The art so long to learn

J. E. McKnight, M.B., B.Ch., B.A.O., F.R.C.G.P.

TO be invited to give a William Pickles Lecture is an honour. To be invited to give a William Pickles Lecture in Pickles' birthplace (Pemberton 1970) before the serried ranks of members of the Yorkshire Faculty and their north-country colleagues is a singular honour. It is also a challenge of which I hope I may prove worthy.

I must tell you, however, that I was encouraged when I read on the very first page of Will Pickles of Wensleydale (Pemberton 1970) that the commonly recognized qualities of Yorkshiremen and women, which Pemberton tells us were developed in Pickles to the full, are kindliness, mental toughness and a love of the ribald jest.

This is the fourth Pickles lecture but I am the first lecturer who has not known Will Pickles personally. This disadvantage is balanced to some extent by the recent publication of Will Pickles of Wensleydale by John Pemberton, professor of social and preventive medicine at Queen's University, Belfast. This excellent book, written with affection and illuminated by friendship and understanding of Will Pickles, his family, his friends, his patients and Wensleydale itself will surely stand for many years as an eloquent testimony to his life's work as a country practitioner and epidemiologist.

Across the Atlantic our North American colleagues talk of 'life-time learning' and affirm with conviction, 'The Doc. ain't never through'. Nearer home our Welsh speaking colleagues with Celtic fervour tell us of their belief in Addysg O'R Mebyd i'R Bedd—Education from the Birth to the Grave (Owen 1970. Personal communication).

We are more prosaic and speak merely of continuing education. Continuing education in general practice is the subject of my lecture.

I intend to discuss it under four main headings. First, the place of continuing education in the hierarchy of general practice education; second, ways and means of continuing education; fourth, the practitioner's rôle in teaching his fellows.

The place of continuing education

The concept of medical education as a continuum has for long been accepted, yet today there are many practitioners and indeed many members of our College who tend to minimize the rôle of continuing education and rank it well below undergraduate education and vocational training.

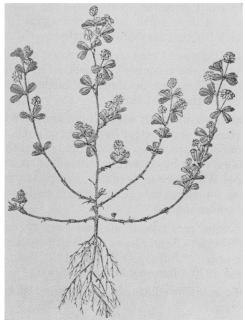
Why should this be? It is in the natural order of things that the endeavours of our College should have been directed first towards gaining a foothold in the universities and medical schools and then towards ensuring that our young entry are adequately trained, and we may take due credit for the widespread acceptance of our ideas on these matters evidenced by the steadily increasing numbers of academic appointments of practitioners and of vocational training schemes.

But there are other reasons why continuing education has become the 'poor relation' of general-practice education. A part-time appointment as regional general practice adviser of a recently formed regional postgraduate committee cannot compare in prestige or attraction with an appointment to a chair or lectureship in general practice in an ancient university or medical school. 'And tell it not in Gath, publish it not in the streets of Askelon', (2 Samuel, i, 19) but it is infinitely more difficult first to ascertain

J. E. McKnight

and then to satisfy the educational wants and needs of established practitioners than it is to demonstrate general practice to eager young medical students or to train aspiring practitioners. In short it is a less glamorous, less rewarding and more troublesome field than either of the other two.

I can think of no better way to counteract this tendency to push continuing education into the background than to show you an illustration of a small plant known to botanists as the lesser yellow trefoil (Ross-Craig 1970). The more discerning among you will recognize this as the 'Dear little, sweet little, shamrock of Ireland' (traditional Irish air). This little trefoil illustrates perfectly the unity—the oneness—of education for general practice. The stem and roots represent pre-university education—a period when the



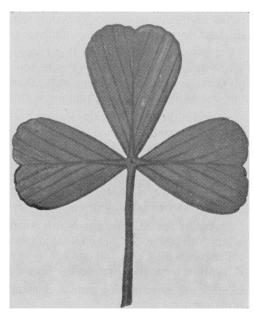


Figure 1 Figure 2

aspiring doctor should receive a liberal education, start to develop his critical faculties and above all else start to think for himself. The first leaf of the plant represents undergraduate education—when the curriculum is no longer designed to turn out a 'safe' doctor but instead a medical scientist who will require further training before he can practice independently in any branch of medicine. The second leaf represents this further training—vocational training—when the knowledge gained at school and university will be complemented by instruction and training in the art and science of general practice. The third leaf represents continuing education which must continue throughout the lifetime of the practitioner if he is to serve his patients efficiently and enjoy his work to the full.

