

Medical education and general practice*

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William Marsden—the man

Let me begin by looking at William Marsden, the pioneer activist reformer. For the facts about him we are indebted to his definitive biographer, his grand-daughter, Mrs Frieda Sandwith. He was a Yorkshireman, the family name being still imprinted in the village of Marsden, near Huddersfield.

Of fine physical presence and endowed with the famed pertinacity of the Ridings, he displayed a character warmed by compassion and pity, and strengthened by a capacity to *do*. His biographer tells us that “He was a man of action, and that while his wife was married less to a man than to an institution, he had nothing but pity for the poor.” “A rabid enthusiast,” he had no patience with half-measures. He was the vital driving force behind the Royal Free. It was the Governors of this Institution who, in 1842, commended him for his “active benevolence, unceasing perseverance, and high professional skill.”

He suffered greatly, both in his personal and professional life. Most of his children died in infancy. His beloved first wife, Betsy Anne, died from cancer, but his affection for her remained alive and constant after her death, throughout the years of his second marriage. He persevered even with his emotions.

He knew unpopularity, the common lot of reformers, as did his supporter Wakley, the great editor who scoured the then Augean stable of the Royal College of Surgeons of England. He fought a long fight against prejudice—and he won. His clinical skills and capacity for organisation were amply displayed, with his monumental rate of work, in the cholera epidemic of 1832. He studied ‘iatrogenic disease’, demonstrating, in his early days at the Royal Free, 51 cases of ‘rheumatism’ caused by the misuse of mercury in the treatment of syphilis.

He had at the same time a lifelong capacity to acquire support from friends, and knew how to use publicity to further the cause of his beloved hospitals. No man was less self-seeking. Able to command a large practice, he retained little even of the remuneration which his long hours of free service at the hospitals permitted him to earn. He was a man of great *caritas* and no little *scientia*. In short—certainly until the Royal Free became able to afford an inpatient service—he was a superb general practitioner, for we are also told that, unlike the situation in North America and in the South of England today, “Two colleagues followed his example in visiting such patients as were unable to attend the hospitals.”

Such is an outline drawing of the man in whose memory this lecture is given. His environment, the social conditions and *mores* of his times, and the state of medical training and practice we must leave in order to consider the pressing problems of medical education in our own day.

Introduction to medical education

We must briefly examine undergraduate medical curricula and postgraduate training against the background of our environment. As the child is father to the man, we must also consider our present educational system.

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The production and continuing education of any professional person should be seen as a continuum. Ideally, it should be a continuum in which each stage was built on those which had preceded it. Furthermore, at each stage advantage would be taken of contemporary educational theory and practice, so that 'job specification' would be derived from 'job definition' and educational aims and objectives would be declared and shared with the students.

The schools

Teachers would be required to have a motivation to teach and to demonstrate a capacity to teach, with an emphasis on achieving learning. Perhaps the best teaching in our country is in the infant and primary schools, when they are not too over-loaded with pupils. There has certainly been more research concentrated on this age group.

In our grammar schools specialisation starts at least two years before Ordinary Level examinations when decisions of omission and the narrowing of learning objectives are obligatory. Pressures on sixth forms are even worse. They have to adapt to the requirements for university entrance.

It is almost unnecessary to be able to speak fluently, or write legibly. To be a neat and accurate 'ticker' or 'ringer' is, however, essential. 'To know' is not necessarily to be educated, yet culture is at a discount; knowledge is all that is required. The pursuit of learning for its own sake and the savour of perceptive and persevering scholarship are but for the fortunate few.

The universities

The universities, too, have changed. By and large they behave as the providers of entrance tickets for careers as the production factories of those whom the state requires. The relative values of technologies, the pure or applied and the arts and sciences are reflected in the provision of resources by government. The conflict between pure scholarship and pragmatism is being resolved by the politicians who, on behalf of the community, pay the piper. Rothschild has overcome Dainton.

Medical schools

Medical education needs further change. We might accept that two basic functions of a medical school are, first, to produce doctors to give medical care to people; and second, to advance medical knowledge. It seems certain that we should add to the first—within the system of health care obtaining in the country.' In its practical implementation the excellent report of the Royal Commission on Medical Education (1968) has suffered a sophisticated castration.

