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The New Medical Curriculum: A Restoration of the Status Quo

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Abstract

I HAVE TO WARN YOU: this is a piece of adverse criticism, but perhaps not quite in the way that you might expect.

Last June, Res Medica asked me to write an article on the New Medical Curriculum, which has recently been inaugurated in this University. The original idea was that two essays would be written on the subject, one by a Professor of Medicine, and one by a medical undergraduate.1 In fact, so far as I know, the Professor of Medicine declined the offer for the very good reason that he considered that the new curriculum ought to be given a chance before it is evaluated. I, however, having nothing to lose, accepted the commission, because, as a matter of fact, I have a point of view. But of course there are various reasons as to why my overview of the subject must be even more blinkered than that of a Professor of Medicine. When Faculty switched curricula, she (I always think of her as a young girl) also chose that moment to convert me from a pre-clinical to a clinical student. Now there are various reasons why this should confound me as a critic of the New Order, they are wearisome to relate and surely self-evident to the attuned. I want to get round them by stating that this piece of adverse criticism is not really directed specifically against the New Medical Curriculum, which may well turn out to be much better than the old. I don't want to talk about all the current curricular hot potatoes — the extra time devoted to clinical chemistry, the curtailment of time spent on the wards in Phase II, the question of whether Phase III Year 1 should have to compete against Phase III year 2 in the same subjects, and so on. I have been trying to ask myself what I think is really wrong with the way we are taught. I think that there is something wrong, that, as my title implies, the existence of a new curriculum has done nothing to improve the situation, and that, really, the new curriculum represents a series of quite superficial changes in the Faculty's approach to medical teaching, beneath which things are going on exactly as before.

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Comment and Reflections

THE NEW MEDICAL CURRICULUM: A RESTORATION OF THE STATUS QUO

by Hamish Maclaren M.A. (Hon.); B.Sc. Medical Student: University of Edinburgh

"Where is the knowledge we have lost in information?" T.S. Eliot – Choruse's from 'The Rock', 1934

I HAVE TO WARN YOU: this is a piece of adverse criticism, but perhaps not quite in the way that you might expect.

Last June, Res Medica asked me to write an article on the New Medical Curriculum, which has recently been inaugurated in this University. The original idea was that two essays would be written on the subject, one by a Professor of Medicine, and one by a medical undergraduate.¹ In fact, so far as I know, the Professor of Medicine declined the offer for the very good reason that he considered that the new curriculum ought to be given a chance before it is evaluated. I, however, having nothing to lose, accepted the commission, because, as a matter of fact. I have a point of view, But of course there are various reasons as to why my overview of the subject must be even more blinkered than that of a Professor of Medicine. When Faculty switched curricula, she (I always think of her as a young girl) also chose that moment to convert me from a pre-clinical to a clinical student. Now there are various reasons why this should confound me as a critic of the New Order, they are wearisome to relate and surely self-evident to the attuned. I want to get round them by stating that this piece of adverse criticism is not really directed specifically against the New Medical Curriculum, which may well turn

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Much of what I have to say here concerns the earlier part of the medical course. Despite the fact that one of the aims of the revising of the curriculum was to wean the student, to some extent at least, off lecture courses, lectures still remain the main educational tool of the Faculty for the first three years of the new course. Thereafter, Phase III represents an attempt to encourage the practice of self-education combined with the gaining, on the wards, of practical experience.

^{*1} I was to be the prof.

One can say therefore that Faculty puts its concerted teaching effort, quite reasonably, into the early parts of the course.

I will therefore begin by considering "The Typical Medical Lecture", then try to say what is wrong with such a lecture, and conclude by reviewing certain implications arising. I may say here, parenthetically, that I have found this article very difficult to write², partly because of problems of style, and, related to this, because I have been continually losing my temper with the subject-matter. Though it may be a poor reflection on me, it will probably be more entertaining to you if I *do* lose the place a bit, therefore I'd like to insert in here a kind of blanket apology to any of those who consider any of this to be what I believe Socrates or one of his pupils called an "argument *ad hominem"*. Nothing personal.

