WILLIAM PICKLES LECTURE 1978

Those who can

P. FREELING, FRCGP
Senior Lecturer, Unit of General Practice, St George's Hospital Medical School, London

I AM honoured by the invitation to give, in the Silver Jubilee year of our College, the eleventh lecture in memory of our first President, Dr William Pickles.

His biographer quotes the aims of our foundation as "to encourage, foster, and maintain the highest possible standards in general medical practice" (Pemberton, 1970). I intend to examine the point we have reached on our educational route towards that aim and to make some suggestions for our future journey.

I never had the privilege of meeting William Pickles nor of hearing him lecture. My picture of the man we honour today is drawn from vicarious experience only. Its outline is derived from reading his own classic *Epidemiology in Country Practice* (Pickles, 1939); its tints and hues are taken from the palette of his biographer Professor John Pemberton (1970) whom I have already quoted. I have extracted from my readings certain principles to guide me in the task of review and prediction which I now undertake.

The contribution of William Pickles

Pickles confirmed accurately the long incubation period of infective hepatitis, then called catarrhal jaundice. He confirmed the incubation period of several other communicable diseases. He described, and was the first to suggest the name 'farmer's lung' for, the disabling condition brought about by repeated inhalation of the dust from mouldy hay. He was one of the first in Great Britain to identify and describe accurately Bornholm disease or epidemic myalgia (Pemberton, 1970). Pickles thus made contributions to medicine which were descriptive and contributions which were discoveries.

These contributions were made in context. Pickles focused on infectious diseases at a time when these diseases, as causes of mortality and serious morbidity, were a main concern of medicine at large. His own work concerned largely self-limiting infections, and opportunities to study and describe them arose from the unique context of providing "personal, primary, and continuing medical care to individuals and families", attending "his patients in their homes and in his consulting rooms" (RCGP, 1969), through being a general practitioner.

His opportunity to derive specific incubation times arose by geographical accident which Pickles recognized. He quotes in a description of it William Budd, who had used his own country practice to study typhoid: ". . . Where the question at issue is that of the propagation of disease by human intercourse, rural districts, where the population is thin, and the lines of intercourse are few and always easily traced, offer opportunities for its settlement which are not to be met within the crowded haunts of large towns" (Pickles, 1939). It was in his rural practice in Wensleydale with its clearly definable 'lines of communication' that Pickles made the meticulous notes from which he was able to derive both his classical descriptions of disease and his calculation of the incubation times of some of them. The act of discovery was dependent upon the acts of description since Pickles derived incubation times by applying to his observations the notion of "the short and only possible exposure" to infection.

Pickles appears to have brought to his record-keeping the rare ability to separate observations from interpretations of what has been observed, recording what he saw, heard, and felt rather than what he thought his observations meant; but he would not have been able to apply his notion of "the short and only possible exposure" if he had not possessed a characteristic essential to all general practitioners, a curiosity about and an interest in his patients as people. He reports that in the course of establishing the lengthy incubation time of infective hepatitis he found himself unable to explain the infection of one sufferer whom he describes as "a rather pathetic little fellow of middle-age". Pickles continues: "At last I tackled his sister, who gave him away shamelessly . . . 'Oh, yes', she said, 'he's very fond of E' (a girl of 16 known to have had and spread the illness). 'He often goes in at the back door in the evenings and helps her wash up.' "

Pickles' investigations sought to make sense of his experiences: they were also directed to a practical

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purpose. Isolation was the main method of control for diseases propagated by personal contact, so an accurate knowledge of their periods of incubation and infectivity was essential to him. He was also part-time Medical Officer of Health for Aysgarth Rural District; he had the authority to control epidemics by enforcing the closure of schools or other places of public meeting. It seems, however, that he preferred to use his personal power, his personal status as their general practitioner, to encourage his patients to isolate themselves.

Principles

I have drawn a number of inter-related principles from the work of our first President. I have drawn principles about objectives and their applicability; principles relating to experience and recording it; principles about the making of discoveries; and finally principles about the overriding concept that all our work must be considered in context—historical, geographical, social, and organizational.

Three mountain ranges

I will punctuate my lecture with these principles, applying each to my survey of our educational route towards encouraging, fostering, and maintaining the highest possible standards of general medical practice. The terrain features three mountain ranges and three sets of foothills. The mountain ranges are undergraduate medical education, vocational training for our own discipline, and our own continuing education. The foothills are the education of doctors in, or training for, other disciplines, the education of other helping and associated professions and, finally, the appropriate education of the public. I will concentrate on vocational training for general practice, the mountain range now most clearly marked on the maps of medical education.

Context

I will consider first the question of context, by which I mean "the state of things at a given time and place" (Partridge, 1963). Objectives can be applicable only when in context. Experience occurs in context and its context must be recorded. Discoveries are made in context and can be generalized only by appreciating the context in which they have been made. Objectives, experience, and discoveries are more useful the more permanent they are; for the purposes of vocational training they should relate to the special functions of general practice. The special functions of the general practitioner stem from the context in which he practises; their permanence rests upon the degree to which that context is likely to persist.