The Royal Commission reinforced the recommendation of the General Medical Council (1967) of the need to create a 'basic doctor' who would require postgraduate training for all disciplines of medicine (including general practice). It is ironic that this quest for a basic, undifferentiated doctor should be pursued by the exposure of students in medical schools almost entirely to the most highly differentiated doctors whom we possess.

The Royal Commission concept of 'general professional training' which, it is clear from that report, meant what it said, has been with great skill translated by the older Royal Colleges to mean general professional training for all the new separate disciplines of medicine and surgery and not as a base of generalism from which the 60 per cent of young doctors, known to be uncommitted to a specific discipline at registration, may launch forth to their eventual career.

We would also do well to remove the artificial gulf of the second M.B. and in particular the artificiality of the preclinical avoidance of contact with patients. It is time we tried the cross-over plan with the increasing introduction of patients throughout the

whole course, as in Nottingham and Southampton. Students are not motivated to learn subjects whose relevance they cannot appreciate.

The behavioural sciences, if taught at all, tend to occupy preclinical curricular time taken from bereaved anatomists. Too often both the behavioural and basic clinical sciences are taught by non-medical professional scientists and they are taught, as far as the students can see, with no obvious relevance to patients, but with a great deal to rats, Polynesians, and sometimes propaganda!

Many medical schools now follow a North American trend of providing a course on *Man and his environment*. The crucial trouble with this is that man's environment is demonstrated only in the medical school and in hospital. Man's environment is primarily in his home and his place of work, not in theoretical or temporary institutions, however prestigious or transiently important they may be—or worse, conceived to be. We general practitioners working with our colleagues in the community health team are the people who can best present man in his environment. He lives in it, we work in it, for and with him.

The great majority of doctors are not pure scientists. While all clinicians should think scientifically, most practising clinicians are applied scientists. It was Robert Platt who pointed out that new knowledge might be difficult to understand, but easy to apply. Clinicians are forced to be pragmatists.

While disease may be represented in the sequence: causes—processes—effects, we have been less concerned or competent to define the former. The rationale of many of our treatments is wide open to question. Convention is no substitute for reason, while 'schools of thought' by their passionate existence deny proven solutions to unsolved problems.

One human attribute is the tendency for able teachers, successful in their own discipline, naturally to attempt—often unconsciously—to indulge in self-replication. This attribute is bound up with the concept of attitude and reflected in undergraduate curricula. Particularly in the USA, it aids the production of medical scientists than doctors who will care for people.

Student selection

We share in the continuing international problem of student selection, with the sheer weight of the number of applications forcing so many schools to rely on the unreliable predictors of school results of advanced levels, while motivations and personalities are left to reveal themselves *after* entry.

Yet the academic quality of our medical students has never been higher. In addition, they have a fierce and admirable social conscience and social consciousness, which it is our duty to keep alive. The future of medicine is in good hands, which will become even better if our training programmes are right. Less authoritarian teaching and more non-directive opportunity for the students to consider issues which they believe to be important would be of value.

It is nevertheless a tragedy that among the thousands of rejected applicants for places in medical schools there are enough potentially good doctors to fill our schools again. While the injection of brains into our profession, which has never before attracted the highest in the country, is no bad thing, it remains to be seen whether the shift from pure sciences to medicine is accompanied by the exhibition of those humane qualities which have distinguished its practice. Will we be in danger of over-producing medical scientists when we suffer nationally a shortage of home-produced clinicians?

Postgraduate training

The next stage of medical education is that of postgraduate training and I am particularly concerned with its vocational aspect. Assuming that we succeed in our attempt to define and create a basic doctor, then we might be able to improve medical care.

Incidentally, all undergraduate curricula suffer from a complete lack of definition as to what the 'basic doctor' should be.

As the first function of a medical school is to produce doctors to give care to people within the health care system of the country, we should expect that our trained doctors will function in our National Health Service, but postgraduate training is outside the responsibility, if not the influence, of medical schools.

The Royal Colleges and Faculties

For all the disciplines of medicine the responsibility for standards and evaluation is that of the Royal Colleges and Faculties, who have yet to state their educational aims and objectives. We in general practice have gone further than most in this essential direction. In their accreditation of posts the Colleges must be careful to avoid the possible result of the good becoming better and the bad becoming worse.

The responsibilities for the logistics of training lie with the National and Regional Councils for Postgraduate Medical Education. The Departments of Health have accepted the responsibility of paying for this training. Yet the question must be asked: "Are the training requirements of the Colleges designed for their own needs, or do they match those of the National Health Service?"