Why have I chosen to depict education for general practice in this rather simple way? First, to demonstrate that it is indeed an entity—a concept complete in itself with each part dependent on the others so that if one is neglected or imperfect the whole will suffer and become lopsided or deformed. And second, to bring vividly to your attention the first of the main themes of my thesis today—that no single one of the three components of practitioner education is pre-eminent but that instead all are of equal importance.

Ways and means

I would like to make it clear at the outset that in spite of the title of this heading I do not propose to talk about, still less attempt to evaluate, the infinite variety of facilities

available in continuing education today. Instead I am going to discuss briefly the history of formal continuing education and develop my theme from there.

Before 1927 there were no formal schemes of continuing education for practitioners. Postgraduate courses had for some years previously been organized at the West London Postgraduate College but those attending were almost entirely doctors from the medical services of the armed forces, the Colonial Service, and the Commonwealth (Allison 1970. Personal communication). For practitioners the journals, meetings of local medical societies and consultations with colleagues appear to have provided adequate facilities for keeping up to date.

In 1927 for the first time the Ministry of Health organized postgraduate courses for 100 insurance practitioners practising in sparsely populated rural areas in circumstances of special difficulty at an average weekly cost of £15 10s. 6d. (Annual report 1927). This sum included instruction fees, the cost of subsistence while attending the course and the cost of a locum tenens.

One of these courses was held at the University of Durham College of Medicine. The programme, entitled 'Syllabus of special postgraduate course, 19–24 September 1927' was arranged for Lancashire, Cumberland and Westmoreland panel committees. One wonders what mutterings would arise from Darbishire House if a similar course were specially laid on for a similar audience today. The courses were much appreciated and the main comment offered was that more attention might with advantage have been given to the clinical demonstration of cases and less to laboratory work and lectures.

When enquiring into the beginnings of formal continuing education in Northern Ireland I was fortunate enough to get in touch with Dr R. S. Allison, formerly consultant neurologist and now archivist at the Royal Victoria Hospital, Belfast—the main teaching hospital.

Towards the end of 1930 Professor Andrew Fullerton, chairman of medical staff, proposed that Northern Ireland practitioners should receive postgraduate instruction at the Royal. The majority of the staff viewed Fullerton's proposal, if not with enthusiasm, with good-natured tolerance. It was a new idea that was catching on in other places and should not impose too great a burden on the staff. Some criticisms were voiced, one ENT surgeon exclaiming 'If we teach general practitioners too much, they will take out all the tonsils and adenoids and we will soon be in the workhouse'. But such objections were not taken seriously as most of the staff recognized that nothing but good could come of the new move (Allison 1970. Personal communication).

The first extended course began in January 1931 and one of the participants was my former family doctor, the late Dr Willie Dickey, whose work and example influenced me greatly in choosing general practice as a career.

I have gone into the Northern Ireland story in some detail because I was able to obtain first-hand information about it and because I am sure that the reactions of the "Royal" staff to practitioner education were similar to those of hospital staffs elsewhere in the United Kingdom.

The main comments made by practitioners attending the first course were similar to those made about the first English course—that more time should be devoted to clinical instruction and less to formal lectures. It is of interest to note that in the 1969 survey of postgraduate education for practitioners in the Manchester region (Byrne 1969) 70 per cent of those who wished to see changes in the content of courses indicated that they wished to have more clinical subjects.

Pemberton tells us that Mackenzie's book, *The principles of diagnosis and treatment in heart affections* made a deep impression on Pickles (Pemberton 1970, p. 97) and that it may be that it was this book that was responsible for him setting out at the age of 42 on

318 W. W. McKnight

the road which made him famous (Pemberton 1970, pp. 98-99). He determined to go forward.

