Peter Piper's peck*

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I NEVER met Will Pickles, but it is not necessary to dig deeply into the lore and literature to discover two of his salient qualities. One was informed concern for his patients.

One day, the story goes (Pemberton, 1970), a young locum was reporting on his round of visits to Will. As he came to each name, it appeared that every patient was either exaggerating his symptoms, was too stupid to carry out the treatment advised, or was obviously malingering. The locum appeared to have reprimanded them all. Finally, at the end of the ritual, Will, losing his customary urbanity, angrily remarked: " You can't treat those people like that. I've known them a lifetime—they're *good* people."

While Pemberton quoted that anecdote to illustrate the *caritas* of Will Pickles, it also tells us something about the other party, whom I shall call Peter Piper—that apparently brash, insensitive, non-vocationally trained locum, whose attitudes Will found so irksome.

The second of Will's attributes was the ability to think critically and constructively, and his belief in the relevance of *scientia* to the care of patients. " Our observations are direct and the contact is human, and we can often supply facts which no other members of the profession can. We see disease in its early stages—very rarely a chance of a specialist—we can follow it through from the beginning to the end of the illness." " Each one of us," said Pickles, " has the chance of adding a little to the sum of human knowledge, and," he added, " *most general practitioners consider that this would be nonsense.*"

One day I was conducting a seminar on the day-release course with our trainees, and I introduced the idea of research in general practice. " Research? " exclaimed another Peter Piper, " Research? For goodness sake, I came into the general-practice scheme to get away from research! "

It is the contrast between these attitudes of the Peter Pipers and those which contributed to the greatness of Will Pickles—and the relationship of this contrast to contemporary medical education which I wish to discuss.

Caritas—and dealing with patients

I wonder how many of us might, without too much difficulty, recount stories similar to that encounter between Will Pickles and Peter Piper, about young assistants—trainees, perhaps; and it may be that some of us with hindsight recognise something of ourselves when young.

Most general practitioners in their daily work with patients have to deploy numerous and varied skills and often exercise them at a high level of proficiency. How have these skills been acquired? Certainly when we were at our medical schools we were taught to take a history, usually applying a check-list approach in a question-and-answer game. Most of us discover that, while this seemed to work well enough for the cases we met in hospital, it was often not good enough for many of the problems encountered in general practice.

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The nature of many disease processes—the consolidated lung, the thrombosed artery, the inflamed appendix—remains substantially the same, whether seen in general practice or in hospital. It is the setting in which they are perceived, the circumstances of both patient and doctor which are sometimes so very different, calling for different and additional knowledge, skills, and attitudes. No doubt we were well equipped with techniques for interviewing in hospital, but what of techniques essential for the consultation in general practice?

To explore this difficult business of the consultation, my colleagues and I in Dundee have made extensive use of videotape recordings of medical students, trainees, and trainers consulting with patients both " real " and " simulated." This approach is full of difficulties because of the many variables which operate, some not amenable to control. Nevertheless, by capturing information otherwise lost, a tool is available to study the complexities of the consultation. For example, it is possible to identify different phases of the process. The stages set out in table 1 can be easily identified, although not all phases are necessarily clearly differentiated or present in every consultation. This description of a two-way process is seen from the doctor's point of view.

TABLE 1
STAGES OF CONSULTATION

(1) Before the consultation begins,
(2) Establishing rapport,
(3) Gathering information,
(4) Defining problems (perceived by doctor and patient),
(5) Agreeing about problems,
(6) Solving problems/ helping patient,
(7) ' Educating ' the patient,
(8) Ending the consultation.

It is possible to demonstrate by videorecordings, without too much difficulty, variations in the interplay between doctor and patient in each of these phases. For example, the focus of activity when the patient first enters is usually the doctor. During the gathering of information the focus moves to the patient and then back to the doctor as the consultation progresses.

By studying the behaviour of medical students, trainees, general practitioners, and experienced trainers, it is possible to identify some differences between the groups. McGirr and his colleagues (1971) have shown that personality factors are important in determining diagnostic behaviour, and what is at issue is much more than merely being nice to patients.