Role of the community

There is an important principle which needs to be re-stated. Decisions on the priorities of provision for medical care should be decided by the community which pays for them, and not by the profession, which does not. Whether we like it or not, this principle applies in the National Health Service. It affects training, research, and the choice of allocation of resources between the several disciplines, other than medicine, which are together concerned with the provision of health care.

It explains for example the inevitable logic by which the Departments of Health decided to support the Rothschild rather than the Dainton Report on research. It helps us to see, if we are prepared to look, what may lie in store with active community health councils.

Education for general practice

The example of general practice reveals a job definition, educational goals and aims for training, put forward by the Royal College of General Practitioners and accepted by the General Medical Services Committee and the Health Departments. The College and the leading political body for general practice have reached agreement on a *modus vivendi et operandi*.

The College is the standard-setting body, the GMSC and the Departments fix prices and arrange implementation. One hopes that this happy symbiosis will continue, but its very existence stems from the fact that the job definition relates to a doctor who will practise in the National Health Service.

The agreements between the profession and the Department of Health and Social Security provide for a minimum period of three years postregistration training for general practice from 1980. Two years of this period are spent in hospital, and one year in a selected, appointed, and paid, teaching practice. Add to this the preregistration year in hospital and the three undergraduate years also in hospital and there is a vast weight of vocational responsibility lying on the 'trainee' year in general practice.

This situation is illogical. We are training for too long in one context for practice in another. It represents a hangover of tradition, regardless of the fact that the practice of medicine has changed so much. So too have the needs and potential of the two situations—hospital and the community. The former with its specialised teams demanding increasing technical resources, the latter with its own specialised, yet not so well understood

teams, requiring an increasing amount of knowledge and the use of the behavioural sciences. There is no parallel with this development. We must face it and adapt our training accordingly. We should train for general practice in general practice and there are many working to this logical end.

Not surprisingly, when the trainees eventually arrive in the one year devoted to training for their chosen discipline, one of the first requirements is a deconditioning of acquired attitudes. It is not that those acquired in hospital, or in general practice are 'good' or 'bad.' It is that in many instances they are, of necessity, different. Their relevance to the locus of practice is what matters.

It comes as a shock to trainees to discover that their previous education has prepared them hardly at all for the multifactorial problems of illness which they meet immediately in general practice with its whole-person philosophy.

It cannot be overstressed that the basis of good general practice is good clinical medicine. *Clinical methods* is still a seminal work which no amount of behavioural considerations may be permitted to obscure. An additional new and exciting situation is approaching. Once all intending general practitioners have to undergo a three-year period of postregistration training we then have at least a minimum of nine years of continuing compulsory education and training for all doctors in the United Kingdom.

It should be planned as a continuum. As it takes several years to plan and change curricula, it follows that we should take a new look at medical education now. This much-needed exercise will not succeed unless there are simultaneous changes in attitudes by many people in the medical schools and colleges.

Examinations

Examinations matter. The second MB is a major event of iatrogenic trauma and academic attrition—and at present—represents a watershed. While it is often easily passed by those whose capabilities respond to a basic science degree course, it often troubles many whose concern it is to lay hands on patients and who flourish later when they come to the essence of their desired medical education, the clinical work.

No school yet has sought to implement the original idea of A. N. Whitehead in 1929, later restated by Anderson and Roberts. This was simply to attempt to demonstrate relevance to the students. All students would spend the first week in medical school, rotating in groups throughout the wide spectrum of professional opportunity. By simple observation, they would be enabled to see the end products of training, from medical administrators through the wide spectrum of the clinical disciplines to whole-time medical scientists. One of these, they would be told, will be your career choice; all of these present the reasons for the next five years of toil. It would be a good idea to implement.

When we use the term 'the practice of medicine' we speak of a practical discipline. When we have defined them, each of our objectives, couched in behavioural terms, begins with the words "the student shall be able to do—something." There is no doubt that the best way to find out if the student can 'do' or not, is by observing his behaviour.

In all the clinical disciplines of medicine the student must be able to take a history, to examine, to investigate, to make a diagnosis, to define problems, to propose management and treatment, i.e. to offer solutions.