In 1927, in order to bring his medical knowledge up to date, he took a correspondence course in medicine arranged by a 'cram' school in London. He did the required reading and diligently answered the set questions at the end of his day's work. But knowledge by post did not satisfy him. He felt he should return to the hospital atmosphere to see and hear consultants demonstrating actual cases and to learn, from the men at the top, the latest methods of diagnosis and treatment.

In 1929 he went for a month's refresher course to London and spent two weeks at St John's Hospital for diseases of the skin and urogenital system, and two weeks at the West London Hospital. The next year he went to the Edinburgh Royal Infirmary for a month. He continued to go for a month's refresher course at different hospitals every year until 1929.

During the 1930's Will Pickles found month-long refresher courses a satisfactory method of continuing education but we must remember that he was a remarkable, indeed, a unique practitioner. Others held different views.

The Inter-Departmental Committee on Medical Schools—the Goodenough Committee—reporting in 1944, quotes with evident approval an extract from 'a very helpful memorandum' received from the British Medical Association (Goodenough Report 1944).

The courses do not always give the practitioner what he most needs, and the instruction is frequently given by teachers who are not experienced in general practice and lack understanding of the general practitioner's outlook and difficulties.

The report makes several more good points; the benefits of contacts with hospital and practitioner colleagues in mitigating the ill effects of isolation on the practitioner's academic standards; the encouragement of local medical society meetings; the necessary proviso that conditions of general practice should be such that the daily demands of practice should not absorb the whole of the practitioner's time and energy but allow him opportunities he must have if he is to keep his knowledge and methods up to date; that suitably qualified and experienced practitioners might with advantage be employed as teachers on such refresher courses as are necessary.

The British Medical Association returned to the attack in 1950 in the Cohen Report on 'General Practice and the Training of the General Practitioner' and made a further plea for the employment of practitioner teachers who had special experience in particular problems within the range of general practice, giving rural epidemiology as an example (Cohen Report 1950, p. 58). It is not difficult to guess which practitioner inspired this suggestion!

In the 1960's the Gillie (1963) and Todd (1968) reports made only brief reference to continuing education and it would appear that since the Cohen report was published in 1950—21 long years ago—no comprehensive or authoritative guidance or advice on continuing education for practitioners in this country has been published—a remarkable omission which reinforces my earlier remarks about the 'poor relation' of practitioner education.

However, in 1969 the education committee of our college council set up a sub-committee on continuing education which at present is engaged in analysing data obtained from a national survey designed to elicit information on facilities available for continuing education and practitioners' views on these. It is hoped to make a preliminary report later this year.

It is now time, if not more than time, to put forward my own views.

We in this College make much of what we term the attitudes of general practice. Indeed our Board of Censors can justly say that our membership examination is designed to test some of these attitudes.

May I suggest to you that the concept of continuing education, in contrast, say, to the

concept of caring for the 'whole person', is an attitude which is lacking in practice today and that our task is to create a climate of opinion as we have already done successfully in respect of undergraduate education and vocational training; a climate in which continuing education is accepted by all as an integral part of modern general practice; a climate in which failure regularly to undertake some form of continuing education will be regarded by one's colleagues in much the same light as failure to turn up for morning surgery; a climate, in short, where continuing education is a habit of mind, an attitude of general practice.

How do we set about this task? I would like to put forward for your consideration three methods. I will deal first with the least important—the reorientation and improvement of formal continuing education. My views on traditional general refresher courses coincide with those the BMA put forward in 1944 and again in 1950. I do not view them with enthusiasm. Even at best, they provide a means of education in which practitioners play mainly a passive rôle, though it must be admitted that many seem quite content with this rôle—seem quite content to be recipients of education rather than participants in an educational process. To say this is in no way to denigrate the efforts of clinical tutors and course organizers to whose dedication and diligence we owe so much. Indeed, when we consider that they must cater for a group of people of different ages, with different backgrounds and of varying experience who are attending for various motives, it is remarkable how successful their efforts are. And we must also remember that in recent years their task has been made much more difficult by the enforced attendance of a hard core of practitioners who through apathy or loss of intellectual curiosity have become professionally obsolescent and whose lack of enthusiasm and low academic standards give general practice a bad name. Professional obsolescence, by the way, is not confined to practitioners or indeed to the medical profession.