The phase of the consultation in which a working relationship is established is important because it sets the tone of much that follows—and, in the case of a new patient, it may colour the whole of that patient's subsequent relationship with the practice. For this reason, studies of this phase especially are being pursued in Dundee. The following examples are intended only as illustrations of some of the issues requiring fuller examination. In each example the doctor's reactions have not been rehearsed.

Example (1)

A new patient consults an experienced general practitioner. As a matter of course the doctor makes positive moves (by word, gesture, and demeanour) to make an appropriate relationship.

Example (2)

When a new patient consults a trainee at the very start of his general-practice training year, the doctor's behaviour under the constraints of being videotaped is sometimes rather different.

Learning the technique of consultation

Sometimes the doctor's behaviour is muted, or the doctor's behaviour may be inappropriate to the consultation. Sometimes the young doctor straight from hospital appears to be so keen to get to grips with the problem that he does not put enough of himself into the early phase and at a later stage of the consultation may be seen to be presuming upon a relationship which does not exist, to the detriment of the flow of information.

Observations of this kind need to be interpreted with care—what has been captured by the camera under studio conditions may not always correspond with the reality of the consulting room. Yet differences are observed between experienced and untrained doctors under similar conditions, and differences may be seen in several other components of the consultation besides the early phase of establishing rapport.

From studies such as these, one might conclude that doctors may reach a moderately advanced stage, apparently without having acquired much sophistication, and may even be grossly deficient in basic interviewing skills. However, when we came to study pre-clinical medical students in the Dundee Medical School during the behavioural sciences course, we found that, in general, these students conducted the early phase of the consultation fairly easily, occasionally more competently than some of their seniors.

Most young medical students we have observed show such qualities at this stage of their medical education, and on to these qualities are grafted the professional skills. This process, which does not appear to have attracted attention, is easily under-rated in complexity. For some medical students it is not a matter of common sense, as is often supposed, and in the early stages a conscious effort may have to be made if the " technical element " is not to obtrude.

For example, an intelligent young student, who was being taught the rudiments of physical examination, was seen to confuse the " register " of language appropriate for teacher and pupil with that appropriate for communication between doctor and patient. This is a common phenomenon, persisting even among experienced doctors.

In learning to find the appropriate language, by modifying words, the student has at the same time to learn to guard against the temptation to modify concepts, which may often have to be shared with patients.

Attitudes—' anti-modelling '

So far what I have been discussing relates to knowledge about the consultation, and to some of the skills required for the process: what of professional attitudes? By this I mean " that mental state of readiness to respond, organised through past experience." If past experience has been deficient or inappropriate, then possibilities exist of problems arising in this most human of aspects of medical work—the relationships between doctor and patient at both the personal level, and at the collective level of how society perceives the doctor and his role. In an age of increasing impersonalisation, might not doctors' deficiencies in this aspect be all the more readily detected by patients, and misinterpreted as failure to care?

Crombie (1975) has shown that the needs and demands of patients are changing, with a greater emphasis on minor conditions. The Health Departments, spurred on by our adverse economic circumstances, have published their guidelines for the future of the health services. The six principles of the document *The Way Ahead* (Scottish Home and Health Department, 1976) include the following:

(a) Improved services for the elderly, the mentally ill, the mentally handicapped, and the physically handicapped.

(b) Encouragement of preventive measures and the development of a fully responsible attitude to health on the part of the individual and the community.

The need to promote health care in the community calls for a progressive improvement of primary care services and community health services. In the Civil Service wording of the document, this is to be achieved by " lessening the growth rate of the acute sector of the hospital service in order to finance essential developments in other sectors."

In future, then, it seems that all doctors will have to be more concerned with health care and less with medical cure. If this is so, then not only must tomorrow's doctors be provided with the knowledge and skills, they must be enabled to develop *attitudes* appropriate to the task of meeting these changing needs: can this be left to take care of itself?

The following is a report from a general-practitioner tutor about a sixth-year medical student who had completed two weeks in a practice outside Dundee.

Report on medical student—Mr X

Knowledge of clinical medicine:	Good
Knowledge of human behaviour:	Outstanding
Skills in physical/organic medicine:	Adequate
Skills in relationships:	He was very good at relating to patients and seemed at ease in consultation.
Attitudes to patients and colleagues:	Interested and involved. Easy to get on with, interested in human relationships and in family medicine. He was particularly helpful over a case of anorexia nervosa.