"The Typical Medical Lecture"

At 9 o'clock on a Monday morning 150 very talkative but somewhat bored and definitely unexpectant students gather in a lecture theatre. The lecturer, an harrassed individual, enters with the hand-outs at about four minutes past nine. There is a certain trafficking to and fro within the body of the assembly as these handouts get disseminated. During this time the lecturer consults with the servitor, arranges his slides, puts his filmsies on the overhead projector, and writes a few things on the board. The background level of noise does not decrease. The lecturer leans for a few minutes on the lectern with a look of mock appeal on his face; the noise does not abate and he begins; the noise abates very slowly.

Over the next fifty minutes, the lecturer employs a variety of techniques to fulfil one task – he spills the contents of a book in the general direction of his audience. The audience participates by transcribing these contents piecemeal into 150 loose leaf folders, to the incessant accompaniment of the low, monotonous background conversation emanating from the rear stalls.

Although this process is undoubtedly tedious, it can also be quite exhausting. It is not uncommon for a lecturer to display a slide on the screen, a flimsy on the overhead projector, and a battery of formulae on the board simultaneous with his own high speed verbal delivery. The conscientious female student sitting in the front row doesn't know where to turn but soon learns that, if she doesn't think about any of the information coming her way, she can usually get most of it into her loose leaf folder.³

It is easy to criticise this sort of lecture. But it is worth pausing to consider why people lecture in this way. It seems to me that what appears at first to be a rather low-key, nondescript event lasting for an hour, is in fact a quite highly ritualised conspiracy between lecturer and audience, largely designed to soothe the nerves of the lecturer. If you look very closely at most (not all) medical lecturers you will see that they are actually guite tense. Who can blame them? But they keep a firm control of their nerves by employing various tactics designed to elevate the background count of boredom. Crucial to this process is the practice of the delayed start to the lecture, the elaborate setting up of the indispensable lecturer's crutch, the visual aid, designed to distract the attention of the audience away from the central figure of the lecturer, to dull the audience with the narcotic of an array of factual information, to get the heads of the audience into the loose leaf folders, with the blind concentration of the post-menopausal bingo plaver.

*2 It is becoming virtually impossible these days to write an article of this nature - medically orientated without being "scientific" or, in other words, a discursive article, without falling foul of a certain obnoxious error of style. We are forced by sheer weight of tradition to write after a certain manner, I will call this manner, for want of a better term, "Medical Baroque". Medical Baroque is characterised by a kind of smug, complacent undergraduate ribaldry. The exponent of Medical Baroque always laughs at his own jokes. These jokes are invariably full of pus, and sex. In our introductory lecture of welcome to the medical school we were all told, I believe, that there exists some strange subtle bond between doctors and writers (the names Conon Doyle, and Maugham, are invoked). This seems to me to a kind of distortion of logic: it is possible to show that a lot of good writers were interested in medicine, but it is much easier to show that a lot of good doctors are very bad writers. This has absolutely no relevance at all to the New Medical Curriculum, except in that, in my attempts to avoid writing Medical Baroque, I find myself continually slipping into the style of Ivan Illich, the author of Medical Nemesis. This to my mind is disastrous, I entertain no ambitions to blow up Edinburgh Royal infirmary.

*3 If this sounds chauvinistic, it is not meant to be - but it just happens to be the picture conjured up in my mind by the idea of a medical lecture. I suffer the same dilemma, and occasionally used to sit in the front row. What is wrong with "the typical medical lecture"? Well, we must sympathise with our harrassed lecturers, but at the same time there is something far wrong with the whole dreaded formula of the boring lecture. Most people take a kind of pragmatic, fatalistic view of medical lectures. They may attend the lecture or they may not; probably the majority do attend in case they miss something of importance. It is widely recognised that there are good lecturers and bad lecturers, that no amount of tinkering with curricula is going to alter this fact, that it is up to the student to sift knowledge from books and from lecturers largely as he pleases. Bad lecturers are a kind of thorn in the flesh.