Short formal conferences or symposia on special subjects with specialist speakers will always be necessary. But for logistic reasons alone traditional general intensive courses will be essential for some years to come, especially if postgraduate requirements for seniority payments and postgraduate training allowances are increased.

How then can we improve them and tailor their content and presentation to accord with our concept of modern general practice?

The answer is clear. Regional general practice advisers, general practice sub-committees of regional postgraduate committees, university departments of general practice and our own organization of college tutors must strive, and strive successfully, to influence clinical tutors and organizers of courses to see continuing education from our viewpoint. A concise and comprehensive statement of college policy would prove a most valuable aid in this formidable task.

The second method is to inculcate the attitude of continuing education in our trainee practitioners. Most of these young doctors enter the general-practice year with their intellectual appetites unimpaired and they should be encouraged to grasp every opportunity of furthering their education. Trainers can do much to influence trainees by force of example. It augurs well for the future if one sees trainers and trainees arriving together to attend lunch time or faculty meetings. The danger period is the first few years after trainees become principals. During this time they are up to date clinically and unless their partners are orientated in the right direction or unless they have an objective such as a diploma to aim at they may falter and lose their way. The membership examination of our College must play an important rôle here. You will remember what Will Pickles said about objectives 'I don't think the letters count. What is important is working for degrees and diplomas because it keeps you active and up to date' (Pemberton 1970, p. 197).

The third and most effective way is self-education or learning as opposed to being

320 J. E. McKnight

taught. The basis of self-education is a 'need to know' which Miller (1967) regards as 'the most fundamental requirement for efficient and effective learning'. I referred a few moments ago to this 'need to know' as intellectual appetite.

This appetite may be satisfied by means within a practitioner's own control and available in his own environment; by research; by learning from contacts with colleagues—contacts which nowadays are easily made in multiple partnerships, group practices and health centres—contacts with colleagues from all fields of medicine in postgraduate medical centres and postgraduate societies. Remember Osler's aphorism about medical societies—the society should be a school in which scholars teach each other (Osler 1967); by systematic daily reading; by forming or joining already established journal clubs or study groups; or by the use of audio-visual aids.

Two attributes are necessary—an awareness of the educational opportunities which exist in everyday practice and the ability to make a moderate and sustained effort in reading and the use of audio-visual aids.

If I may give you one or two examples of the former. Might not a single-handed practitioner, working as he does in an unsupervised environment and so escaping the comments of colleagues, realize the need for continuing critical viewing of his daily work and undertake a 'self-audit'? (Acheson 1970). Or in the small practice or group practice might it not be obligatory for any member who attends a postgraduate course or lecture or who reads a good article or book to report anything of interest to his colleagues? After all a good precedent has already been set by the Father of Medicine who had 'an over-mastering desire that his experience should benefit others' (Cohen Report 1950, p. 79). And you will all have read how Dean Dunbar encouraged Pickles to go to courses saying, 'You go, Will, and come back and tell me what you have learned' (Pemberton 1970, p. 99).

When one discusses reading by practitioners one must admit that they make little use of libraries compared with hospital medical staff. While there are many reasons for this, the chief one being lack of proximity, it is true even of postgraduate medical centre libraries. Practitioners prefer journals to textbooks yet spend little time even in journal libraries. Our trainess will have learned to use libraries during their undergraduate and hospital training and must be encouraged to keep up the habit during their general-practice training year and afterwards. Just as every hospital unit has its 'bench books' so must every group practice and health centre have its own small library. I know already of several such libraries in Northern Ireland. The list of books recommended for vocational training in the *How to become a Member or Associate* booklet makes an excellent base to build on.

When I call for more learning—more self-education—am I being too idealistic, too visionary? I do not think so. 'Where there is no vision, the people perish' (*Proverbs*, xxix, 18). It is for the members of our College and especially for our college tutors first to set a personal example in their practices and then to take the lead in their postgraduate centres and ensure—not that general practice will not perish for there is no fear of that—but that it will attain its proper stature.

