Medical Education

Are doctors born teachers?

GRAHAM A O'BYRNE

At one time or another some doctors find themselves teaching medicine to others. This may be by lecture, demonstration, case study, or other method, and many will have had no advice on how to do it well. Consequently the people taught may not be much enlightened or enthused. As the "students" are predominantly doctors, medical students, nurses, and other health care staff it is the care of patients that suffers when the teaching is poor.

Six months ago I accepted a post as lecturer in emergency medicine to the United States Armed Forces in West Germany. I was contracted to train soldiers in prehospital emergency care, leading to their certification as emergency medical technicians. At the start I assumed that all would be plain sailing in the light of my previous teaching experience in various clinical posts in the National Health Service, including two years as a registrar in a teaching hospital. What happened over the next few months showed the woeful inadequacy of my teaching skills. The first indicator was during an introductory four day training workshop for instructors run by the army. There I learnt different methods of instruction; how to formulate a lesson plan; the range and effectiveness of training aids available; how to prepare a good handout and present material; and about counselling. I was already more knowledgeable than before and thought that I would be able to do a much better job of teaching. Next I started a three week course of instruction at an army base, teaching a class of 24 soldiers. During the course a few people nodded off from time to time, but I dismissed this from my mind as being within normal limits of behaviour. (Who has not sometimes found himself falling asleep during a lecture?) At the end of the course each instructor received from each student a written critique consisting of answers to 20 questions (table). These concerned the instructor (15 questions) and the course (five questions), with an appropriate score for each answer. There was also a section for the students' comments.

Critical comments on performance

I expected my own critique to be mediocre, but the scores and critical comments on my performance came as a nasty shock. One particularly telling score was in answer to the question, "Would you take another course from this instructor?" A third of the first class said "No." Here are some other examples:

"He is a boring teacher . . . not enough variation in teaching method."

"He taught over our heads . . . we are not training to be brain surgeons."

"Tendency to sway from subject matter, and his stories (though amusing) easily got the class sidetracked."

In the light of all this I sat down with my wife, a qualified teacher

with eight years' experience, to analyse the main problems. Our conclusions boiled down to one thing: I lacked practical experience in teaching techniques. Getting out there and doing it for real was different from learning about it in the workshop. Student critiques were to provide the key to continuing self improvement over subsequent courses as they were an accurate indicator of how I was

Student's questionnaire for assessing lecturer

Question	Response*					
1 The instructor is knowledgeable in the subject	SD	D	N	A	SA	
2 The instructor's presentations were clear	SD	D	N	A	SA	
3 The instructor encouraged questions and comments	SD	D	N	A	SA	
4 The purpose and content of the course were clearly explained	SD	D	N	A	SA	
5 The instructor was available for help outside class	SD	D	N	A	SA	
6 The instructor explained and adhered to the grading policy	SD	D	N	A	SA	
7 I knew what was expected of me	SD	D	N	A	SA	
8 The instructor stimulated my interest in the subject	SD	D	N	A	SA	
9 The instructor treated students fairly and equally	SD	D	N	A	SA	
10 The instructor's critical comments were appropriate and timely	SD	D	N	A	SA	
11 The instructor was well organised and prepared	SD	D	N	A	SA	
12 This course will help me succeed in my job or personal goals	SD	D	N	A	SA	
13 Equipment was sufficient to enable each student to practise	SD	D	N	A	SA	
14 Laboratory assistants were helpful	SD	D	N	A	SA	
15 The instructor was concerned with my progress	SD	D	N	A	SA	
16 The text, workbook, and other course materials were helpful	SD	D	N	A	SA	
17 The instructor used several teaching methods (eg, lecture, demonstrations, films, group discussions, etc)	SD	D	N	A	SA	
18 The instructor was familiar with the use of the equipment	SD	D	N	A	SA	
19 There was sufficient time with equipment to develop practical skill	SD	D	N	A	SA	
20 I would take another course from this instructor	SD	D	N	A	SA	

SD=Strongly disagree. D=Disagree. N=Neither agree nor disagree. A=Agree. SA=Strongly agree.

actually doing as opposed to how I thought I was doing. Over the next few months I regularly reviewed my performance and critiques. The result was a dramatic improvement in the scores and comments—for example, "Excellent teacher! Great job!" "Knew how to talk to the class." "Cares about having things explained clearly." In answer to the question, "Would you take another course from this instructor?" my latest class all agreed that they would, with over three quarters strongly agreeing.

