Training to be a doctor

Omissions and their consequences

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When I accepted the invitation to deliver the William Pickles Lecture, 1970, I remember writing: "I am proud to be associated in this way with such a dear man as Dr William Pickles."

Coming from an inhibited presbyterian, such an emotional outburst is out of character. I repeat it today because it was the spontaneous expression of my feelings for the late Dr Pickles. We who used to meet him at the early meetings of the council of the College, regarded him with something much deeper than affection. For me, he had one especially endearing characteristic—he never forgot my name and always addressed me as Dr Gardner.

It is not my intention to give a dissertation upon the life and work of Dr Pickles. What I do wish to do is to acknowledge the influence he has had upon me. In particular, I admire the meticulous care he took over "simple things" and the great attention he paid to every sign and symptom, however irrelevant they may have seemed to be at the time. The respect he felt for his patients is something we should all try to emulate. In the end, it led Dr Pickles to his great achievements in the field of epidemiology.

I am honoured to have been chosen this year to deliver the lecture which bears the name of this charming, lovable man and, above all, this great general practitioner.

The thesis

My thesis today concerns medical education, or to be more precise, two omissions in the undergraduate curriculum which, in my opinion, are of considerable significance.

Reports and authoritative statements on medical education have become endemic in this country in recent years. The major issues which confront medical educationalists have been thoroughly argued and form the basis of many symposia. Dr John P. Horder, in the second William Pickles Lecture, has given us an exemplary discourse upon the potentialities of medical training. There must be little that is new to add to the glut of readily available informed opinion on the subject and I have been moved to enter this well-trodden field by an acute awareness of a significant hiatus in my own undergraduate training which has affected me adversely during my 30 years in general practice.

At this point I wish to make it perfectly clear that what I have to say concerns omissions only. No criticism of the teaching of clinical medicine, therapeutics or pathology is implied. It is what is not taught that worries me. My lecture relates to medical education as I know it in the United Kingdom, but I hope that my theme will prove to be sufficiently embracing to interest our Australian colleagues, whom we are so pleased to have with us today.

Materia medica in perspective

In this section I intend to show how it has come about that the importance of drugs in the treatment of disease has been over emphasized; how it has come about

that, in certain directions, our patients have been misled and, most serious of all, how we, the family doctors, have become deluded ourselves.

My story begins in the year 1617, the year in which, by Royal Charter granted by James I of England and VI of Scotland, the Apothecaries of London were finally separated from their parent company, the Grocers. I suppose this date could be considered to be the rather tentative beginning of general practice in this country, although it bore little resemblance to what it is nowadays.

From the start of their recognition as a separate society, the apothecaries were determined to engage in medical practice. The College of Physicians was equally determined to oppose this invasion of their preserves. A long and bitter quarrel ensued, with sequelae which are still an integral part of the doctors' life today.

A confusing situation existed regarding the original Charter of the Apothecaries. That omnipotent body, the College of Physicians, played a highly significant part in its composition and contrived to have inserted several paragraphs which they called 'Headings for the charter'. One of these consisted of an oath which every apothecary would have to sign, in which he would swear to confine his practice to dispensing the prescriptions of physicians and that he would neither prescribe on his own account nor give treatment to patients, except in emergencies, if no physician were available. When, however, the Charter was finally approved, no form of oath was included. In spite of this, the physicians seemed to have gained their point. Apothecaries were not allowed to treat patients on their own. It was illegal for them to charge a fee for giving advice. They had to earn their living by selling drugs and appliances only.

This created a very troublesome and unhappy situation in the medical profession in and around London in the seventeenth century. The general public must have been quite bewildered. To whom were they to look for help when visited by sickness? The overwhelming tendency was to consult an apothecary. Physicians in those days were somewhat detached; a race apart. They were, or considered themselves to be, 'gentlemen'. Even today, signs of survival of this tradition can be detected. The word 'gentlemen' had a rather grander significance in olden times. It implied that he, the gentleman, lived on a higher social plane than the general level of the community. In order to maintain such standards, a large income was necessary. Medical fees had to be commensurate. Also, the attitude of the physician towards his fellow creatures was one of superiority. He belonged to the educated classes and regarded the apothecaries as ignorant, unlettered men, "bred up in some mean and contemptible trades". The sick man must have found the physician a difficult man to approach, both socially and financially, especially when his own morale was apt to be at a particularly low ebb.