Wants and needs

What do practitioners want to learn? What do they need to learn? These are two separate questions and we must differentiate carefully between them. Needs may be demonstrated by deficiencies in performance. Wants are self-perceived needs (Fleisher 1970). The two are not necessarily identical and, indeed, there may be a world of difference between them. I am sure there is not a married man here today who is in the slightest doubt as to what his wife wants. I am equally sure that there is not a married man here today who has not considerable doubts as to whether she needs what she wants.

Let us see if we can answer the questions. What do practitioners want? Evidence on which to base an answer to this question is scanty and, as a result, continuing education until now has been provided on an empirical basis. Indeed Fleisher goes so far as to say that in the Philadelphia area of Pennsylvania there is practically no evidence which would support the money and efforts devoted to 99 per cent of programmes of continuing education (Fleisher 1970).

John Horder, in a paper read to a meeting of the Association of Clinical Tutors in 1970 (Horder 1970. Personal communication), after an exhaustive study of the literature and personal enquiries, came to the conclusion that the answer was 'almost anything, provided it is relevant to the day-to-day clinical problems met with in practice'. I am not sure this answer tells the whole story. Are the basic medical sciences relevant? I think so. Surely it might well be argued that it is only by constantly renewing their knowledge of first principles, especially of physiology and pathology, that practitioners can cope with the problems with which they are confronted daily. In addition I believe there are many practitioners who wish to be informed about those fields of medicine which are not immediately concerned with every-day practice and that these men are often the most forward looking of our colleagues.

But I must admit the evidence is conflicting. Though only eight per cent of doctors in the Manchester region wanted instruction in the basic sciences (Byrne 1969), the Medical Recording Service finds there is a considerable demand for tapes on clinical physiology and pathology which are relevant to day-to-day clinical problems, while surprisingly a tape on genetics is a best-seller. There is wider agreement about instruction in the behavioural sciences, for which 37 per cent of Manchester practitioners expressed a desire and for which the Medical Recording Service also finds a good demand.

While there may be doubt about what practitioners want I have no doubt whatever about one fundamental principle. Those of you who shoot snipe will know that the cardinal rule in snipe shooting is to aim high. This rule applies equally to continuing education. When consultants or other speakers ask me, as they sometimes do, at what level they should pitch a talk to practitioners, I have a standard reply, 'Never talk down to practitioners. Pitch your talk at the level of the best practitioner you know and you won't go far wrong'. In an average course a few practitioners will know nearly as much as most lecturers, a fair number will have a considerable knowledge of the subject and the rest will at least realize how much more there is to know. I believe that practitioners must be shown the hills as well as the valleys. Some will surely climb them. Many others will attempt to do so and become better doctors in the process.

What do practitioners need? The answer to this question is equally obscure, and indeed practitioners form such a heterogeneous group that it may well be necessary to break them down into smaller groups, possibly on a regional basis, before the question can be answered satisfactorily. Three attempts to find the answer are worthy of note. The American Medical Association has sponsored a national plan for continuing education which is presently being developed by Storey, Williamson and Castle (1969). The objectives of this plan are to help the individual doctor, by means of an analysis of his practice situation and work load, to assess those areas of his practice which are open to improvement and then to provide appropriate instructional material for him to study in his own time. The plan is extremely complicated and detailed and I understand is still in the experimental stage.

In 1970, Roger Meyrick, chairman of the South London Faculty Board, in an attempt to establish objective criteria for subject matter in continuing education, carried out a pilot study by sending out questionnaires—a list of 50 multiple-choice questions—to 2,438 National Health Service practitioners in four geographical areas in Great Britain (Meyrick 1970. Personal communication). The questions covered six fields of medical practice—management in respiratory and cardiac care; deduction and factual recall in

322 W. W. McKnight

clinical pharmacology, clinical pathology, paediatrics and physical medicine. The overall reply rate of 22 per cent was disappointing. Preliminary analysis of the answers suggests that clinical pharmacology, clinical pathology, paediatrics and physical medicine in that order are subjects where practitioners' knowledge is deficient. Questions on management in respiratory and cardiac care were well answered. In spite of the low reply rate it is reasonable to extrapolate, because these replies are likely to have included many of the more interested and better doctors, that similar areas of ignorance will be shown to a greater extent by the 78 per cent who did not answer. I have dealt with this survey in some detail because I believe it is the only available objective assessment of needs which has been made on unselected practitioners in this country. It is an interesting piece of work and will be studied with care by the Continuing Education Subcommittee.