Historical context

I turn, therefore, to the broad historical context of ideas which continues to affect the society in which and for which we practise. Since much of the training of future general practitioners is by apprenticeship, these ideas affect not only what needs to be learnt, but also the opportunity to learn it. These ideas stem largely from two major revolutions, the Industrial Revolution and the French Revolution. Nisbet (1967), in his book *The Sociological Tradition,* describes these two forces as "monumental in their significance". The Industrial Revolution was distinctively English and Nisbet lists five aspects of it which still affect our society today, namely, "The condition of labour, the transformation of property, technology, the industrial city, and the factory system". All five certainly affect our practice of medicine in the community, and their effects will be greatest in those large cities in which most people live and a majority of general practitioners practise.

The effects of the French Revolution combined with those of the Industrial Revolution to produce three fundamental and widespread processes which Nisbet terms "Individualization", "Abstraction", and "Generalization". As private contractors to the NHS we are part of the process of individualization and as doctors who claim to provide personal medical care we accept that process as affecting our patients and take responsibility for working with it. As doctors who establish a continuing relationship with our patients we are affected by changes in the source of moral values. Our sense of the sacred no longer arises from direct contact with the vagaries of nature, it has become an abstraction, as has the meaning of, for instance, loyalty and friendship; it no longer originates in hierarchies of rank and mutual association constructed to help us survive. As doctors within the Welfare State we are affected by, and often battle against, the effects of generalization, which result in ill people being thought of as patients just as an employer may think of the human beings who work for him as indistinctly differentiated members of his work force.

The combined effects of these two great revolutions are paradoxical and therefore confusing. Increasing emphasis is placed on the importance and rights of the individual; yet the individual tends to become anonymous, his needs and wants submerged beneath the idea of the greater good of society as a whole. Many of the problems brought to us by our patients can be construed, partly at least, in terms of this confusion. Many of the problems we encounter in trying to help our patients can certainly be so construed. Our trainees may also find themselves confused in trying to deal with these problems if the concepts which underlie them have not been learnt—if the trainee has picked up no more than the fripperies of his trade marketable only over the counter of his trainer's practice.

The confusion is compounded by a philosophical environment in which beliefs which were once shared by individuals of different status in a grouping such as a village have become the norms of groups stratified by occupation and status and are no longer shared by individuals from different strata who may have to communicate with each other.

I speak here to the College, not for it. I am discussing

the historical context of general practice and history tends to repeat itself. Fourteen years ago Kevin Browne and I defined the special function of the general practitioner as attempting to learn the language of each individual patient so that the whole of the patient's communication can be understood (Browne and Freeling, 1964). I have found no reason to change my view. This is the special function of general practice, and I intend to concentrate on it here because, rooted as it is in the paradoxes of the society in which we and our patients live and work, it offers objectives possessing permanence. To it must be added the responsibility of using understanding for the benefit of the patient.

There are three lesser and more recent revolutions which have had obvious effects on the work of general practitioners today and reinforce the arguments for our definition of his special function. These are the administrative, the pharmaco-technological, and the educational revolutions. The administrative revolution provides us with a reasonably stable bureaucratic location for our work. We provide the first of a two-tier system of medical care in which we deal with illness as yet unorganized, self-limiting illness, and chronic disease or continuing handicap: activities which require a wide understanding of our patients.

Notionally at least, we control the gateway to the second tier of medical care, the hospital tier. This is beginning to price itself out of business. We must prepare ourselves and our trainees to take over more and more of the care of continuing disease and handicap; we must train ourselves and them to be more active in preventive care, but we must perform these tasks remembering always that we are general practitioners who recognize the patient as a unique individual and try to understand the whole of each patient's communication.

The pharmacological revolution has made us both more effective and more dangerous, especially if we misunderstand our patients. The technological revolution has brought to our consulting rooms tests and apparatus which were once available only within hospital walls and has given many patients better, and certainly warmer, houses and better transport. The result has been to increase our power to cure and relieve physical discomfort and we can do so on our own premises or in our patients' homes.

Paradoxically we now spend more and more of our time with patients who suffer from conditions for which there is no dramatic cure; conditions for which treatment consists primarily of adjustment by patients to, as well as of, their environment; conditions the prevention of which, like their treatment, requires changes in life-style by patients. Only by exercising their special functions can general practitioners hope to be truly successful in helping patients suffering from, or wishing to avoid, these conditions.

Our patients now receive an education both in school and from the media which makes them less prepared to accept instruction without explanation—they are certainly less willing to comply when uninformed and not obviously ill. There is no need to emphasize how these developments also demand of the general practitioner expert exhibition of his special function.

