine was largely a mystical practice of charlatans. There was little accurate fact and less effective treatment. Scientific rigor was notable for its absence. Any educated man might add the role of physician to his repertoire, as the human knowledge base was small and the literate tended to be polymaths. The alternative route was to sit at the feet of an established practitioner as a trainee, so that after a period of observation and supervised practice the neophyte could become independent.

Over the centuries the desire to drive up standards, the increasing influence of science, the availability of effective drugs and procedures, and the huge expansion of information led to the intellectualisation of medicine. Medical schools proliferated and there was a heavy emphasis on theoretical knowledge. Qualifications were registered and professionalism was emphasised. The process eventually became rather counter-productive. The medical graduates were rich in book learning but poor in practical skills. The procedures I was actually taught as a student were dissection of corpses, delivering babies and taking blood. The former was a gruelling academic exercise in anatomy with little emphasis on how hernias happen and can be remedied, or why people have strokes. Proficiency in obstetrics was fun but never practised after qualification so that women now somehow have to deliver babies on their own. Blood taking was featured because junior doctors wanted to use us as ward phlebotomists so they got out of the job.

The pre-registration clinical year was crucial in acquiring the skills needed to run wards. You learned a lot from the nurses and the sarcasm of senior staff over your mistakes. My first resuscitation was conducted in the middle of the night. I had never even put up a drip, so that the staff nurse who was my "assistant" told me what to do, showed me how, and did most of the work, leaving me to prescribe and document afterwards. It is different now!

Over the years I have acquired other techniques and learned something about methods of learning. My first liver biopsy was done because the consultant in charge asked if I could do one. I said yes though I had never actually even seen one. I went to read up the relevant book and did it entirely unsupervised. It worked well and I never looked back, but you cannot imagine it nowadays. Later an attempt was made formally to teach me gastroscopy using a simulated stomach. This was a total failure as it was nothing like real life, and I learned nothing until I was allowed to handle instruments in real patients. When I came to learn colonoscopy thirty years ago it was on the basis of the unit buying a colonoscope, and one of the local surgeons and myself having a go. We were both greenhorns. This widely used method of learning led to some very poor results elsewhere, and formal training and continuous audit are now integral to the procedure. There is an artificial colon, but I don't detect much enthusiasm for using this in training. Apparently the Americans have to practise on pigs before they get at humans.

ERCP was learned by the purchase of a duodenoscope, getting to know how to use it in standard gastroscopy patients and then attending three one-day courses to find out about ampullary cannulation and therapy. Flexible sigmoidoscopy came about because I was interested in having a new toy in 1983, bought one, watched the video and got stuck in. I seem to remember thinking this was quite an advanced training technique at the time.

On the whole, emphasis on practical experience rather than theoretical preliminaries has worked

well for me. Competence and confidence only follow when you have done lots of procedures.

I don't know if it is a benefit of the NHS or because of the benign trusting nature of most British patients, but I found that if it is explained that there is a new procedure or equipment of which I had no prior experience but felt might be beneficial, they have been invariably enthusiastic. "If you think it is a good idea let's give it a go, Doc" was a typical response.

The pendulum has swung heavily the other way. Trainees are now theoretically supposed to go on academic courses before they start doing anything. However, I suspect in practice experience precedes and is simultaneous with these exercises. How would you know if you would like to do endoscopy, or be any good at it, without having a go with the kit and real people?

The same trend has been seen in nursing, with four year degree courses instead of the old two or three year spell spent largely on the wards as semi-skilled labour. This had the perverse result of producing graduates who want to be managers rather than clinical nurses, while much of the physical work is done by unqualified auxiliaries who take National Vocational Qualifications on the job.

What is the solution? Probably some sort of hybrid with concurrent experience and theory. Certainly medical teachers are much better trained and able to cope now than in the past. In the 1970s I worked for 5 years as a medical lecturer without any formal training in education at all, which appalled my rather worse paid school teacher spouse. I also remember delivering medical lectures to nurses. My lack of appreciation of their needs and learning abilities probably led to their bafflement. However, I can tell you every word was written down, so I quickly learned to give up iconoclastic jokes and negative humour because they were all regarded as gospel and committed to the page in handwriting rather neater than mine.

I am happy to report I now have a full portfolio of educational training courses, in small and large group teaching, mentoring, practical training and others. I will retire perfectly qualified to teach the junior doctors who will be responsible for my own medical care in the future. However, as this certified excellence came rather late in my career, most of the new generation won't have had the chance to benefit from it!