Such reports are received from tutors about many of the students whom they have a chance to observe at close quarters. Every so often, however, a report reveals problems.

Report on medical student—Miss Y

Knowledge of clinical medicine:	Fair
Knowledge of human behaviour:	Poor
Skills in physical/organic medicine:	Adequate
Skills in relationships:	Inadequate. Failed most of the time to establish rapport with patients and missed subtle clues.
Attitudes to patients and colleagues:	Little or no interest. Had little appreciation of the work-load and was " anti-establishment " and almost aggressive in arguing with teachers. Claimed to be idealistic, but made no attempt to modify or compromise with the service situation.

It may be that such a student simply did not like the tutor or general practice: yet in discussing their adverse reports with them I have observed several students who

expressed utter astonishment, and claimed to have enjoyed their time in the teaching practice.

Again, it may be suggested that the medical school had simply made an inappropriate selection at the outset: yet it is interesting that such deviations are not being detected earlier in the careful assessments made by general-practitioner tutors on these students during the preclinical course.

The development of professional attitudes in medical students is not a simple affair: students learn much more about their chosen profession than they are formally taught. Eron (1955), from Yale, was among the first to adduce evidence that, as they went through medical school, medical students became more cynical and that the phenomenon could not be attributed simply to increasing maturity. In this country, too, Walton and his colleagues (1963) noted an apparent decline in students' "humanism" as they moved through the undergraduate course, and drew attention to the preference that students seemed to show for the organic rather than the psychological aspects of medicine. More recently, Harris (1974), in a study of the development of attitudes in undergraduates, medical and non-medical, showed, somewhat to his surprise, what he called "anti-modelling" occurring among senior medical students. He believes this is widely distributed, and is not an extreme characteristic limited to a minority.

Other work, from King's College Hospital, shows an *increase in negative attitudes* towards the elderly and their problems as medical students progress through medical school to early postgraduate training (Gale and Livesley, 1974). Patel (1975) has shown the unfavourable attitudes shown by junior doctors towards patients who have attempted suicide.

When such isolated pieces of evidence are taken together, it begins to look as if there is something in undergraduate medical education, as it is currently organised, which "switches off" medical students in important areas of care: as one medical student put it, "We came to clinical medicine with humanity, and after three years they have educated it out of us."

So far, I have suggested that some doctors entering general practice from hospital may appear to be insensitive to people. They often lack basic skills in consultation in general practice, and this may promote an image of failure to care, making the situation appear to patients worse than it is. By contrast, most young medical students appear to possess considerable social skills and appear eager to learn. Yet by the time they qualify some students have developed attitudes which at that stage appear to inhibit learning and performance when face to face with people. Might failure to resolve the issues explain, in part, the contrast in approaches to patients exhibited by Peter Piper and Pickles in the anecdote quoted above?

Scientia—and going beyond the patient

The prime function of general practice is to give a service to patients and families and the general practitioner's organisation, including his record-keeping, should be organised to this end. So great are the pressures on his time that it was with some trepidation I encouraged a few Tayside general practitioners about three years ago to go beyond the immediate needs of their patients and report on the occurrence of influenza-like illnesses in their practices.

The main aim was to devise simple recording methods compatible with the exigencies of the service, yet capable of giving rapid up-to-date accounts. If such reports could be shown to be valid and sensitive, they might provide under epidemic conditions a basis for re-deploying medical nursing and other services at short notice should the need arise. A subsidiary aim was to study the relatively neglected influenza-like illnesses.

As Dingwall (1975) points out, less common infectious conditions, like infective hepatitis, attract attention merely by being uncommon, and an increasing incidence is unlikely to go unnoticed. Influenza-like illnesses, on the other hand, may quietly increase, and before the general practitioner is fully aware, may have acquired epidemic proportions. This can happen the more easily if the general practitioner has not made it his business to find out what is happening in neighbouring practices.