Only a small minority of us have patients preserved in the archives of history, as were the inhabitants of Wensleydale when their illnesses were recorded. A larger number by far live in the decaying cities which are part of our now unwanted material inheritance from the Industrial Revolution. Nearly all of the individuals whom we general practitioners doctor live with 'lines of communication' which are complex in their multiplicity. We rarely have an opportunity to apply the concept of a 'short and only possible exposure' when dealing with communicable disease. But, just as our attempts to identify the sources of infection are confused by the complexity of lines of communication, so our patients may be confused not only by the paradoxes of society, but by the complexity of their human relationships, by crossed lines in their networks of communication. They may be unable to identify just what is making things go wrong with their lives. Just as we are confounded in our attempts to use isolation to control infection, so our patients may feel confounded in their attempts to control their own lives by the paradoxical emotional isolation from others imposed by the complexity of their human relationships. Where this is so, how much greater is the need today than ever before for the general practitioner, with his twin functions of attempting to understand the whole of his patient's communication and of utilizing that understanding to his patient's benefit, and what excellent opportunities for learning to do so are afforded in such a context!

Objectives and their applicability

When we decided to follow the educational route we committed ourselves to finding out more about education and soon realized our need to learn more about both clinical process and educational process. We appreciated the importance of having objectives and the need to base these on an understanding of the clinical process of our work. Unfortunately, like children given a new construction set, some of us have become diverted by the entertainment provided by the simple working models which increased knowledge of these processes allows us to build: we may be losing sight of our original purpose, the purpose of encouraging, fostering, and maintaining the highest possible standards in general medical practice. Many have found that it is all too easy to complicate methods of teaching and working, but much more difficult to simplify and clarify the objectives at which we should aim.

The diversion in our journey is understandable, but not necessarily forgiveable. I have emphasized the importance of viewing general practice in context. Objectives for trainees must relate directly to the criteria for determining "the highest possible standards" and

these change as the context of general medical practice changes. It is all too easy to select objectives specific to the context of one practice in one place at one time rather than to help the learner to derive concepts which are general enough to be of value when the context changes. It is understandable if a teacher focuses on what seems relevant to his own practice; it is unforgiveable if a distinction is not made between objectives which are likely to have some permanence and those which are likely to be transient or local in their applicability. The easiest way of making objectives seem to have permanent applicability is to write them in very broad terms. The risks of doing this are: first, that without statements of some detail the individual teacher cannot be sure what it is the trainee should be able to do at the end of training; and secondly, that some teachers may choose to teach what it is easy for learners to learn, leaving out that which is difficult to teach. We must specify "the highest possible standards of general medical practice" if we are to be certain that vocational training is indeed "encouraging, fostering, and maintaining them."

Broad goals and aims of vocational training for general practice have been published (Royal College of General Practitioners, 1972; Leeuwenhorst Working Party, 1977). The general practitioner requires "sufficient knowledge of disease processes particularly of common diseases, chronic diseases, and those which endanger life or have serious complications or consequences", and needs to understand "the opportunities, methods, and limitations of prevention, early diagnosis, and management in the setting of general practice". These two broad statements have some permanence, but no detail. We must be concerned to write more detailed statements, but equally concerned not to enshrine them as immutable dicta. Further, we must remember that the general practitioner always provides all his medical care within the context of his special functions. We must beware always of the risk of trivializing our work in making the necessary attempt to itemize it.

We must ensure, for instance, that a standardized approach to the management of lower urinary tract infection in young women does not lead to a standardized approach to the sexual experimentation which may have preceded it in a particular patient.

We must be careful to avoid assuming that social concomitants are causes of organic illness while still remembering that social distress can co-exist with physical illness and that both may require help from us.

I believe it is potentially harmful if any teaching interferes with trainees learning to understand the patient's communication and learning to use that understanding to help the patient.

Vocational training for general practice must be designed to foster these abilities, although refining and polishing them takes a life-time. Our success in legitimizing vocational training must not lead us to lose sight of its purpose. The need to put into operation what we have discovered about educational process and clinical methods must not make us lose sight of the aims to which training should be directed.

Now that we have bureaucratized mandatory vocational training those who complete it must not be led to believe that they are now trained general practitioners but rather that they are doctors who have taken a step on the road towards that goal.

I have applied the principle of context to justify the twin objectives of learning the language of the patient, so as to understand his communication, and of using that understanding to help the patient.

I apply next to the methods we are using to help our trainees to achieve these objectives the set of principles which concerns experience.

Experience

The apprenticeship system of vocational training is, like all education, highly dependent upon experience. Learning is unlikely to be effective unless it is rooted in experience and is reinforced by later experiences. Teaching will not be effective unless the learner can relate it to his experience and is enabled to relate to his future experiences what he has been taught. The functions of a teacher, particularly a teacher of adults, include helping the learner to extinguish any inappropriate responses previously learnt. The teacher provides experiences during the learning phase appropriate to the acquisition of desirable behaviour but also has a responsibility for helping the learner to use 'bad' experiences for profit to learn from, not merely to learn not to repeat, those bad experiences. Finally, the teacher must help the learner see the relevance to likely later experiences of the changes he is at present being asked to undergo.