A learner can do none of these things adequately unless he not only has knowledge, but is also able to use it. While the multiple-choice question can be constructed to assess the use of knowledge, it can never do so in the practical circumstances of direct contact with patients. What I say that I will do in a given set of circumstances may well be very different from that which I do when observed in real life. This concept applies both in undergraduate and, in particular, in postgraduate clinical training. I do not believe that

for the clinical disciplines of medicine we require conventional examinations at all, although we may need multiple choice questions for screening for admission.

This view is based on work which we are undertaking in Manchester. Direct observation of performance, by teachers of their students or registrars, using progressive rating scales derived from job definitions seems to provide high correlations with more traditional once-and-for-all types of examination which hence might appear to be unnecessary. The one-to-one teacher/student relationship of general practice is a particularly happy situation for this approach. Our assessments should be task orientated.

Teaching ourselves

An important hallmark of a profession is that each generation teaches the next. During the last few years in general practice this welcome and necessary change is coming about; a change which may be viewed with joy by those consultant colleagues who find their weekends and evenings consistently and ever more eroded by general practitioners, who have not yet learnt that continual learning is their own responsibility.

There seems no doubt that the postgraduate medical centre, first produced in Stoke-on-Trent, and given such great and valued impetus by Nuffield, is one of the most important medical advances of recent time. Our own developing efforts to train teachers, signalled by the Royal College of General Practitioners' Nuffield-sponsored course and the eight years of courses in Manchester, are an earnest of what is already being done. This work needs to be done even better in future to improve and expand the teaching resources of general practice itself.

We may now look into a somewhat cloudy crystal ball to see some facets of the training of a doctor in Marsden's United Kingdom. Let T. S. Eliot lead us "The end of all our exploring will be to arrive where we started and know the place for the first time."

We start from the concept of whole-person medicine. The patient is a person, soma and psyche, living in an environment. This environment contains his home, his family, his place of work, and his wider community. He will be ill because he fails to adapt to some single internal or external factor or group of factors. We shall define his total illness by expressing our definitions of his problems simultaneously in physical, psychological, and social terms. The differences between the specialist and the whole-person doctor have long been recognised. Listen to the Roman Martial, walking in a garden with a friend *circa* A.D. 40. He says "Cascellius extracts an aching tooth, Hyginus removes the hairs that hurt the eyes, Hermes is a very Podalirius at the repair of hernia, but tell me Gallus, where is 'He' that may help my harassed person?"

'He' has now been defined and 'his' training is beginning. 'He' is the future general practitioner—our oldest new generalist in medicine.

Meeting the needs of the people

We need in our medical schools urgently to produce definitions, in behavioural terms, of our basic doctor. Indeed, we need to define in the same way the roles of each of the health care professions. There will need to be interdisciplinary agreements and co-operation. Furthermore, our basic definitions must relate to the needs of the National Health Service—to the needs of our people.

We educators in medicine have largely failed our community in this respect. We have not listened to Johann Peter Frank or to Marsden. We fail to place our own graduates in those areas of this country where our patients' needs are greatest. In my own region about 78 per cent of junior hospital staff are overseas graduates. It is from the same source that we appoint one third of all general practitioners in the South Wales valleys and the East Lancashire towns.

We have largely ignored the fact that the massive upgrading in the competence and capacity of the district general hospitals and their surrounding general practices provides

substantial educational resources. The centralised concentration of medical resources in London, the control of the production of 24,000 general practitioners and over 10,000 consultants by a few hundred highly differentiated doctors and non-medical scientists in our medical schools, all these factors have lain like a dead hand on the concepts of whole-person medicine and the creation of doctors to practise it.

Nor have we helped the developing countries by our relentless pursuit of specialist medical training, when what they first need are barefoot doctors and, above all, nurses.

Decentralisation

In the distant dampness of the North-west Region, we arrange that all our students spend their second clinical year in whole-time clinical work without any formal lectures or classes. Four months are spent in a district general hospital and a fortnight in an adjacent selected practice. The students regard this period as the highlight of their course. Already large numbers are taking up the house officer posts in these hospitals and are entering our region-wide vocational training programmes. Early days though it is, we are now beginning to see them entering practice in some previously unacceptable areas. The experience in Newcastle is similar and also worth noting.

It appears that more decentralisation is effective in itself in contributing to the health care needs of our population. But the students themselves comment adversely on their comparison of the attitudes to people displayed in the teaching hospitals and those observed in the holistic medicine demonstrated by the district general hospitals and the surrounding practices. "Every district general hospital a teaching hospital" is a worthwhile aim which could be reflected in the consultant contract.