This sense of superiority was by no means confined to the physicians of London. In 1599, James VI of Scotland, in a Royal Charter granted to the physicians and surgeons of Glasgow, had imposed the following injunction; "to visit and give counsell to puir and diseasit folks gratis". The physicians of Glasgow were reluctant to comply with this order. Surely they could never be expected to work alongside anything so despicable as a barber-surgeon, a mere tradesman. Half a century passed before the heirarchy of the profession deigned to associate with the surgeon-apothecary in fulfilling King James's noble command. Another curious anomaly existed at that time in certain towns in the West of Scotland, namely, Ayr, Kilmarnock and Paisley. There, the possession of a university degree was usually held to disqualify a man from general medical practice and to elevate him to the more serene sphere of the pure physician. Indeed, the physician was a superior, expensive and remote gentleman.

On the other hand, the apothecaries were popular and approachable by rich and poor alike. They lived on the same social plane as the bulk of the population. A visit

to one of them was neither alarming nor ruinous. Their prestige, always high, increased enormously in 1655 during the Great Plague of London when many physicians fled the city while the apothecaries stayed to tend the sick and the dying and to face death themselves. Still, the same old fallacy persisted. Every patient had to have a 'bottle of medicine' or the apothecaries had no legal right to charge fees for their services. And it was to these homely men that the public turned for medical aid. After the Plague, upon the return of the physicians to London, the quarrel was resumed and, in 1687, the College of Physicians issued a statute in which, once again, it was stated that apothecaries "could demand payment for drugs only."

In 1703 an important test case was brought in the English courts. An apothecary, called Rose, was accused by the College of contravening the above injunction. A lower court found in favour of the College of Physicians but an appeal, heard in the House of Lords, overturned the decision.

At last, the apothecaries found themselves free to give advice and to prescribe treatment on their own account. The physicians did not accept this ruling readily and the dispute between the two institutions continued for another 100 years, admittedly with abated virulence and diminishing intensity. It was not until the Apothecaries Act of 1815 that the apothecaries were finally delivered from the crippling yoke of legislative restrictions and found themselves free, at long last, to conduct general medical practice. About this time, we find the expression "general practitioner" coming into use for the first time.

It is clear now how a great medical fallacy became established; how the cult of the 'bottle of medicine' became an essential ingredient of medical care. For two centuries the sick man had chosen the apothecary to help him in his distress and for 200 years each episode was accompanied by the inevitable bottle. A deep seated iatrogenic neurosis had been firmly established.

We are still the victims of this mass neurosis today. When William Pickles started practice in the Yorkshire Dales in 1913 he noted that his predecessor had found, and I quote, "the bottle of medicine dear to his patients' hearts." Thirtyeight years later, Dr Pickels goes on to say, "if there is one thing that has remained stationary it is the faith in that bottle." Little has been done since 1815 to dissipate this illogical belief in the value of drugs. Occasional corrective statements come from academic and administrative sources but the advice given is usually impractical. Anyway, the family doctor is acutely aware of the position and it will require more than circulars and statistical statements to eradicate what is, as I have already said, a deep-seated mass neurosis. Perhaps today we can detect some improvement. Perhaps patients nowadays are more willing to listen to the advice we give them but the pattern of medical care is still incomplete and unsatisfactory without the inevitable 'bottle of medicine.'

Developments

It is interesting to reflect upon some of the developments which have resulted from this obsession with drugs and which, in turn, have nourished this human failing.

In 1618 the pharmacopoea, *The London Pharmacopoea* as it was then called, contained 1,960 preparations. The *British Pharmacopoea* today contains fewer drugs, but a recent count of a comprehensive list of proprietary medicines makes up for that. It revealed the astonishing figure of 2,638, of which 656 are loosely described as 'new' preparations. The 1968 *British National Formulary* contains about 640 drugs which we are encouraged to prescribe.