The teacher must perform a positive act of creation, an act of faith, since the reality of future experiences must be awaited, and the testing of learning against that reality must be made by the learner without the presence and guidance of the teacher. The trainee must learn to profit from his experiences, not merely repeat them. The need for education to be learner-centred rather than teacher-centred, becomes clear. The teacher's past cannot be the same as the learner's past and certainly the teacher's past is unlikely to comprise the whole of the learner's future. The teacher/practitioner is not excused, however, from the need to study his own experience, and to study it he must follow Pickles' example of distinguishing between observation and interpretation, while being willing to make both. Trainees too must be able to distinguish observation from interpretation, fact from possible fiction, or they will be unable to make a creative and independent interpretation of their experiences as principals and will tend to deform the reality of later experience to make it conform with interpretations learnt earlier. General practice is the arena for patient-centred medicine (Pereira Gray, 1977).

The teacher/practitioner must offer a model to the trainee by being willing to question his own customs and habits and encouraging his trainee to join in the exercise: only those who can should teach. The model will be incomplete if the teacher as practitioner does not allow patients a similar right: only those who can should teach. Just as the special function of the general practitioner is to understand the whole of his patient's communication and use the understanding to his patient's benefit, so a special function of the teacher is to understand the whole of his pupil's behaviour and use the understanding to the pupil's benefit. In summary, if the teacher/practitioner is not patient centred, the trainee is unlikely to be so. If the teacher is not pupil centred, the trainee is unlikely to become a patient-centred general practitioner.

It is then a prime requirement of the teacher/practitioner that he attempts to practise what he preaches: hence my title, "Those who can". The common aphorism is "Those who can do and those who can't, teach". The original quotation is from George Bernard Shaw (1903), who wrote in *Maxims for Revolutionists,* "He who can, does. He who cannot, teaches." My message is: if you can't do, don't teach. This may seem an unreasonable demand. I quote again from Shaw (1903): "The reasonable man adapts himself to the world: the unreasonable one persists in trying to adapt the world to himself. Therefore all progress depends on the unreasonable man."

I have a strong feeling that we are going to need to train a lot of unreasonable trainees if the College is going to achieve through vocational training its stated aims for the highest possible standards of general practice. Learner-centred teaching based on the ability to distinguish between observations and their interpretation is likely to produce young doctors who question the customs and habits of those they join as partners. Our College has fostered the development of learner-centred teaching (Pereira Gray, 1977). Learner-centred methods give teachers great power. With that power goes responsibility. Each of us has a responsibility for ensuring that new general practitioners are provided with an environment likely to reinforce behaviour produced by that teaching. Education is a process by which the behaviour of a motivated learner is changed in a desired direction. Learners are unlikely to build effectively on their learning if new experiences and their development are inimical to the exhibition and logical development of the newly acquired behaviour. Not all ex-trainees will find themselves with partners happy to reinforce, by encouraging criticism of their own established habits, the learning that has been achieved. There may be greater difficulties than this in wait for ex-trainees who acquire the ability to understand a large part of the patient's communication.

There is no doubt that much is being done to foster this ability during vocational training. Videotape and audiotape recording of consultations with real and simulated patients are being made and studied. Inventories of behaviours, doctor-centred, patient-centred, and negative (Byrne and Long, 1976), have been created and applied. Non-verbal behaviour has been categorized and examined (Pietroni, 1976). Discussion groups are conducted during vocational training, including groups based on those initiated for established general practitioners by the late Michael Balint (Paulley, 1970; personal communication). My concern then is not that there is no activity; quite the contrary. We are encouraging our trainees to lower defences they may possess against involvement with the patient without allowing all of them time to learn how to cope with their new involvement. My suspicion is that while we can hope to give training in the skills of eliciting information which will contribute to understanding patients, some trainees today have little opportunity to apply the understanding of the *whole* communication for the patient's benefit (Marinker, 1970). If I am correct in my suspicion, then some trainees will be achieving the objective of learning to understand the language of each individual patient, but will not be able to see that the objective is capable of practical application.

To rehearse my grounds for suspicion I must return to another of the principles which I stated earlier: that the degree to which an objective is practicable depends upon possessing the authority and/or power to implement it.

Authority and power

I must distinguish first between the terms 'authority' and 'power' as I use them here. I described William Pickles as eschewing the use of his authority as Assistant Medical Officer of Health to Aysgarth Rural District and preferring to use the power of his personal relationships to encourage individual patients to isolate themselves.