University departments of general practice

The arrival of strong university departments of general practice can contribute greatly to whole-person attitudes, effective recruitment, the integration of disciplines, and professional morale. In Manchester, John Dobbing runs a Medical Research Council Unit enquiring into fetal development. He has demonstrated that, in the human species malnutrition in the last trimester of pregnancy continuing through the first year of life produces a permanent physically and mentally stunted child.

The ultimate failure of a new department may be ensured by logistic or financial deprivation during planning and in its early years of disadvantaged life. We know already of university departments of general practice honoured by a chair and no other visible furniture! We shall observe with a concern, which may not be silent, the gestation and neonatal life of the new departments of general practice recently created by London University.

The future

We are moving into an age where more training of undergraduates will be undertaken in peripheral hospitals and yet more by our surviving and evolving generalists, the general practitioners. For the latter have a head start in the production of definitions and a rationale for training. It is a foundation which we will continue to build, helped by the enthusiasm and support of our students.

We shall be assisted to this end by the increasing appearance of the community hospitals, a new site for teaching/learning, well suited to make contributions to the creation of the basic doctor. Consultants will consult with general practitioners more in the health centre and yet another corporate learning situation in the community will be provided, another bridge achieved across the hospital/community interface. It is beginning to become apparent that, once he is defined, almost the last place in which to produce a basic doctor is the conventional Western teaching hospital.

Importance of research

At the same time as we create this new and enviable learning laboratory in the community,

we provide also a research laboratory. Science needs a laboratory, but not always a bench. We shall have increased opportunity to follow the examples of Mackenzie, Snow, Pickles, Watson, Fry, Watts, and Tudor Hart.

We believe, with Plato, that we ought to enquire, and in this vast, much-neglected laboratory, we may enquire into epidemiology—perhaps best of all from general practice. We should recognise and meet the respectable need to enquire further into human behaviour, including our own, into the natural history of disease, into sociological and environmental factors of illness, into our educational process and its effectiveness, into the quality of illness, into the quality of the care provided for patients.

In many of these topics we shall be constrained not merely by the principles of scientific enquiry, but by the deficits of knowledge from which we must perforce begin. We know so little of the quality of medical and health care, although we are beginning to make a start. We believe that for us doctors the provision and use of ever updated yardsticks for the self-audit of practice is a more professional and effective approach than is compulsory recertification.

Importance of attitudes

As doctors we are members of the society which we serve and we ourselves become tainted by its *mores*. We are losing our vocation and some behave as they admit to being, trade unionists. We fail to recognise the effect our public threats and utterances have on our students. In the 1950s and 1960s the expressed emotional hyperbole of my branch of the profession certainly helped to achieve needed improvement, but there was the concomitant effect of lowered recruitment which is only now beginning to be made good. At the present time we are somewhat muted, the consultants vocally rebellious. The same effects are to be expected.

Recently, Dr Ofusu Amaah of Ghana said “Physicians are the advocates of the world’s poor.” Would we were seen to be so. We should continue to produce doctors who are compassionate and courteous, who care for people, who think honestly, logically, scientifically, who are patient with patients, who may both listen and hear. Doctors who are motivated to practise medicine because they wish, like Pope John, to serve people, doctors who recognise and believe in the importance of the person.

We should be primarily concerned to inculcate attitudes—not by precept, but by example. The details of learning are less important. Our students are more than able enough to learn whatever they wish. It is our task to try and demonstrate the relevance to basic medicine of what they will learn, and to try even harder to keep up with them. They should be also doctors who, like Marsden, are activists, not necessarily wishing to politic locally or nationally, but who will be prepared to use their clinical records and experience to produce hard evidence of the ill effects of society and environment on people. They should be doctors who like Marsden will seek to fulfil those needs of people unfulfilled by lesser men.

We in general practice may look at our medically empty designated areas. We should question our failure to absorb new techniques and procedures, usually valuable preventive measures, without always demanding to have them priced. We might query the validity of our continuing use of the word ‘profession.’

In conclusion, I recommend to you the motto of my College *Cum Scientia Caritas*—science with love. For this lambent word *caritas* means more than merely charity. It is a motto of which William Marsden would surely have approved. After all, its sentiment was the driving ethos of his life.

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