In this decade we have witnessed the growth of an enormous pharmaceutical industry. Old drugs are combined in countless permutations and a week seldom passes without the arrival of several of these 'new' products. One cannot wonder that the patient should think that, in this day and age, as he so often says, there must be some-

where amongst this plethora, a tablet that will cure whatever affliction happens to be annoying him, even the common cold. His faith in drugs is insatiable. If we doctors cannot wave the magic wand, the search can be directed elsewhere. And it is. A survey conducted in the districts around Guy's Hospital in 1968 unearthed the astounding fact that the ratio of those treating themselves outside the National Health Service to those using National Health Service agencies was always about 8 to 1. An investigation into the amount of medicine bought direct from the chemist would, undoubtedly, be illuminating.

How is the doctor to cope with this therapeutic bonanza. The pressures upon him are terrific. The recently-qualified graduate arrives on the scene ill-conditioned and ill-equipped for the fray. He discovers an industry well versed in sales techniques. Soon he finds that his patients consider the prescription to be an essential part of medical treatment. He is faced with the demand for drugs to cure all ills; tablets to assuage grief; tablets to give courage; drugs to ensure comfortable travel. Drugs galore for every conceivable contingency.

The undergraduate curriculum has not been adjusted to meet this situation. The effect of this omission upon the young doctor is subtle and serious. The older members of the profession, with whom he associates, have inherited the tradition and appear to our young man to have compromised with what seems to be the inevitable. He discovers that it is justifiable to prescribe placebos. The word 'placebo' means "I will please". This is a weak and ignoble principle for a man to find at the outset of his career.

This generation has seen the introduction of many preparations of proved and inestimable value. A side effect of these dramatic advances in therapeutics has been to enhance the faith of the patient in the prescription and to tempt the practitioner to prescribe empirically.

Arriving on this scene, straight from university and hospital, must be, to say the least of it, disconcerting. The shock is too sudden. The young doctor's powers of resistance are bound to be eroded. A gradual blunting of his clinical integrity occurs. Sadly, he will look at the prescription he is writing and remember the therapeutic ideals acquired in his student days. A source of discord has greeted him on the threshold of his career. He meets one potential cause of irritation at the start. Surely this is a matter for serious concern. It is wrong that the general practitioner, at the very outset of his medical life, should be exposed to a situation which will make him, in certain respects, discontented with his chosen vocation.

There can be no quick answer to this problem. Nevertheless, I conceive it to be our duty to try to find a solution. In some way we must bring about an understanding of the historical development of therapeutics and a more realistic appraisal of the position drugs should occupy in medical care. We owe this fuller appreciation to ourselves, to our patients and, above all, to the medical students.

Where and how should this be done? The obvious place to start this broadening of medical education is in the undergraduate curriculum, while the youthful mind is still vulnerable. Were materia medica and therapeutics taught against an historical background such as I have just sketched, a rather dessicated subject would be transformed into a fascinating and lively discipline. After qualification and registration, the doctor would arrive in practice with a deeper sympathy for the foibles of his patients and a tolerance for certain of their illogical demands. Emanating from this harmony, is it too much to hope for a gradual re-education of the public? At least, let us start at home. My family now accept the invariable advice they receive from me, namely, "leave it alone". Perhaps it will require several generations of patient endeavour on the part of the family doctor before the community at large will accept such a high standard of therapeutics.

The main-spring from which an adjustment of medical education could originate is from the introduction of general practice into the teaching programmes on a more definite footing and a greater scale than occurs at present. I will say no more about this at the moment as I mean to refer to it later. At this point I shall only enunciate the suggestion that infiltration of general-practice teachers into the classes of clinical medicine and of materia medica would help to fill one of the omissions in the curriculum.

The understanding of minor ailments

Up to this point I have portrayed the physicians of the seventeenth and eighteenth centuries in a poor light and the result is a distorted picture, which is not entirely fair to them. They occupied a leading position in medicine and must have been deeply concerned with the integrity and honour of the profession.

Until the last quarter of the seventeenth century there was no organized medical teaching in Great Britain. True, in the sixteenth century, the University of St. Andrews, having no medical faculty, nevertheless granted a medical degree upon the recommendation of a physican of repute. The University of Aberdeen made a more serious attempt to give medicine university recognition but their efforts were only slightly more successful.

During the eighteenth and nineteenth centuries medical education developed, but the situation continued to be unsatisfactory for many years. The Royal Colleges in London and Edinburgh and the Royal Faculty, now the Royal College of Physicians and Surgeons of Glasgow, took an active part in this development but their outlook was curiously parochial. For example, as recently as 1825, a licence granted in Glasgow was not recognized in Edinburgh and an Edinburgh qualification did not entitle the holder to practice in Glasgow and the west of Scotland. These local restrictions do not pertain today.