Authority and power both stem from being able to apply sanctions or give rewards to others. Authority stems from being able to do this because of the laws, customs, and usages of our society. Authority has a formal basis: it relates to authoritarianism and rests also upon the special kinds of learning one is supposed to possess. Power, on the other hand, is accorded by the individual to whom the sanctions are applied or the rewards given; it depends upon the individual patient accepting the gifts and responding to the sanctions. Power is an individual attribute and depends upon each patient according to it; it has in it elements of symbolism and magic. The strength of power depends in part on the personality of the patient, in part on the particular person's perception of the interacting social roles 'patient' and 'general practitioner', and in part on the quality of the relationship established between the individual and his personal general practitioner. It will depend to some extent on the degree to which the patient has seen as beneficial the general practitioner's use of his authority and his understanding. Power is accorded to those who show their patients that they can

be trusted to use it altruistically (Black, 1977). Power may be accorded as well to those who have extended their knowledge of the patient into personal matters and demonstrated responsibility in their use of it. Power is given to those 'who can', it is not given to those who must possess authority before they dare 'do'.

Improved understanding of the patient's language helps the general practitioner to form a more accurate definition of his problems. When the problem stems from organic disease prescriptions can be written, admission to hospital arranged, investigations ordered, certificates of absence from work provided, or consultations sought with specialist colleagues. All these are actions backed by authority, arising from the context—historical, organizational, and social—in which we practise. We find ourselves on shakier ground when it comes to the patient taking our medicines, accepting our referral or lack of it, and following our advice. It is as if our authority dissipates as the patient leaves the intimacy of the consulting room and experiences again the pressures of the very society from which our authority is devolved. All doctors are trained within the context of that authority, although teaching about it is more likely to be implicit than explicit; it is likely to form part of what Marinker called in the 1974 Pickles Lecture the 'hidden curriculum' of medical education.

Double-blind trials can be thought of as designed to neutralize the effects upon the patient of the authority and power of the doctor (Clyne, 1977). No wonder we are confused when medications which have been proven to be effective in double-blind trials produce in individual patients results much more variable than seems fair! Perhaps the variability of effect of proven drugs depends upon the variation in the force of the power accorded to individual doctors by individual patients, the force of authority remaining reasonably constant. Certainly it would appear that a doctor can predict neither the benefits nor unwanted effects of a drug unless he can predict how the patient will view his intention in prescribing it (Berblinger, 1963).

If there are difficulties in using our increased understanding of the patient who has organic disease, how much greater are the difficulties when the patient's problems stem partly from the confusions caused in our society by the simultaneous effects of individualization, abstraction, and generalization: from the replacement of simple lines of communication with whole marshalling yards of points of confusion-controlled signals whose meaning is easily misunderstood? Attempts to apply authority by making judgements and giving advice in such matters may be accepted by individual patients but are dangerous in the long-term because the origins of authority are the very laws, customs, and usages of society, a personal response to which has been part source of the patient's problems.

Recognition of the dangers of misapplied authority has led to an emphasis during vocational training for general practice on the use of non-directive methods in both the consultation between trainee and patient and the tutorial between teacher and trainee (Byrne and Long, 1973). The trainee doctor and the doctor/teacher are both encouraged to abstain from the use of authority and to adopt a style conducive to an interaction of the character of mutual participation (Szasz and Hollender, 1956; Tuckett, 1976). They must be restrained from giving up at the same time the appropriate use of power: we must beware of throwing out the baby nuclear reactor with its cooling water. I will return to the subject of power and its appropriate use later. Let us consider now the question of power and vocational training.

Power and vocational training

Most trainees have only one year, even in three-year schemes, in which to learn how to understand patients and to demonstrate the use of authority for the benefit of their patients. Such a trainee is unlikely, therefore, to have many patients who accord him power and as a consequence little experience of exercising it; yet it is this power which will be one of his most valuable tools when he becomes established in his own practice. It is because of this lack of opportunity (Hasler, 1978; personal communication) that I suspect that the objective of learning to understand the whole of a patient's communication may not be seen by trainees to be of practical use. We seem to be at risk of sending out into general practice some ex-trainees who have been sensitized to "an extended range of information" have acquired "an extended range of techniques" for collecting it, have begun to formulate "an extended range of hypotheses", but have had little or no opportunity to practise the use of "an extended range of solutions" (RCGP, 1972). This risk may be unavoidable; its magnitude can be reduced if ex-trainees are helped to recognize that it exists. Such recognition, however, merely postpones the problems identified; it does not remove them.

We are using methods in vocational training which tend to produce in trainees attitudes and skills similar to those of their trainers (Freeling, 1975; Freeman and Byrne, 1976). We are at risk of resurrecting the theories of Lysenko and guaranteeing that our trainees inherit our acquired characteristics. We are at risk also of producing trainees who feel that their education is completed when the three-year vocational training period ends. Why else, they could ask, is vocational training mandatory and continuing education not?