Teacher training requirements in Britain mean that university graduates who wish to teach their subject undergo a year of teacher training. A friend of my wife recently decided that she wanted to become a full time teacher after spending some years gaining practical experience in her specialty. She had to spend a year at teacher training college, where for a third of her time she attended lectures on learning theories, teaching methods, problem situations, etc, and for the remainder of the year she had practical teaching experience. While doing the latter she received frequent critiques and advice from experienced teachers. The students she was trained

United States Armed Forces, West Germany

GRAHAM O'BYRNE, lecturer in emergency medicine

Correspondence to: PO Box 7741, APO NY 09012-5425, West Germany.

to teach were adults who were training for qualification in her specialty. In contrast, doctors are often required to teach members of the health care professions despite having had no instruction in teaching skills and practice.

Gaining teaching skills

How may doctors gain the skills necessary to teach medicine to others? Clearly the investment of time entailed in training full time teachers is both unnecessary and out of the question, but what about a basic training course in teaching skills and practice? In practical terms this would probably have to be in doctors' own time because of the heavy workloads and probably at their own expense because of financial restrictions in the NHS. A weekend conference may well be most suitable, but if health authority approval could be obtained a period of study leave could be arranged. The course should comprise lectures and practical experience, the latter arranged by requiring each participant to present a lecture to the rest of the group, with subsequent advice and critique.

And how should the course be followed up? Continuing self evaluation using written critiques from all the people who are subsequently taught could be considered based on a format provided during the training course. Though it is a sensitive suggestion, other NHS staff might be invited to give regular

critiques on the doctor's performance at work. For those doctors offended by such a suggestion I report that my wife's teacher friend occasionally has to sit in front of her adult class, with her fellow instructors present, while the students deliver their critiques. Anyway, the following advice may help doctors to be better teachers.

- Bearing: be bold and confident, stand upright, and avoid distracting mannerisms

- Be well prepared: adopt objectives for each lesson so that nothing is missed out and the lesson follows a logical progression; teaching off the cuff is *not* as effective

- Use a variety of teaching methods: this is essential to retain the students' interest—useful ideas include scenarios, interesting slides or a film, question and answer sessions, anecdotes or examples from your own experience, group discussions, good handouts, etc

- Vary your tone of voice: a monotone induces sleep

- Pitch the lecture at the right level: find out beforehand the students' abilities and levels of experience.

In conclusion doctors who have to teach cannot be assumed to possess natural teaching skills. Instruction in basic teaching skills could usefully be provided. Judged by the recent student critiques I am now considered a good teacher. Meanwhile my respect for full time teachers has increased considerably: I had no idea there was so much to teaching.

Medicine and the Law

How informed is signed consent?

D J BYRNE, A NAPIER, A CUSCHIERI

Abstract

The assurance that patients fully understand the information given to them before they sign the consent form for operation has never been validated in this country. One hundred patients were interviewed by an independent medical observer in one surgical unit in a teaching hospital between two and five days after their operation. Although all the patients interviewed were fully aware that they had had an operation, 27 did not know which organ was operated on and 44 were unaware of the exact nature of the surgical procedure. A significantly higher age group was observed in the group of patients who were unaware of the basic facts relating to their operation, and the problem was encountered most commonly in patients over the age of 60. Because of the

medical and legal importance the findings of this pilot study warrant further large scale investigations.

Introduction

Informed signed consent is now a legal necessity for all surgical procedures.¹ In this country it is increasingly considered desirable, if not mandatory, before recruiting patients into clinical trials.^{2,3} In the United States such signed informed consent is a legal requirement.⁴ But in this country the reliability of medical communication and assurance that patients fully understand the medical terminology and information given to them has been assumed but never validated. Studies in the United States have found poor understanding and recall of consent form information.^{5,7} Most of the patients in these trials, however, were undergoing various treatments other than surgery, the information they were asked to recall was rather detailed—for example, the surgical techniques to be employed—and their recall was tested up to two years after signing the consent form. In addition to the communication skills and experience of the medical attendant, several factors may adversely influence the ability of the patient to understand, appreciate, and retain the information.

In this preliminary study we tried to ascertain the level of knowledge of 100 consecutive patients treated in one surgical unit about the nature of the operation performed before they were discharged.

Department of Surgery, Ninewells Hospital and Medical School, University of Dundee, Dundee DD1 9SY

D J BYRNE, MB, FRCSI,

A NAPIER, RGN, nurse

A CUSCHIERI, MD, FRCS, professor and head of department of surgery

Correspondence to: Professor A Cuschieri, Department of Surgery, Queen Elizabeth Hospital, Edgbaston, Birmingham B15 2TH.