

General practice and the unity of clinical medicine

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Introduction

It is unusual to be asked to give one's own eponymous lecture and I am deeply appreciative of the honour which my colleagues in the Royal College of General Practitioners in Wales have conferred upon me. It shows that one of my principal aims in 1968, to create constructive links between the University of Wales Department of General Practice and general practitioners throughout Wales, has in some measure been achieved.

I should explain why I joined the ranks of academia. All my life has been spent in general practice and my interest in research was stimulated when I was encouraged to record the use of a new drug, streptomycin, in the treatment of tuberculous sinuses.¹ Shortly after entering practice the Welsh Faculty of the Royal College of General Practitioners was founded and I became the Secretary of the Research Committee. Soon afterwards I started to work on postoperative hypoparathyroidism with Paul Fourman²⁻⁶ and this led to my doctorate of medicine.

At that time I was becoming aware of the potential of general practice for research and because of the increasing emphasis of hospital research on technology and rare diseases, of the need for research in general practice into commoner conditions. In addition I was becoming more and more frustrated by some of my consultant colleagues who complained about the poor quality of general practice, but condescendingly remarked, 'of course, your practice is different'. They seemed totally unaware that their experience was of a biased sample and I became convinced that the only way to modify their attitude was to work within the system, starting at the undergraduate level.

At that time (the mid 1960s) the Royal College of General Practitioners was encouraging universities to create departments of general practice in order to teach undergraduates. Professor C.R. Lowe was largely responsible for the Welsh National School of Medicine becoming the third university in the UK to establish the nucleus of a department of general practice. In 1968 I was appointed Senior Lecturer in his department and Director of

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the General Practice Unit with the remit of establishing general practice teaching and research, based upon a service practice situated in the new housing complex at Llanedeyrn.

One month after I was appointed the Royal Commission on Medical Education⁷ published their report which recommended that specific time should be set aside in the undergraduate curriculum for teaching in general practice and that universities should appoint senior staff to undertake this teaching.

At lunch on my first day in the medical school I sat next to Harold Scarborough who was then Professor of Medicine. He turned to me and said 'And what are you going to teach that I cannot?' I forget what my precise reply was, but his question provides me with the theme of this lecture 'The contribution of departments of general practice to the unity of clinical medicine'.

The unity of clinical medicine

Clinical medicine is, or should be, a single coherent discipline. There is a core of knowledge, skills and attitudes which are common to all clinical specialties. Doctors in any specialty should be able to teach clinical medicine to undergraduate students. However, because of the fragmentation which has occurred in medicine some doctors are able to teach some aspects of clinical medicine more easily than others. The concept of unity is even more valid if one accepts that a central principle of learning in clinical medicine is thinking and problem-solving, that facts while important are not all important and that in clinical medicine the answer may not be evident even with all the facts. Students must learn to handle uncertainty and be able to make rational decisions based upon probabilities.

Clinical medicine also has a unity beyond undergraduate teaching. Specialization and technology have resulted in fragmented care, which has all too often been disorganized, overspecialized, impersonal and duplicated. However, there is no doubt that different disciplines in medicine have different but complimentary roles in both patient care and research. Some patients are more appropriately cared for in their own home or in a community hospital than in a high technology hospital and some aspects of ill health can be better researched in the context of primary care than in hospital.

The unity of clinical medicine will be achieved by the appropriate integration of all the specialties of medicine in patient care, teaching and research. The contribution of each specialty to this unity depends upon the context of its clinical role. So my reply to the question 'What can you teach that I cannot?' should have been 'Nothing, but there are some aspects of clinical medicine that I can teach more easily than you and vice versa. I can teach some things better because I am daily dealing with them in the context of my clinical work and so can illustrate them to the student. Likewise however, you can more easily teach about the detailed investigation of disease, about rare but important conditions, because these are what you are predominantly dealing with in your clinical work'.