New principals need some years to put their training to the test of responsible general practice. They must be allowed time to recognize a need for continuing education. Our College, its faculties, and each of us, its members, must wait for our ex-trainees to identify their own problems, holding ourselves ready to offer them the opportunity to define these problems and to seek their own solutions to them.

Two of the broad goals of vocational training (RCGP, 1972) are that the trainee should recognize his continuing educational needs and be willing and able

critically to audit his own work. These two broad goals, more than any of the others, depend upon the act of creation, the act of faith, which I have said already is demanded of all teachers. We must, as a College, await the testing by the ex-trainee of his learning against the reality of practice, ready to offer the opportunity to use it profitably.

Our future journey

I undertook to examine the point we have reached on our educational route towards encouraging, fostering, and maintaining the highest possible standards in general medical practice. I have focused my survey on that part of the route which we have constructed through the terrain of vocational training, partly because we are about to enter the era of mandatory vocational training and partly because it is the one to which most of our efforts in the past have been directed. My survey has been critical; I hope that my commentary on it has not been merely captious. Like many professional people I have picked out the roads of whose surface I am critical and omitted to praise the way in which difficulties in engineering the route have been overcome. I have chosen as the main criterion for measuring our progress the degree to which we have helped our trainees to realize the practical application of the twin goals of understanding the whole of the patient's communication and of using that understanding for the patient's benefit. This has been the theodolite of my survey and I believe I have justified its use.

What then is the new terrain through which we must pass if we are to be sure that all doctors will do what every general practitioner is required to do, namely, "include and integrate physical, psychological, and social factors in his considerations about health and illness"? To discover the answer to this question I turn again to one of the principles I said would punctuate this lecture, the principle relating to the recording of experience.

Observation and interpretation

William Pickles made his discoveries by first describing his experiences, and then applying to them ideas about infectivity. He calls the first chapter of *Epidemiology in Country Practice* (Pickles, 1939) "An appeal", and he closes it by writing, "We country practitioners are in a position to supply facts from our observation of nature and it is, I feel most strongly, our plain duty to make use of this unique opportunity".

General practitioners today still have a unique opportunity to supply facts from their observations of nature, and among them should be descriptions of the patterns of behaviour with which patients present. Some doctors have attempted this, individually or in groups (Balint, 1964; Balint and Norell, 1973), but all too often the error has been made of failing to distinguish clearly between observation and interpretation. As a result, many general practitioners have considered that no practical application has arisen from the results perhaps because they have discarded the interpretation and along with it the observations. A classical example concerns the work of Michael Balint who directed our attention to the necessity for the now accepted holistic approach to our work. His observations were interpreted in terms of psychoanalytical theory (Sowerby, 1977) and there is no reason for everyone understanding, or finding comfortable, the ideas implicit in psychoanalytical psychology. Yet what general practitioner can honestly say that he has never observed the patterns of behaviour which Balint categorizes as "the collusion of anonymity" or the "doctor's apostolic function" (Balint, 1964), or other patterns of behaviour such as those described by the title *Treatment or Diagnosis,* given to a study of repeat prescriptions in general practice (Balint *et al.,* 1970)? I say this not to defend Michael Balint (his work needs no defence from me), I say it to emphasize the need to make the distinction between observations and their interpretation and also to emphasize that whatever the value found in the interpretations by those who read them, what is important is that the doctors who made a voyage of discovery in his seminars felt that they became, as a result, better general practitioners.

I must now be more honest about the dictum that observations should be distinguished from interpretations. You will all have realized that the two cannot be clearly separated. We cannot describe that for which we have no language: we cannot ask a sensible question unless we are already in possession of some part of the answer. What I have been emphasizing is that making the intellectual distinction between observation and interpretation permits us to examine the accuracy of one and the truth of the other. If we are to make this distinction and if the new generation of general practitioners are to make their own voyages of discovery we must recognize the nature of the blinkers which limit our power to observe. The blinkers are manifest, for instance, not only on those who reject the observations of Michael Balint, but also on those who believe in his notions; indeed they are manifested by some of the notions themselves. It is to identifying these blinkers and ways of removing them that I ask you to turn your attention.

Blinkers and the biomedical model

We are doctors. We make our observations within the constraint of a biomedical model (Engel, 1973), a model which permeates our thinking as it permeated our education and permeates our teaching. Why should it not? We are, after all, practitioners of medicine. On the other hand all doctors work in the context of history, geography, and society. Are we safe doctors, let alone good doctors, if we restrict ourselves to a biomedical model? I doubt it. Are we any better doctors if we

alternate between a distinctively biomedical model and a distinctively psychosocial one, ignoring one when focusing on the other? It is to the blinkers imposed by the biomedical model that I was referring when I pointed out that the vision of those who accepted Balint's notions appeared constrained in the same way as the vision of those who rejected them. The central notion of Balint's work was related to the effects of what he and the most religious of his followers call "the drug doctor"; what could be more biomedical in context?