Gottfried Heller, a practitioner from Klagenfurt, organizes study days in which hospital doctors and practitioners participate (Heller 1970. Personal communication). Following discussion a paper giving information on fields in which practitioners show lack of knowledge is sent to all practitioners in the Austrian province of Carinthia—a remarkable individual effort in this field.

From all this you will have gathered that I am unable to give satisfactory answers to the two questions which I posed earlier and that there is an urgent need for research into the wants and needs of practitioners, probably along Roger Meyrick's lines.

It would be wrong to leave this section without mentioning the preliminary report of the Fourth Report Working Party which is engaged in preparing a book entitled The future general practitioner and has outlined five areas of knowledge with which competent practitioners should be conversant. Two of these—clinical medicine and the practice—are familiar to every one. The other three—human development, human behaviour, and society and medicine—are areas of knowledge which many have practised unconsciously since entering practice. Yet I am sure you will agree when I say that at a conscious level these are areas of deficient knowledge for the generality of practitioners. They should be taught in the context, in the setting, of general practice but unfortunately the organization of their teaching is rendered difficult by lack of suitable teachers.

Indeed there is here a teaching vacuum only partially filled by some admirable, illustrated tapes from the Medical Recording Service. If this vacuum is not filled by practitioner teachers, as it ought to be, it will undoubtedly be filled by teachers from other disciplines, teachers whose work will once again be criticized because they do not understand the needs and difficulties of general practice.

This leads me on the the fourth and final heading of my lecture—the practitioner's rôle in teaching his fellows.

The practitioner's role

The concept that general practice cannot be considered a discipline in its own right until the major portion of all its training programmes is provided by itself (Byrne 1968) finds widespread acceptance. How does general practice measure up to this criterion? Today practically all general practice teaching in the universities and medical schools and during the general practice vocational training year is undertaken by practitioners. Only in continuing education does general practice fall short of this standard. By far the greater part of formal continuing education is provided by hospital medical staff.

Why should this be? I hope the answer I am about to give will not offend by its frankness. 'The fault, dear Brutus, is not in our stars, but in ourselves, that we are underlings' (Julius Ceasar I, ii, 145). The primary reason is to be found in one of the more illogical and less attractive attitudes of general practitioners—egalitarianism. Alone in the field of medicine, practitioners cling to the concepts of equality and independence. I do not wish to comment on the attitude of independence but I do wish to say that I believe that the attitude of equality is not only a nonsense but a positive hindrance. Many

practitioners who are prepared to learn from colleagues in the course of conversation or of their daily work are reluctant to acknowledge the implied superiority of those same colleagues when they lecture or teach by other methods. Conversely, many practitioners with an aptitude for teaching and with something useful to say to their fellows will not come forward through fear of being thought presumptuous. A secondary reason may well be that practitioners have become so conditioned to teaching by hospital doctors that they are suspicious of any alternative.

There is one honourable exception—practice organization—where practitioners teach confidently and competently and are listened to with respect.

Teaching is not a difficult exercise. It is also a most rewarding method of continuing education because it provides an objective, ensures that one will make a close study of one's subject and brings one into contact with like-minded colleagues. The best way to start to teach is to present patients at clinical meetings. The next step is to lecture or teach by other means about one's special medical interest or hobby. I agree with Pat Byrne that many practitioners holding clinical assistantships are competent to teach their fellows at an acceptable level (Byrne 1969).