And yet there is a terrible consistency in the way in which our bad lectures are bad which makes me hopeful that in fact they could be improved. I am now approaching the main point of this essay. It seems to me that our medical teachers concern themselves very largely in the trafficking of information. This pursuit has a kind of doctrinal, dogmatic basis in a particular notion which finds almost universal acceptance both within medical circles and with the lay public, and which seems to me to be fundamentally invalid: this is the notion that medicine, unlike, say, mathematics or physics, is "conceptually" easy. It is the notion that all that the study of medicine requires is a good memory or, if you haven't got one, plenty of stamina and black coffee. It is the notion that the study of medicine is a matter of memorising lists - the longer the list, the better your knowledge. The process of medical education arising from such notions. equals the process of confronting the medical student with an array of facts. These are the facts that appear on blackboards, slides, overhead flimsies, and books; the facts which are vocalised in lectures, and copied into loose leaf folders. I think this mindless regurgitation of text book information is the great disaster area of medical teaching.

I have discussed, in general terms, the way in which a medical lecture is a mass of factual information, but I really ought to give a concrete example of this. Every medical student's first exposure to undergraduate medicine is his first 9 o'clock Monday torning anatomy lecture, the first horrified glimpse of the cadaver to the accompaniment of the smell of formalin, impinging on the consciousness. I think most people are rather bad at anatomy, probably because a good visual imagination is relatively rare. Anatomy is conceptually difficult; I wonder how many students at the end of Phase 1 Year I have a good mental picture of, for example, the convolutions of the peritoneum?

The first anatomy lecture I ever went to concerned, among other things, the position of a certain neurovascular bundle passing through the axilla and drawn in transverse section for our benefit at the level of T4. I didn't know what a neurovascular bundle was, nor a transverse section. nor T4. Come to think of it, I didn't know where the liver was, and I don't think I'd ever heard of a spleen. Did that lecture therefore do me any good? I suppose it might have had a value as a kind of shock treatment designed to make me open a book. I realize now that that was its purpose. But this effect might equally well have been achieved by the use of some non-specific shock tactic, perhaps by sneaking up behind me, unawares, and firing blanks from a pistol three feet from my ear.

I think anatomy lectures could be of great value, 4 but as they stand at present, (and I'm talking of regional anatomy) I think they are unsuccessful. But I do not wish to make an isolated attack on the anatomy department. What I say here could equally well apply to a host of other departments. Lecturers seem to have this pathological desire to vocalise all the examinable facts at least once, as if such a recital absolves them of all responsibility for the student's progress (a responsibility which they never held anyway), and puts the onus of making good headway squarely on the student's shoulders (it was there in the first place). It seems to me to be self-evident that the lecturer is there to help the students (he certainly isn't there for his own benefit, so what other reason can there be?). But the presentation

^{*4} Would it not be more sensible to supply an idiot's guide to the human body at the first anatomy lecture; It might even be a good idea to get an idiot to give the lecture, somebody who had not forgotten the extent of the ignorance of his audience. It would be helpful to find out, on that occasion, where the really big bits reside.

of a "factual package" is a quite futile undertaking because such a package exists in the text book anyway.

What then should a lecturer do? To my mind, while he is preparing his lecture, he should ask himself the following questions:

- (1) What are the crucial, guiding principles of today's subject (assuming there are any)?
- (2) How can I present them in such a way as to keep my train of thought as simple as possible without becoming incomprehensible to an audience which has little insight into the background of my subject?
- (3) How can I present a readily digestable package of knowledge upon which the student can subsequently build up for himself the quantity of information that he undoubtedly needs to know in order to function as a doctor?

If I were asked to say in one sentence what is wrong with the way I have been taught in this university, I would say that hardly any of our teachers have offered an "approach" to the subject. We have been swamped in a great welter of undigested, undigestable information. We cannot see the wood for the trees. I could count on the fingers of one hand the number of lecturers who have stood up and said, "This is the way I hold a given body of knowledge in my head; this is my approach to the subject."