I take the view that we must now construct a bio-psycho-social model if we are to open our eyes to the difficulties of the terrain ahead of us as we plan the further extension of our educational route. I share with George Engel (Professor of Psychiatry and Medicine at the University of Rochester Medical School) the idea that to formulate such a bio-psycho-social model we must put on one side the reductionist simplifications of Victorian science which dealt with simple cause and direct effect, as Pickles dealt with symptoms and infection. We must turn to something like General Systems Theory (von Bertalanffy, 1968) to find ideas which will enable us to observe our patients in the multiple aspects of the complex of contexts, which the accepted definition of our job demands. As Engel (1977) points out, General Systems Theory was developed in order to achieve "fundamental réorientation in scientific perspectives in order to open the way to holistic approaches more amenable to scientific enquiry and conceptualization". General Systems Theory has made possible recognition of form and operation at different levels of organization and thus enables us to study the physical, psychological, and social aspects of our patients as inter-related rather than alternative processes. I have already touched on one part of such an approach; I will now underline it and illustrate it briefly.

Many patients seem to offer to me as problems questions of control and function. They present problems about controlling themselves or about controlling others, problems about controlling their environment, problems about feeling controlled or the need to reduce excessive control. They present problems about controlling their bodies or parts of their bodies. They report on their inability to be in complete control of themselves and present as evidence alteration in function. The pharmaco-technological revolution has provided us with drugs and other means of controlling our patient's functioning, of altering their observable behaviour. These methods require no deep understanding of the patient, just a willingness to use them. When we prescribe them we are using our authority to provide control for our patients, just as we do when we alter their physical environment or certify the need for absence from work or perform surgery on them.

When we do use our authority to provide control we fail to help our patients develop appropriate attitudes, perceptions, and skills concerning control, and their difficulties may be compounded. The imposition of authority when it arises from an understanding of the patient seems to me a specific misuse of the understanding and a possible misuse of the authority, especially when it is used to defend the doctor against continuing involvement with the patient. When we do this we act as charlatans (Guggenbühl-Craig, 1971).

I hope I have already made clear the distinction between authority issued with the uniform, exercise of which is authoritarian, and power which has to be earned by each individual and given by another. Where power exists the doctor can exercise it to help the patient with problems conceptualized in terms of control. It can, as it were, be given on loan. Permission can be given to forego the use of compulsive responses; approval shown can reduce those feelings of insecurity which lead to difficulty in ordering one's life. Drugs can be given to use as the patient thinks fit, or when the patient recognizes a constellation of symptoms that he and the doctor have agreed need controlling. The concept of control bridges the body-mind dichotomy and together with the ideas of power and authority may provide an entry into applying a general systems approach to a bio-psycho-social model from which, for instance, methods of comparing the drug doctor with the drug diazepam might be derived. The ideas fascinate me, but I must return to the biomedical model in which I was trained and offer my prescription for the future.

I have reported the need for us to write detailed statements concerning the care which should be provided for patients suffering from specific diseases and handicaps. I recognize the need for devising methods for handling the presentation by patients of specific symptom complexes; I know that we must teach a problem-orientated approach. I have stressed the importance of writing these statements, devising these methods, and using this approach within the context of the special functions of the general practitioner. I have pointed out that we must not trivialize our work in our attempts to itemize it. I have emphasized that we must understand the context in which we work and in which our patients live in health and in sickness. I have emphasized that the context is historical, geographical, and organizational as well as social and psychological. I have warned of the risk of sending out into the field ex-trainees stripped of their defensive armour and provided with no alternative survival kit.

I have chosen so far to ignore the mountain ranges of undergraduate education and continuing education. I now bring them into my survey. It is those who negotiate the passes of undergraduate education whom we set out to train, or perhaps to retrain, during vocational training.

For the future we must try to make sure that undergraduate training is so designed that we no longer need to teach our trainees the basic skills of simple interviewing. We must ensure that doctors learn and apply the necessary simple concepts of sociology and psychology before they come to vocational training; we

must see that they learn modern holistic approaches to science. In vocational training we must improve our detachment courses for trainees, carefully designing them with our trainees' help, both to supplement and complement learning in the practice. By the same token trainers must co-operate with course organizers, providing, at the time it is needed, experience in which teaching on courses can be rooted.

We must have as an objective the detachment of trainees from the hospital component of their training to other experiences, which will help them realize that hospital jobs are part of the route to general practice and not merely a service station where they can be pumped full of the wrong grade of expensive fuel. We must experiment in different contexts with different ways of organizing such a detachment. We must experiment with differing organizations of the three years now allocated to vocational training. We must not allow bureaucratization to stultify experiment.