It is not surprising that, in the absence of adequate medical education in the British Isles and the anxiety to establish a system of examinations to test a candidate's fitness for medical practice, the physicians should have resented the encroachment of an outside society into this virgin territory.

From its foundation, the Royal College of General Practitioners has been similarly concerned, not with outside intrusions, but with the paucity of teaching and the lack of a suitable test in general practice. The council of the College has had examination committees almost from its foundation. I soon discovered that I had a consuming interest in this aspect of the work of the College. I have often asked myself, Why? It was not sadism, rather the reverse. I thought that we had reached a stage in the history of general practice when we must, first, examine ourselves and secondly, examine the confines of our occupation. This we did. We tried to define the boundaries of general practice and, in 1962, a report was published entitled 'The Content of General Practice'. I wish to focus your attention upon one line from this document. It reads—"He," that is, the general practitioner, "should be well trained in the management of all minor ailments." This quotation, with the addition of the word 'understanding', is my text for the second part of this lecture.

The size of the problem

Estimates of the amount of minor illness seen in general practice vary widely. Considerable discrepancies in these studies are perfectly intelligible when it is realized that the investigator has to assess the quality of each episode according to his own interpretation of what is minor. Also, some include chronic conditions in their researches, others do not. For my purpose there is no need for mathematical accuracy and a sentence taken from a College Report from General Practice, dated 1965, will suffice. This reads, "between one half and two thirds of all diseases in general practice are minor."

No apology need be offered for proposing to discuss with you what amounts to at least half of the family doctor's work. Should any apology be considered necessary, it should come from us, the established practitioners, to our young colleagues; for failing to reveal to them the magnitude of this facet of medical care; for neglecting to ensure that they would receive adequate experience of the full range of morbidity and for not guiding them towards a sympathetic appreciation of the significance and importance of this huge reservoir of ill health.

The 1968 Report of the Royal Commission on Medical Education expresses, rather naively, a similar sentiment when it states that "most students are interested primarily in learning how to alleviate human suffering." It is sad that many medical schools are still so inhibited in their efforts to foster this interest. The alleviation of human suffering cannot be achieved completely without, first of all, creating an understanding of minor ailments.

To describe an illness as minor is unsatisfactory. I have retained the expression because it is in common use and is generally understood by the profession. I do not like it. It should not be equated with the trivial, a category of complaint which has tended to blossom in recent years, although, it too must be listened to with caution. Rather do I wish you, in the context of this lecture, to consider a minor ailment to be one that, in the absence of obscure complications, does not come within the province of specialist or hospital medicine.

Broadly speaking, minor ailments can be divided into two large groups, First, there are the illnesses that can be related to pathology and, secondly, there are those that cannot be explained by traditional laboratory procedures.

Pathology and minor ailments

The first group consists of such maladies as the acute respiratory infections, the exanthemata and so on. They require little elaboration before an audience composed mainly of general practitioners. Many complex situations may develop in the course of their investigation and management, but the methods employed in tackling the problems are well understood. The pattern of approach is thoroughly ingrained in all doctors who practice clinical medicine. The diagnosis may be obvious or it may be necessary to send a variety of specimens to bacteriology, biochemistry, virology or some other department of the laboratory. In the end, the search leads inevitably to a pathological explanation of the disease.

There are several features of these relatively common, simple disorders which require stressing in order to bring up to date a full appreciation of their position in medicine.

The influence of modern chemotherapy and diagnostic facilities

Since the advent of antiobiotics and other dramatic chemotherapeutic advances, there has been a great increase in the number of diseases which fail to make the hospital grade and have been relegated, or promoted, depending upon which side you are on, to general medical practice. Nowadays, most infections, while clinically immature, are therapeutically aborted. The chronic bronchitic, at one time a privileged candidate for admission to and discharge from hospital, rarely reaches the ward until, after many years of controlled survival, he develops that curious modern phenomenon, cor pulmonale.

The more widespread use of diagnostic aids in general practice has also made it possible to manage more and more diseases in their domestic surroundings.