The contribution of a department of general practice to the image of general practice

There are two sorts of image. How one sees oneself and how others see you. In both respects there is considerable confusion over the image of general practice as a specialty and as an academic discipline. We call ourselves primary physicians, general practitioners or family doctors, apparently unable to agree even upon a name. Like Humpty Dumpty, we are what we say we

are. To hospital doctors and many others including politicians the image is even more confused. Primary care is regarded by some as a synthesis of the knowledge of all the other specialties. As Medawar⁸ has remarked some misconceptions are harmless and some are mischievous and help to estrange one discipline from another. There are four major causes of this confusion.

The first is the variation in the morbidity encountered by different systems of general practice in different countries and often within countries. So confusion arises if attempts to define the discipline are based upon descriptions of the morbidity encountered and further confusion results when the discipline is compared in developed and underdeveloped countries.

The second cause of confusion is the variation in the context in which different systems of primary care operate. The precise context varies from country to country depending upon historical, cultural, economic and political factors.

Thirdly there is the rapidity of change in the nature of the discipline and the rapidly changing context within which systems of primary care operate. Practitioners of primary care are usually very responsive to the demands and needs of the local situation thus creating the apparent variations within even small countries.

The final cause of confusion, especially to our specialist colleagues, is the sheer scope of the discipline. Hence the argument that general practice is simply a mixture of other disciplines.

What is needed to clear up this confusion is a model of the basic concepts of primary care which can be internationally applicable and therefore universally acceptable. Such a model needs to be simple enough for students and lay people to understand but capable of expansion. It needs to span the continuum of undergraduate/postgraduate/continuing education and to be able to explain the variations in practice between one locality and another.

The unique features of primary care are contained in the primary care consultation. I am unashamedly proud of the model of the consultation which Nigel Stott and I described in 1979.^{9,10} The model describes the potential which is present in each primary care consultation and is applicable to any system of medical care. Hence it provides an easily understood basis for the academic discipline of primary health care. The model also serves to highlight those aspects of medicine which can be best illustrated and therefore best learned in primary care.

The contribution of a department of general practice to the clinical care of patients

The recent Government discussion paper¹¹ clearly hopes that departments of general practice will influence local primary care services positively. This can be achieved not only by directly influencing the primary medical care services of the area, but also by influencing the hospital services.

Davis's Law states that the quality of the primary medical care services varies inversely with the distance from the nearest teaching hospital. Teaching hospitals alter the distribution of care between the primary and secondary care services. In teaching hospitals patients are often followed up in outpatient departments and special clinics are established for research purposes. Community hospitals are notably absent in the vicinity of teaching hospitals. All these factors have a direct effect upon the quality of the care in the surrounding practices.

The so-called inner city problems of primary medical care could be due not only to the demography of the area but also to the fact that many teaching hospitals are in inner cities. London is a special example with its concentration of teaching hospitals. There the position is compounded by history as in the past teaching hospitals frequently provided primary care for an area. The misconception that hospital doctors frequently have

about general practice is thus compounded and the result is the disunity of clinical medicine.

The contribution of a department of general practice to research

Research is currently the most important part of academic life. Selection committees look for achievement in research, readerships and personal chairs are given for excellence in research and brownie points are accorded to universities by the University Grants Committee for excellence in research.

Howie and colleagues in their Mackenzie report¹² state that general practice research is difficult because precision of definition and degree of order are lower in general practice than in hospital specialties and because the measurement of outcome is compounded by non-clinical incompatibilities between the populations under study. This argument leads to the misconception that general practice can play only a minor role in clinical investigation. Indeed, they actually state that the interface with social science provides the major challenge to general practice research.¹² A considerable amount of valuable research in these areas has been undertaken in the Department of General Practice in Cardiff in recent years and this needs to be continued. But an exclusive concentration upon this type of research would deter general practitioners from pursuing a more important and fruitful line of clinical research and one which general practitioners are ideally placed to pursue — the study of symptoms.