There was some resistance at first, but through their good nature and sometimes with an amused tolerance, the general practitioners began the task. The first year of this work was spent in setting up a system, the second in consolidating the gains, and the third in extending it to involve general practitioners in non-teaching practices in East and Central Scotland. The Scottish General Practitioner Research Support Unit operates the system whereby 38 practices, with combined National Health Service lists totaling about 200,000, provide weekly reports of new cases of influenza-like illness. Each week (Friday lunch-time to Friday lunch-time) a named staff member from each practice reports by telephone the number of new cases of influenza-like illnesses encountered by the practice during the previous week. In return, she is given a résumé of the general pattern. About every four weeks, bar charts are prepared showing the weekly rates in each practice (identified by geographical location and by number); these are posted to the participating practices.

This method thus differs in several respects from the more familiar notification of infectious disease (table 2).

TABLE 2
COMPARISON BETWEEN NOTIFICATION AND SPOTTING

	Notification	*Spotting*
Statutorily compulsory	Yes	No
Fee payable	Yes	No
Patient identified?	Yes	No
Intervention of third party clinically	May follow	None
When reported?	As disease arises	Weekly
Laboratory confirmation	Commonly supplied	Not required
Agreed predetermined clinical criteria?	No	Yes
Duration of period	Indefinite	November–April
Feedback to general practitioners in the area	Uncommon	Cardinal feature
How notified?	Post	Telephone

This exercise led participating doctors eventually to consider what was meant by "influenza-like illness", and as they came by consensus to a definition, so they became more involved. To begin with, for example, the Research Support Unit made the weekly contact—now the majority of practices take the initiative. Initially, only the tutors working with the University Department were involved, now non-teaching practices are helping.

Other general practitioner-initiated developments include moves to seek laboratory confirmation of clinical phenomena: I quote an excerpt of a recent letter from a general practitioner to the Regional Virologist:

"Just a note to give you the picture of the epidemic currently raging at ..... school. Today there are 60 cases out of a population of 360. In September 1975, and each year before that, all the boys were given influenza vaccine. . . . . Some of the houses have escaped infection while in one house at least 70 per cent have succumbed, leading

me to the conclusion that there is a very low immunity to this particular virus. Blood specimens from 18 boys have been despatched and these will be repeated in 14 days' time as requested."

There have been other developments as well. When a local Member of Parliament called for an enquiry into deaths from influenza in an old people's home in another practice, the Area Epidemiologist was already fully briefed and gave the impression on the mass media that availability of such information from general practice is the norm! Perhaps Pickles' view is still in the minority, yet his idea that each of us in general practice has a contribution to make in epidemiology is even more relevant today. The Director General of the World Health Organisation has this to say of such efforts (Mahler, 1975):

" The collection of evidence which can be used to decide what are the main problems facing our health technicians opens great opportunities of research for the individual research worker, for professional workers, and for governments. This is research in the broadest sense and need be no poor and low-class relation to other research aimed at measuring fundamental knowledge of our bio-medical world. And this type of research would make major contributions to the demystification of medical technology."

How may we encourage tomorrow's doctors to think in such terms? A course of 40 hours solid lectures may get across to undergraduates some of the knowledge of epidemiology—but at what price, if at the same time the learning is associated with a web of anti-modelling, destined eventually to promote a fierce allergic reaction at the mere mention of the word " research "?

Knowledge and creative thinking

Dangers of such a concentration on attempts to instil factual knowledge are increasingly recognised. The danger lies not simply in the rapidity with which knowledge becomes outmoded, but also in that other qualities quite apart from these may be ignored.

If, as a cynic has suggested, the half-life of medical knowledge nowadays approaches five years, and the doctor has *not* been fully equipped to cope with change by thinking critically and creatively, then there may be a case for subsequent periodic re-examination of the competence of doctors to practise. But if this should come about, might it not encourage further efforts towards the teaching of yet more *facts?* I believe that we in general practice need a re-emphasis, in the postgraduate sector, on the will to learn, and to learn from each other.

Vocational training is the order of the day and there are now over 1,000 intending general practitioners in training (*Journal of the Royal College of General Practitioners*, 1976). All medical schools are incorporating contributions from general practice into the undergraduate curriculum. Despite all this, the ingredients of undergraduate medical education remain much as before. The central focus of content remains disease, and the emphasis of the educational process remains on memorising fact—ask any senior clinical student preoccupied as he is with ordeal by multiple choice questions.