Appendix 5 in the 3rd Annual Report of the College of General Practitioners, 1955, is entitled "Provisional Basis for a Syllabus". This monumental work is the first effort of the examination committee of the College to map out the clinical contours

of general practice. It is founded upon records from the practice of Dr John H. Hunt and received contributions from many varied sources.

I studied this provisional syllabus again recently; a fascinating exercise in nostalgia. From the long list of diseases noted as seen in general practice, I picked out some of the more serious which I have been able to treat at home during the past two or three years and which, in my earlier days in practice, would have been admitted to hospital. They include, erysipelas, pneumonia, left heart failure, congestive heart failure, most anxiety and depressive states, trigeminal neuralgia, almost all cases of skin sepsis, acute pyelonephritis, acute gout, acute osteitis of the tibia. These conditions, with only occasional confirmatory consultant help, were managed entirely at home. They are the vanguard of a new grade of domestic illness to be seen with diminishing frequency in hospital clinics. They are losing their place in the undergraduate curriculum.

Early diagnosis

There is another class of domestic illness which it may be appropriate to consider at this point, namely, minor symptoms which may have sinister implications.

It is a glib truism that nothing is more important in the work of the general practitioner than the recognition and early diagnosis of serious disease. Apart from a few screening programmes, the community is wholly dependent on the family doctor for this vital service. It is to him the patients come in the first instance, often diffidently, with their nebulous complaints. "I hope I am not wasting your time, doctor?" How often must we all have heard this cry, tinged with embarrassment and anxiety.

It follows that the family doctor must be so conditioned that he can understand and sympathize with the underlying fear which brings these patients to consult him. To do this he must have experience and training in the management of illness in its earliest stage. He must learn how to deal with people who come to him totally uneducated in the art of complaining.

This is an important matter. The hospital outpatient has already been filtered through the sieve of general practice. He has had some experience in the technique of history giving, before the consultant sees him, accompanied by his retinue of students. The significant moment, however, is before this, when the symptoms are being described in a less articulate way and presented in the informal environment of the individual.

Symptom presentation

Over the past years I have noticed quite a remarkable change in the way people try to describe what they are feeling wrong. They come, nowadays, to the doctor, armed with the diagnosis. It is relatively uncommon to hear a patient say that he suffers pain. He looks quite incredulous if faced with an enquiry regarding this dominant symptom. The doctor should not have to ask about the obvious. The complaint is, tonsillitis, sinusitis, pleurisy, or, a frequent and brilliant diagnosis, a virus infection. Need the doctor ask? Of course there is pain.

I suppose this change in patient approach is the result of the digests of medical information which the public receive through the various mass media of communication. We are forced to accept this modern method of complaining and laboriously decipher the lay diagnosis into simple and comprehensible language. It is necessary to do this. Patients can be most misleading. Several times I have been called to visit a patient who was said to be suffering from that rather characteristic Glasgow condition, catarrh, and arrived at the bedside, in a state of suppressed annoyance, to find a case of bronchopneumonia. Not only may patients present in this curious way but they often chose the most awkward place and time for their primary physical confessions; coming out of church; an accidental meeting on the pavement.

I was once visiting a man who had had a shock. As I was leaving the house,

his wife mentioned that she herself had been having recurrent abdominal discomfort for the previous six weeks. To her, this was a trivial occurence but, to the doctor the portent was ominous. It was the first manifestation of serious disease divulged in unconventional circumstances. She had an annular carcinoma of the bowel.

It is essential to have experience of and to be alert to the possible significance of this first contact between patient and doctor however and wherever it may occur. Otherwise many a serious disease will fail to receive the early treatment which gives some hope of total eradication of the lesion. They will be consigned to the residue of undiagnosed conditions until it is too late to institute effective therapy. A recent case history is revealing. A woman, aged 50, complained of painful feet. She then developed a most absurd obsession for buying shoes, always the nearest she could find to a man's type of lacing shoe. This gross extravagance persisted for four years and was replaced by an equally expensive habit of buying new spectacles. I could not understand the meaning of the latter notion but had a fascinating psychological theory to explain the first. This particular patient's marriage had never been consummated. As you know, shoes are one of the better known Freudian sexual symbols. This poor woman was unconsciously striving to adjust her marital failures with a pair of comfortable male shoes. Many other neuroses of a less spectacular nature intervened until, in 1969, eight years after her initial complaints, she developed obvious signs of a space occupying lesion and was found to have a glioma of the right temporal lobe.

