Teaching medical neurology: an o

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BOX 1: THE WAY IT IS, 2005 – A TRUE STORY

Curtain rises on an out-patient clinic; two 4th year students are sitting rather tensely with the professor who is in shirt sleeves, and a patient.

Professor (seeing a patient who has had a stroke some years ago and now complains of brief attacks in which the affected arm stiffens and rises in the air out of his control): What do you think is going on here?

Student (nervous, almost terrified): Is it, er ... a ... stroke?

Professor (astonished): During a stroke do you think the arm goes up in the air or flops to the side? What do you think happens in an epileptic attack?

Student: Um ...

Lights fade and then come up again.

Professor (after seeing a man with tricky epilepsy, and hoping to strike one of those vertical themes so beloved by educationalists): Do you know the difference between compliance, adherence and concordance?

Student (visibly cheering up): Oh yes, concordance is when you and the patient agree together with a course of action ...

Professor smiling as lights fade, curtain.

I am frustrated: the modern clinical students seem to know so very little about neurology and how to sort out what is wrong with patients, and yet they know so much about how to be nice to them. What on earth has gone wrong?

Neurology has the reputation amongst students (and indeed doctors) for being difficult, although as a student I don't think I found it as difficult as hearing a mitral diastolic murmur or recognizing a skin rash (Schon *et al.* 2002). And the students, when asked, generally want more of it (most UK medical schools teach clinical neurology for about 3 weeks in a block, although some no longer have a neurology block at all). I used to think the difficulty was because the students had had their heads stuffed with so much detail, and had become so daunted with anything beginning with 'neuro' during their pre-clinical years, that they assumed that what stops the brain working must be as difficult to understand as how it works in the first place (completely wrong of course, you don't have to know how a TV works to diagnose why there is no picture or sound – power cut, toddler fiddled with tuning, dropped on floor,

Students clinical old codger's view

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etc.). But the students *still* have difficulty, even now when they seem to have been taught almost nothing of basic neuroanatomy and neurophysiology (they only get three weeks for this rather large task in my medical school with the new curriculum). Mind you, in at least one standard student textbook, there are 50% more words for the neurology examination than there were 100 years ago, while for other disciplines there are at least 50% fewer, so some clinicians at least are making it too complicated (McNeill 2005).

I even wonder if the medical curriculum actually stops students thinking and shoves them into some sort of intellectual straightjacket where their *a priori* knowledge is somehow snuffed out. After all, most ordinary folk know that if their arm suddenly falls to their side they might have had a stroke. Why don't medical students? Who has knocked ordinary knowledge out of them and replaced it with the Krebs cycle (in the old days) and an intimate understanding of patient autonomy (nowadays)? I have no idea, but when we are teaching clinical neurology we have a lot of remedial education to get through ... in the nicest possible way of course, no teaching by ridicule as my generation was. So how to do it?

In my place the best neurology teacher by far, as witnessed by years of student feedback forms, was a neurosurgeon (before he returned to his native Ireland). What was his secret? Simple, he taught in the way that he had found the best way for him as a student. He certainly had no teaching qualification, and he had never been on a course – I suspect that if he had, and if he had taken any notice, he would have slipped down our teachers' league table. I don't know exactly what the best way for him was, although I can guess that it was at the bedside, with a patient, simplified, and fairly didactic (as I found so helpful when I was taught neurology by neurosurgeons who seem rather better at this game than neurolo-

gists who probably think too much with our ifs, buts and maybes).

Whatever new developments there have been in teaching theory, I doubt if we teachers of neurology need them. We should do it as it worked for us because we are not so different in our innate abilities from modern medical students (although they probably know more of ethics and being nice to patients than my generation did). Teaching worked for me when it was fun for the teacher and taught, personal, entertaining, and at the bedside with real patients (no mannikins and no CDs then, and not now for clinical rather than basic neurology teaching, thank you very much, just a good book).

But times are against us, in some ways. How can teaching be personal when 250 or even more students are squeezed through the medical school sausage machine every year? And if it is not personal it is unlikely to be much fun. In my medical school there were 50 of us in the year, just four doing clinical neurology at any one time, and the party we gave for our teachers is still remembered – live band, fairy lights on a summer evening in Wimbledon! But, in the UK at least, there are a lot more neurologists than there were and so the students could be better distributed, but that would mean much more involvement of National Health Service consultants, and why not? After all, the professors and lecturers are now so obsessed with the Research Assessment Exercise (RAE), and under so much pressure by their cash-strapped universities to write papers in the *Lancet* or *Nature*, that teaching has hardly any priority at all. And NHS consultants see lots of patients and can be as good, or bad, teachers as any researcher. Their new contract is an opportunity because teaching sessions could be written into it, and paid for by the universities (instead of paying the salaries of the teaching theoreticians who sit in their offices speaking in tongues the rest of us cannot understand). Where I was taught

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neurology there wasn't a professor of neurology in sight, or a lecturer – just very good doctors who cared about passing on their knowledge at a medical school which did so little research at the time that we would have scored minus in the RAE.

For me, and I hope my students, the best way to teach is with a patient who has a problem and who has already been seen by the student, more often in a bed than in an out-patient clinic where we are flogged to beat waiting time targets and anyway there is no spare room for students to see the patients first, and sitting down the student tells the patient's story; the teacher teaches. The student demonstrates the signs. The teacher teaches. We all discuss. Sometimes we also teach the patients quite a lot about their problem (deliberately), and the patients can teach the students too. This method must be centuries old; certainly it worked for me as a student and I still find it fun. Indeed, it is I think what is now called problem-based learning, not on paper sitting round a table with a facilitator who knows nothing about the subject (which has its place), but for real.

However, there is still a residual problem – fear. The older the teacher, the more the student seems to fear him or her. I don't know what to do about this – it seems to be embedded in the culture. Even when I tell students that I have nothing to do with examining them, and nothing to do with selecting them for junior doctor positions, they are still fearful. Of what? Making a mistake? But students are expected to and allowed to make mistakes: we learn from our mistakes. Looking an idiot? So we teachers must be kind and supportive. We try, oh how we try. But we are still frustrated.

The funny thing is that when our students come back to us as young doctors, they seem to be rather good. How did they perform that trick? Maybe we are doing the right thing after

all, or they are – despite us teachers of neurology.

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To my own teachers at St George's Hospital Medical School, London, in the sixties, the good ones who I copied – and even the bad ones who taught me how not to do it.

A version of this article has also appeared in *Clinical Teacher*.

COMPETING INTERESTS

My daughter is a medical student, and I worry about how she will be taught clinical neurology.

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BOX 2: HOW NOT TO DO IT – A TRUE STORY FROM 1967

Curtain rises on a clapped out Nightingale ward in a London teaching hospital. A consultant urologist – rather short, red-faced with rose in lapel – has already inspected the 10 students' hands for cleanliness and sent one to run round the block. One student has earlier asked some questions. The 'teaching' ward round is coming to an end...

Urologist (visibly swelling): You boy!

Student (suddenly very alert indeed): Me?

Urologist (now purple in the face): Yes you, you there at the back who asked all those questions.

Student (shrinking as small as possible): Sir?

Urologist: Don't you forget, boy, truculence is no substitute for diligence!

Lights suddenly cut, curtain.