In Northern Ireland we try to ensure that at least one practitioner teaches at each formal course or conference and that as many as possible speak at lunch-time meetings and on less formal occasions. Last year two formal courses, one lasting for two days and one for one day, were held at which all the teachers were practitioners. The morning sessions consisted of didactic lectures and discussions and the afternoon sessions consisted of the presentation of patients in a group practice and in health centres. These courses were well attended and comment generally was favourable.

I look forward to the day when every health centre and group practice will have, as a matter of course, not only a weekly or fortnightly clinical meeting during working hours to which neighbouring practitioners will be invited but also its own journal club attended by all medical and para-medical staff.

Academic appointments of practitioners and the selection of teaching practices for undergraduate attachments and for vocational training are already beginning to make considerable inroads on our attitude of equality but if we are to make progress at a reasonable rate a deliberate policy of encouraging and promoting practitioner teachers must be adopted and followed through. If I discover a keen practitioner who is willing to teach I do anything in the world to help him. General practice will be the richer because others will follow in his wake and strive to emulate his expertize. It will be for regional general practice advisers and our college tutors to seek out potential teachers, persuade them to start teaching and encourage them to keep on teaching. Only when this policy has been successfully carried out can general practice claim to be a discipline in its own right.

In this, the fourth Pickles lecture, I have urged you to equate continuing education in general practice with undergraduate education and vocational training. I have discussed ways and means by which it might be provided and suggested we should always aim high. I have tried to distinguish between the educational wants and the educational needs of practitioners and have made the point that before they can be defined extensive research, probably on a regional basis, will be necessary. Finally, I have made an appeal that practitioners should play their rightful part in teaching their fellows.

It is Sunday morning and I must echo Will Pickles' words when he gave the annual address to the students of the Birmingham Medical School in 1950, 'I hope I have not been preaching' (Pemberton 1970) p. 153).

324 W. W. McKnight

Annual Report of the Chief Medical Officer of the Ministry of Health. (1927). On the state of public health. London. Her Majesty's Stationery Office.

Byrne, P. S. (1968). Journal of the Royal College of General Practitioners. 15, 409.

Byrne, P. S. (1969). British Journal of Medical Education. 3, 50.

Cohen Report. (1950). General practice and the training of the general practitioner. Pp. 58, 79. London. British Medical Association.

Fleisher, D. S. (1970). Medical Clinics of North America. 54, 600. Gillie Report. (1963). The field of work of the family doctor. Pp. 52, 56. London. Her Majesty's Stationery Office.

Goodenough Report. (1944). Report of the inter-departmental committee on medical schools. P. 220. London. Her Majesty's Stationery Office.

Miller, G. E. (1967). British Journal of Medical Education. 1, 156.

Osler, Sir William. (1967). Aphorisms (1874-1944). Ed. Bean, R. B. and Bean, W. B. P. 59. Springfield, Illinois. Thomas.

Pemberton, J. (1970). Will Pickles of Wensleydale. Pp. 1, 97-99, 153, 197. London. Geoffrey Bles. Ross-Craig, S. (1970). Drawings of British Plants. Parts vii-ix. London. Bell.

Storey, P. B., Williamson, J. W., and Christie, C. H. (1969). Continuing medical education—a new emphasis. American Medical Association.

Todd Report. (1968). Royal Commission on medical education. Pp. 75-77. London. Her Majesty's Stationery Office.

From the editor's postbag

Dear Sir,

Re: Anti-Smoking Gadget

I have read a news report appearing in our local newspapers from your Journal article on Sunday, in which it said, "A new socially acceptable gadget needs to be invented, more versatile than worry beads, something which can be sucked, tasted or chewed like a pencil".

Your report brought to recollection of how I have given up smoking 20 years ago by a cigarette-like gadget that has broken my habit of smoking. Twenty years ago, because I considered that smoking was nothing but a bad habit, and if that habit could be broken I could then easily give up smoking. I did that by an artificial cigarette that needed no lighting up.

If you think that my gadget (artificial cigarette) can be of any commercial value, please let me have a reply by giving me your name and address, and we can then have further discussion on the matter of proposing in commercialising it.

> Yours truly, NG SWEE KIN.

No. 3, Jalan Brani, Penang, West Malaysia. 12 April, 1971.