Were these obsessions with shoes and spectacles the early manifestations of a cerebral neoplasm? Was I failing in vigilance not to realize that I was dealing with the first signs of a potentially fatal lesion? Had I lulled myself into a state of diagnostic nihilism with a smug psychoanalytical exposition? I shall never know but, at least, I mean to try to keep and open mind in future when dealing with baroque symptomatology.

The undiagnosed complaint

My second group of minor ailments, namely diseases which cannot be explained by orthodox pathology, is more difficult to understand. I recall writing once, "general practitioners must remember how lost they were with their first patients and how limited was the value of their recently acquired knowledge." Upon mature reflection, this statement remains more or less true throughout the doctor's professional career. Many illnesses seen in general practice are undiagnosed. They cannot be fitted into any textbook pattern.

All my life I have worked in close harmony with the pathologist, the bacteriologist, the biochemist and the haematologist. I have supported whole-heartedly the demands of the family doctor for open diagnostic facilities. Now that these aids to diagnosis are so freely available, I foresee a possible danger of our becoming over-dependent on laboratory reports to the detriment of our clinical judgment. To a certain extent this has already happened in hospital where we now find so many of our patients being subjected automatically to the routine of chest x-ray, electrocardiography, blood counts, etc. Not for a moment do I decry the value of these investigations, but they should never be allowed to become a substitute for thinking. We must not permit our clinical senses to decay in a welter of laboratory reports.

Out of my long and friendly association with the department of pathology, an unexpected idea germinated and slowly took root. It is this. Medicine has become so obsessed with the need to find a pathological explanation of all diseases that any other possible line of approach has almost disappeared. This seemed to me to contain the rudiments of original thought and gave me some quiet satisfaction. It was not disappointing, however, to discover that Sir James Mackenzie had held similar views.

In an address to the teaching staff of the Victoria Infirmary, Glasgow, in 1920, Sir James said:

> When the improvements of the methods for examining the dead body raised pathology to a distinct branch of medicine, the misunderstanding of the kind of knowledge it revealed led to its wrong application. The physician, seeing the damaged organs on the post-mortem table, very properly sought for signs of the damaged organ in the patients and so laid the basis of what is called 'Physical Medicine'. But he assumed that this gave the whole picture of disease, so that, henceforth, diseases were described from the standpoint of the post-mortem table and today, this is the aspect of disease taught in schools and textbooks. The aspect of disease seen in wards has a relation only to a small proportion of the diseases which are common among the people. Investigation, which was slowly being perfected by the study of patients symptoms, was replaced by the methods of the laboratory.

More recently, in 1969, Dr M. Balint, a psychiatrist working alongside a team of general practitioners, describes a sort of twin approach to diagnosis, the first being what he calls 'illness-centred medicine', and the second, 'patient-centred medicine'. In the latter, the physician, in addition to employing the usual techniques which lead to a localized pathological conclusion, "tries to study the whole person in order to reach an overall diagnosis."

Some further support for my supposition is to be found in the Report of the Royal Commission on Medical Education, but the following excerpt refers to the teaching of psychiatry only. It states, "in very many cases the teacher's natural wish to arrive at scientifically verifiable facts has led him to focus their" that is, the student's "attention on laboratory processes rather than on real life". So my idea that there may be illness with no conventional pathology does not appear to be so fantastic after all. How else can we hope to begin to understand the reason for our failure to attach a diagnosis to the complaints of so many of our patients?

A case history, picked at random from the record card of one of my patients, will serve to illustrate some of the points I have been discussing. A woman, aged 40, was seen for the first time in April, 1968. My initial note consists simply of the cryptic word, pleurodynia. In June she returned complaining of vague abdominal pains and breathlessness, to which she added "pains everywhere" and a "general sense of weakness"; an excellent example of what W. J. H. Butterfield calls "a cluster of symptoms". In November, the pains were in her joints and, by the end of the year she had pains in the loins and frequency of micturition. Such a clinical picture fits no known syndrome. Nevertheless, this patient was incapacitated and posed a difficult problem in management. Patients are pathologically minded as well as doctors. They expect each medical episode to be given an acceptable diagnostic label. They drive us on to investigate. What occurred here is illuminating. Gynaecological examination revealed a simple cervical polyp which was removed. A barium meal and follow through were negative. Blood urea was normal and the urine sterile. Routine haematological estimations were normal and the erythrocyte sedimentation rate was 3. One would have thought that, at this point, investigations could have ceased, but, no, a chest x-ray had to be done and this too was clear. It is really quite astonishing that this patient did not have an electrocardiograph. I would not dare disclose the vagaries of her therapeutic management. Finally, she was reassured.