Furthermore, there is a hidden risk in concentrating teaching endeavour and research effort on university departments of general practice: the wider profession may well be encouraged to leave it all to the so-called experts. The myth will thereby be perpetuated that research is solely for the brilliant, the academic, or the high-powered and highly-equipped medical scientist, and that prosecution of research is incompatible with personal care to patients in ordinary service practices.

The problems of Peter Piper and the professions

On the one hand, then, there are the problems of the need to help medical education to develop so as to preserve and strengthen those precious attributes of skills and attitudes

already present in most young students entering medical schools, to fit tomorrow's doctors better for their tasks, which will be concerned more and more with care rather than cure.

On the other hand there is the need to promote among most—if not all of today's doctors a willingness to see beyond the patient, to look critically at what they are doing.

Can these problems be resolved to the mutual benefit of student and general practitioner, and of patient and society? Can we do this in such a way that we do *not* constrain students with their complex individuality within a mould? For intellectual initiative must *not* be destroyed—it is vital both for the student's personal education and also for future development. As Kessel and Byers (1976) point out, " more needs to be done than simply to introduce new techniques such as audiovisual aids and group discussion. Thoughtful questioning of medical education must continue, particularly of the role and effects of didactic authoritarianism."

Barber and his colleagues (1975) have shown how a contribution from general practice to the undergraduate curriculum in Glasgow has assisted clinical medical students to develop more positive attitudes towards patients and situations in which care is important—but more needs to be done.

I hope I have demonstrated that contact with an academic department can encourage some service general practitioners to respond to a challenge and develop an interest in epidemiology—though perhaps some of them would not recognise that this, in fact, is what they are doing.

The way ahead

It is clear that the new medical schools are striving to inject a community flavour into their medical curricula. The older schools, too, are trying hard, often by tacking a bit of general-practice teaching on to the rump of a sacred cow—perhaps camel is a more appropriate metaphor—the old pre-clinical clinical curriculum. I believe that a surprising amount has been achieved despite this " too little and too late " policy, but surely a much bolder approach is needed.

Initial attachment to a general practice

Odling-Smee (1974), a surgeon in Belfast, has suggested attaching each medical student to an individual general-practitioner tutor from the time he starts at medical school: not to a family—that approach was bound to achieve only very limited objectives in my view—but to a real live general practice, warts and all, with a caring personal tutor. The student would quickly acquire a community-based orientation to health care, which would provide motivation to learn the principles of sciences made relevant because their application is clearly to be seen in daily problems facing the caring professions. There would be ready access to patients and people under supervision of a praeceptor well-versed in the understanding of human nature. To this would be contributed teaching by specialists, technologists, and others.

At first the novice might spend no more than one morning or afternoon per week in the practice, and attend classes in the usual way. Gradually the proportion of time spent in the practice would be increased while the student was encouraged to become involved in providing care to patients, most of whom would be healthy or suffering from minor conditions. Those with major diseases he would follow into hospital where the specialist would be responsible for teaching on the patients now known to the student.

All sorts of objections can of course be raised—where would we find all those sympathetic knowledgeable general-practitioner tutors, for example? I should like to see a start made in a small way—we owe it to our university colleagues to convince them

that at the very least no harm would come to students in such a project: a pilot trial would be necessary. If it were to be set up with sufficient planning my guess is that the medical students thus involved would score better than their more conventional contemporaries, and that the practices faced with this challenge would come more readily to share Pickles' belief that each general-practitioner can contribute to knowledge.

Such a vision of learning medicine from the outset as an apprentice in the community may not be very original, yet it appears to me to offer Peter Piper a chance to pick a peck more appropriate to tomorrow's tasks.

Peter Piper's Peck

In 1813 a certain John Harris published a children's book, entitled *Peter Piper's Practical Principles of Plain and Perfect Pronunciation*, one purpose of which was to combine education with entertainment—a novel idea at the time.

I endorse that sound idea, and, in closing, take a leaf from his book by Propounding the Principle that Provision for Peter Piper of Panoramic Perspectives on Patients and People Pre-clinically by Personal Primary Physician Praeceptors would Promote Perspicacity and Possibly Prevent Perpetuation of Preposterous Perceptions Prejudicial to Proper Postgraduate Professional Practice, Particularly were such Provision to Permeate the whole Programme.

I like to think that Pickles would have approved.

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