Why not? Why do they not do this? Let us consider the possible answers to this question. They are:

- (1) Our lecturers have no more "approach" to their subject than we do. They too, have learned it by rote, and continue to hold it in their minds as a task of memory.
- (2) They have an approach, but they fail to draw attention to it because of (a) indifference (b) embarrassment (c) belief that it is not relevant.
- (3) They have an approach but they conceal it because the medical profession must be entered by a kind of masonic, personal ordeal-by-rote-learning.

(4) They have an approach but they conceal it to cut down the competition for top-grade medical posts.⁵

If I were to be woken up in the middle of the night and asked which single one of these possible reasons was most *a propos*, I would settle for reason No. 2c. For some unknown reason, we have this desire to depersonalise our knowledge in favour of some impossible god's-eye view of the subject.

Implications

This apparent refusal of medical teachers to place ideas and facts in some kind of hierarchical order, to point to the facts that are crucial in that other facts may be deduced from them, to pass over the dead-end facts, has meant that the medical student gradually forgets how to use his brain, if the mental exercise involved is not merely the act of memorising. This is true despite the following quotations:

"My first point is therefore this, that in any branch of university education, including medical education, we should aim at using the methods of education rather than instruction. We must teach the student how to collect the facts, to verify them, to assign a value to them, and how to draw conclusions from them and test those conclusions; in short, how to form a judgment. As Karl Pearson said, 'the true aim of the teacher should be to impart an appreciation of method rather than a knowledge of facts. ...' "?

> Sir George Pickering Medicine's Challenge to the Educator. BMJ, 1958 Vol 2 p. 1117 (Quoted on the frontispiece of Macleod's Clinical Examination).

^{*5} One is reminded of an occasion when Andre Previn asked the one-time Principal Horn of the LSO if he found any advantage to his playing in having a beard. The man replied, "Only insofar as it conceals my embouchure from my students."

"If there is a fault in us bred of familiarity it is, I believe, the old fault of omitting to probe sufficiently deeply into causes; the fault of accepting the fact of common symptoms without trying to explain them."

> John A. Ryle (1948) The Natural History of Disease. (Quoted at the head of Ch. 3, Macleod's Clinical Examination — The Analysis of Symptoms and Signs).

Despite all this, we are still left struggling with the welter of uncategorised facts. A lucky few seem to respond very well to this educational system, and shine, Most people learn. pragmatically, to ride the system, and to put up with varying degrees of mild neurosis. One or two have "nervous breakdowns" (whatever they are) and retire, temporarily or permanently, from the field. The identity of these unfortunates is usually utterly astonishing to everybody else. Very often they are remarkably bright, perhaps somewhat unwordly individuals who have failed to realize that if you want to learn Pathology, you learn it out of a textbook of medicine; if you want to learn Bacteriology, you learn it out of a textbook of Pathology (a good method of getting to grips with the real "basics") - simple, obvious little tricks like that, to be gleaned from the interstudent exam tips Black Market, certainly not from the staff.

But most people seem to acquire the MB ChB – and then apparently settle down to learn some medicine. The undergraduate course seems to be a kind of ordeal by tedium and strain; but you ride the system, don't buck the system, and treat it as a bit of a game, even a joke.

This, at any rate, is the prevalent attitude of the survivors. It just seems a pity that undergraduate medicine is so universally envisaged as a hurdle to be crossed rather than as a preparation for subsequent medical life. And it's a pity that the people who help you over the hurdle are not the lecturers, but very often last year's students; thus you acquire an approach to the subject, stealthily from the commonweil with the audacity with which, twenty years ago, you might have visited a back-street abortionist.

I have heard people say that the "Sink-or-Swim" predicament of the medical student is characterbuilding, that it prepares him for the "one long oral examination" that is a medical career, that it allows him to become accustomed to stress. I don't think this is so. I think most people respond to encouragement rather well.

Besides, the stress in doctors' lives is almost all iatrogenic. We doctors and medics build stress around us; we accept it every time we acknowledge as normal the behaviour of the obsessive surgeon who throws scalpels and retractors at the poor wee nurse who can't find the swabs.