Such a précis of a case history makes it clear that symptoms can occur in the absence of and without any hope of orthodox pathological findings. Also, it demonstrates to what length our obsession to relate all illness to a preconceived prototype can guide us along avenues which lead nowhere. It is my contention that the reason why so many illnesses seen in general practice remain undiagnosed is because, in the present state of our knowledge, no diagnosis is possible. In the future, psychological research will undoubtedly supply some of the clues to the elucidation of these problem patients. This particular woman came from Poland. She was evacuated to Great Britain during the Nazi invasion of her native land. This crisis in her youth may account for much

of her grotesque conduct but it is too easy to accept this as the sole explanation of her bizarre symptomatology and give the matter no further thought.

Perhaps the solution of the undiagnosed will be found outside the realms of psychology. I cannot believe that we have reached the ultimate in diagnostic dexterity. There must be many lines of approach, not yet understood, based primarily on observational research, nearly forgotten in the era of the laboratory, saved from extinction by men like William Pickles and reinstated by the College of General Practitioners.

For too long all our clinical thinking has been in reverse. We begin with the grosser pathological findings and, from this point, our mental processes proceed backwards. Modern screening programmes carry these retrospective thought processes to their ultimate conclusion. Take, for example, cervical smears. We start with the fear of inoperable carcinoma of the cervix, retrace our steps through a maze of signs and symptoms to the cytology of the precancerous state until, finally, we arrive at healthy tissue.

Of course this is good prophylactic medicine but it should not represent our only way of clinical thinking. Let us begin sometimes at the beginning and concentrate on symptoms, allowing pathology, if any, to fall into place eventually as the picture develops. In this way some progress will be made towards solving the mystery of the undiagnosed minor ailment.

You will all have read Dr Pickle's treatise on epidemic myalgia or Bornholm's disease. You will have noted how he tackled the problem of an undiagnosed disease in his own practice, studying and recording symptoms and signs. The laboratory could not help him. His methods were meticulous observation and careful note-taking. These relatively simple means produced an answer and enabled him to reach a diagnosis of a condition hitherto unrecorded in this country. Incidentally, he also created one of his best known classical achievements in epidemiology using symptoms as the starting point for his thinking, unhampered by preconceived pathological notions.

At least, let us rescue the undiagnosed minor ailment from the hysterical receptacle into which so many of them are dumped today. We can then begin to acquire a sympathetic understanding of this large area of human suffering. With patience, judicious attentiveness and an uncritical rapport with the patient, we shall have taken the initial step towards the elucidation of many mysterious complaints.

I quote some further words of Sir James Mackenzie in corroboration of what I have been saying. "The intelligent practitioner is never long engaged in general practice before he discovers that he is unable to recognize the ailments of a great majority of his patients." It is exactly 50 years since Sir James made this comment. Those among us who agree that the statement remains true today may feel virtuous in making such an honest confession, but our clinical humility should be a stimulus to greater effort to reduce the undiagnosed majority to more reasonable proportions.

The student and minor ailments

I have dwelt at length on minor ailments. I have done so in order to stress the importance of illness as it occurs outside the hospital. I have tried to indicate the enormous bulk of clinical material that is, more or less, unavailable for undergraduate teaching. The medical graduate meets these conditions for the first time when he enters general practice. In the near future he may glimpse them during vocational training, but, in my opinion, this is a little too late to introduce him to what will amount to 50 per cent of his life's work. At the moment of qualification his medical outlook is already formed and biased in favour of the exact scientific approach.

What are the consequences of this omission in the training of the medical student? What effect does it have on the attitudes of the newly-qualified man? With his in-

experience of common conditions and the preponderance of scientific training, he cannot be blamed for classifying such complaints as trivial and for lumping them all together as the neurotic grumblings of an unstable community. He tends to find them boring and unworthy of consideration by a qualified doctor. It is undignified and irritating to have to spend so much time on minor illness. It is a pity that, when bombarded by a heterogeneous variety of symptoms, the reaction of the less experienced doctor should sometimes be acrimonious.