We must give our trainees the opportunity to obtain appropriate experience by allowing them to look after patients with whom they can practise the gaining of understanding and the use of authority and power. We must accept that three years' vocational training is the beginning of, not a finish to, a general practitioner's development. We must refine the instruments we already use in our examination so that the ability to understand the behaviour of patients is properly tested and we must devise new instruments to test the use of this understanding. Above all, we must provide a favourable environment, an appropriate context, for the future development of our young general practitioners. We must look for them to identify their own needs, encourage them to describe what they see, and help them to go forward. They may then use new ideas to make discoveries beyond the grasp of us, their teachers. We must do all this without ceasing from efforts to improve our own care of patients, always trying to understand the whole communication of each of them. We must do all this while still pursuing our study of the organization of our practices and research into our work which are the other roads to the Rome of the highest possible standards of general medical care.

We must all remember and apply the principles which informed the work of our first President: the principles of context, the principles of permanent and applicable objectives, the principles of the profitable use of experience, the need to distinguish observation from interpretation, the principles concerning the making of discoveries, and principles concerning authority and power. We must do all this not by seeking legislative support, but by demonstrating that it can be done and is valuable both to the trainee and to the well-being of his patients when it is done. We must not seek further authority to impose these developments, we may even have to abstain from some of the authority we have obtained by legislation. We have seen already that young doctors will take advantage of vocational training if it is offered to them. We have seen that increasing numbers of doctors are keen to test themselves against our examination. We have seen that doctors established in practice can become excited by the opportunity to review and improve their work (Irvine, 1977). We must remember that power is more effective than authority and that power is accorded to those who show that they can do.

I have written heavy demands inside the silver cover of our College's twenty-fifth birthday card. I require that we adhere not only to our motto *Cum Scientia Caritas* but add to it a new one, *De Caritate Scientia:* not only must we dispense our learning with tender care, we must apply to the tenderness of our care the rigour of a scientific approach.

I ask a great deal, but I know that those who will, can.

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The primary health care team

196. The Sub-Committee stressed the crucial role of the general practitioner and other members of the primary health care team in the preventive field. For most patients the general practitioner is their first point of contact with the health services. An important part of his work and that of associated nurses, as well as the main function of health visitors, is to promote health and well-being and forestall illness and disability by preventive measures. The attachment of social workers to primary health care teams, although at an early stage, is an important development both in itself and in improving liaison with the social services department. Most patients seen by a general practitioner do not require referral to hospital for specialist consultation or admission, and most of those who do subsequently revert to the responsibility of the primary health care team. The team accordingly bears a very substantial proportion of the total health care workload. The continuity of care they provide for many patients and their families over long periods of time and the knowledge they acquire about their patients' social environment provide them with unique opportunities to promote good and practical attitudes to health. Health visitors are almost entirely involved in preventive work, especially health education, and much of the work of district nurses is preventive in nature. The Government in giving planning guidance to field authorities has specifically recommended expansion of the primary care services as a whole and of health visiting and district nursing in particular in recognition of their preventive role.

197. The Government is in full sympathy with the Sub-Committee's view (recommendation 14) that more health centres should be established, and is, indeed, continuing to promote health centres and other arrangements to improve the quality of primary health care. Effective medical care in the community can be more readily provided where the general practitioner has the use of modern premises and facilities and continuing contact with other members of the primary health care team and their ancillary staff. Despite financial assistance being available through the General Practice Finance Corporation and direct reimbursement of rent and rates, few doctors are able from their own resources to provide accommodation as comprehensive as that included in health centres; for example, guidance on the design of health centres provides that they may include facilities for health education activities.

198. The NHS has built up the pace of its health centre programme over the last decade, and in England the number of health centres in use increased from 75 in December 1968 to 705 in December 1976. At the end of 1976 there were 120 health centres under construction most of which were likely to come into use in 1977 or 1978. A further 93 health centres were due to be started in 1977/78. Many others are being planned to come into the capital programme within the next few years. Health authorities are expected to spend at least a minimum capital sum on health centres every year and, in selecting new schemes, to give priority to those in socially deprived areas, including inner cities. Eighty-nine health centres were in use in Scotland at the end of 1976 with 17 more under construction. The numbers for Wales were 83 and 11 respectively.

199. The Government notes and accepts the Sub-Committee's view (recommendation 9) that age-sex registers are a useful preventive device enabling general practitioners to identify groups of patients on their lists who may be at special risk. Increasing numbers of general practitioners maintain such registers. They are encouraged to do so by the Royal College of General Practitioners, who have designed a suitable index card. Guidance on the methods and technique of setting up a register is available from the Central Information Service located at the College's headquarters. Under the Health Departments' ancillary staff reimbursement scheme, 70 per cent of the salary of secretarial help employed by a doctor is directly reimbursed within certain limits. Family practitioner committees may themselves provide help with the preparation of a register so far as their resources permit. The use of clerical staff to set up and maintain these registers is time-consuming and relatively costly. However, recent experiments in using computers to maintain family planning clinic records suggest that age-sex registers could be produced quickly and at relatively low cost from computer files. The results of these experiments are being evaluated.

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