My own early research work involved the study of symptoms and recently my interest in this subject was reawakened when O'Dowd and colleagues showed that general practitioners had an accuracy rate of 80% when distinguishing between those women with urinary tract symptoms who had positive cultures in their urine and those who did not, before the result of testing a mid-stream urine sample was known.¹³ Because all these patients had kept diary cards of their symptoms it was possible to show that most patients who had been prescribed an antibiotic had dysuria whereas most of those not prescribed an antibiotic suffered from urinary frequency.

In 1919 Sir James Mackenzie pleaded¹⁴ for the detailed study of the symptoms of ill-health; but in an increasingly technological age priority has been given to physical investigation. This is a challenge that we, the successors of Mackenzie should take up. O'Dowd's method¹³ should be applied to the study of many of the clinical problems that are currently the most difficult to solve, for example, the irritable bowel syndrome and abdominal pain, headache and pain in the chest.

The study of symptoms has particular relevance to medicine today because of the soaring costs of investigation. If we can show that doctors are reliable at clinical decision-making judged by their actions and that the basis of their decision-making can be supported by better attention to symptoms, then we can reasonably expect doctors to have more faith in their clinical decisions and to order fewer investigations. Perhaps then fewer modern clinicians would fit the description of Feinstein¹⁵ who said, 'The modern clinician often believes his own human equipment is a hindrance, not an advantage and an apology, rather than an incentive, for science in his clinical work.'

The study of symptoms opens up an entirely new approach to the management of psychosomatic illness which is currently based upon the traditional biomedical model of excluding organic disease. This practice has the effect of reinforcing the patient's somatization of their symptoms. If we could predict with reasonable consistency which patients had symptoms that were psychosomatic in origin then we could manage them differently and more effectively from the outset.

Research in general practice is often, as Platt argued in his Harveian oration of 1967,¹⁶ the study by relevant observation

of material phenomena, 'the Darwinian method'. He argued that this type of research was as scientifically respectable as the experimental methods of the physical sciences and in clinical medicine often more relevant. What Platt objected to was the undue emphasis upon experimental physiology on Harveian lines. 'The exact study and measurement of the phenomena of disease. Time, talent and money squandered upon the measurement of the trivial, the irrelevant and the obvious. The erroneous belief that only that which can be measured is usually of serious attention. Not everything we count counts. Not everything that counts can always be counted.' Platt went on to stress the need for alternative and more appropriate experiments; for research methodology, including data and relevant observations from natural experiments, which need not conflict with scientific method.

Conclusion

There are two prerequisites to the achievement of the potential contributions of a department of general practice to the unity of clinical medicine. The first is credibility with one's colleagues and students in the university. Without this the department is unlikely to be given time in the curriculum. Students have consistently been our most potent allies. The second is credibility with and the support of colleagues in general practice. Without such links the department could lose touch with clinical medicine and become esoteric and irrelevant. The university department should be octopus-like with tentacles throughout the region.

The unity of clinical medicine is a concept that, in a world of increasing specialization and fragmentation, is not easy to achieve. General practice must take care. A lot has been achieved in a short time and we must not overplay our hand. We must distinguish between what we can appropriately teach to undergraduates and what is vocational training. Metcalfe¹⁷ recently stated that learning in general practice should be the central point of the undergraduate medical curriculum, running through it like a core and providing the fundamental learning experiences to which all others can be related. This is overstating our case and could be damaging both to general practice and to the unity of clinical medicine. If we all teach and demonstrate the concept of unity to students, if we attempt to keep interspecialty rivalry on a constructive basis, if we seek to make people feel better about what they are doing rather than being overcritical about what they are not doing and if we recognize that each department and specialty has a contribution to patient care, teaching and research then we should help to retain the unity of clinical medicine and avoid the dangers of fragmentation.

In a cold, hard world the unity of clinical medicine will be politically important because it will be vital to the health of our people, which, as Disraeli said, is the foundation upon which the power of the State exists.

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