The student's forecast for the future of medicine is that it will become more and more scientific. No doubt this is correct. Even today the medical student is nourished on a diet of glamorous techniques and equipment, intensive-care wards, coronary care units, automated laboratories, not to mention the melodrama of specialized surgery. The minor ailment has little chance in this atmosphere.

It is not going to be easy, in the face of this steadily advancing and computerized approach to medicine, to bring the student back to the realities of ill health. He has been trained to deal with serious and interesting diseases. Why should his newly-acquired skills be wasted on lesser things? Frankly, the answer is simple. During his undergraduate days he should also have learned to appreciate the total range of morbidity and should, even at this early stage of his career, have been taught the skills which are required in the management of minor illness. He must be given adequate insight into the behavioural, sociological and allied sciences. What I am really trying to say is that the medical student must get to know how patients behave and see the way they live.

Permanent sequelae

When I decided to use the word 'doctor' and not 'general practitioner' in the title of this lecture, I did so with intent. I hoped that by doing so, I would create an impression that would reach beyond the confines of a single discipline. Whether we work as general practitioners in the United Kingdom or within the frontiers of a different administrative structure in Australia, we are all, primarily, doctors. In varying degrees, the permanent sequelae to omissions in our early training affect all who practice clinical medicine.

They can be stated briefly; an incomplete understanding of minor ailments and the behavioural habits of patients; a sense of irritation and even drudgery with some of the superficially lesser phenomena; a feeling of loss of prestige in being forced to cope with the undramatic illness, and, finally, an inadequate grasp of the full spectrum of morbidity.

The solution

It is crucial that the curriculum be adjusted so that no longer will there be omissions in training to be a doctor which can result in petty frustration and recurrent dissatisfaction with general medical practice.

I do not wish to exaggerate the significance of what I have been saying. Weaknesses in prescribing habits and flaws in the management of minor ailments bulk large in the daily work of the general practitioner. Both impair the doctor's morale and clinical integrity. I therefore consider it to be of vital importance that medical education should become so complete that no gaps are left in the understanding of ill health and that all potential foci of discontent be eradicated.

The vacuum in the curriculum is slowly filling. Most medical schools, in co-operation with the Royal College of General Practitioners, are now, at least thinking about the problem of teaching general practice. In Scotland, three universities have established departments with chairs in general practice; Richard Scott, in Edinburgh, more recently, James Knox in Dundee and now, Aberdeen has been added to the list.

The difficulties facing medical schools, and particularly our own College, are enormous. Dr Pat Byrne, in the first William Pickles Lecture, stated that "for this College there is no more urgent task than the preparing of teachers." In my view, it is essential that the doctor who undertakes the great responsibility of teaching general practice to the young medical student must be sure that he himself appreciates the infinite breadth of human suffering. He must learn how to teach and what to teach. He must develop in himself a sympathetic tolerance for the illogical whims of patients and he must learn how to impart the philosophy of general practice to the succeeding generation.

Whatever changes may occur in medical care, people will always need a doctor. It is the job of The Royal College of General Practitioners to see to it that they get one who will find complete clinical satisfaction in his work.

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The Doctor's mare, Cassia, was so called by her master from her cinnamon colour, cassia being one of the professional names for that spice or drug. She was of the shade we call sorrel, or, as an Englishman would perhaps say, chestnut,—a genuine "Morgan" mare, with a low forehead, as is common in this breed, but with strong quarters and flat hocks, well ribbed up, with a good eye and a pair of lively ears,—a first-rate doctor's beast,—would stand until her harness dropped off her back at the door of a tedious case, and trot over hill and dale thirty miles in three hours, if there was a child in the next county with a bean in its windpipe and the Doctor gave her a hint of the fact. Cassia was not large, but she had a good deal of action, and was the Doctor's show-horse. There were two other animals in his stable: Quassia or Quashy, the black horse, and Caustic, the old bay, with whom he jogged round the village.

Oliver Wendell Holmes. *Elsie Venner. A romance of destiny.* London. Routledge, Warne, and Routledge. 1861. Pp. 127.