comply if the offer was repeated, so that health education might produce an improvement.[16] A further study of 50 000 people is under way to see what effect education has on compliance. It is difficult to see how revulsion to faeces can be overcome, except perhaps by regular requests for sampling in the same way as for urine tests. Leicester *et al* found compliance was 92%, in symptomatic attenders at a gastrointestinal clinic,[12] but whether it was due to symptoms or education is not clear. The success of any screening programme, however, must hinge on compliance.[14]

Questions about sensitivity and specificity also remain to be answered, but further evaluation of screening in general practice is required to determine whether a reduction in mortality due to colorectal cancer is possible. Detecting asymptomatic polyps at a rate of 5 per 1000 has yielded 13 polyps in 10 patients. Seven of these were less than 1 cm diameter, the limit of resolution by barium enema. Five polyps lay at or proximal to the splenic flexure and would have been missed by the flexible 50 cm sigmoidoscope. All polyps were removed at colonoscopy without an overnight stay in hospital and two showed atypical morphology of surface cells, a recognised prelude to malignancy.[3]

In formulating a policy for cost effective screening identifying groups of patients at high risk merits priority. Our patients with polyps showed no stigmata enabling identification, apart from occult blood in the stool. Perhaps a more sensitive and reliable method can be found, such as bile acid profiles of stool. Haemoccult screening fits into the existing framework referrals by general practitioners. Organisation of general practitioner screening is time consuming and patient compliance poor. From the hospital view, however, colonoscopic polypectomy is surely more cost effective than treating advanced bowel cancer.

Only 16 out of 25 patients positive for the Haemoccult had no tumour, and only two had no lesions. False positive results thus were not a problem. One year follow up of our patients with polyps has yielded two out of 10 with further adenomas, indicating the necessity for repeated colonoscopic examinations. Since the lead in time from adenoma to cancer is not known[5] we have elected to repeat colonoscopy yearly on all patients at high risk.

We gratefully acknowledge help from Eaton Laboratories with organisation and Haemoccult supplies, from Dr D Bryant and partners, whose patients acted as controls, and are grateful to Dr J Chamberlain for reading the manuscript.

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Patients who usually consult the trainee in general practice

ROBERT FAIRLEY

Abstract

An analysis of every tenth case record from each year of birth and for both sexes from a patient list in a practice with three partners showed that 13% of patients who attended the health centre at least twice a year had usually consulted a trainee. These patients were usually young adults, free from known important long term health problems, and they had closely similar clinical characteristics to those patients who did not usually consult the same principal. Few patients usually consulted each trainee over three years.

Introduction

The general practitioner has been defined as a doctor who provides personal, primary, and continuing care.[1] The council of the Royal College of General Practitioners has also reported that chronic illness makes up 30%, of general practice workload.[2] Several recent studies have dealt with the clinical experience of a trainee in general practice and patients' attitudes towards trainees. Carney found that a trainee saw appreciably more acute minor illness and less chronic illness than a principal in general practice.[3] He also saw fewer patients with life threatening illness or psychiatric illness or consulting for obstetric and gynaecological reasons. Stubbings and Gowers reported that the trainee saw younger patients, a higher proportion of whom were men.[4] Allan and Bahrami reported that most patients thought that trainees give satisfactory care,[5] but a sixth of the patients thought that the trainees were not "proper" doctors, nearly half did not want chronic illness to be managed by a trainee, and nearly a third did not find trainees easy to talk to.

Hasler monitored the clinical work of 59 trainees between 1976 and 1979 for 16 conditions requiring long term supervision.[6] He found that many of these patients did not return to the trainees after only one or two consultations, which raised serious questions about the continuity of care by trainees. Furthermore, Hasler showed that the percentages of such patients returning to trainees bore no relation to their overall workload.

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Home visit ratios between principals and trainees (table II) are unlikely to be due solely to differences in home visiting habits between the principals and trainees because the hospital attendance rates are also different for these two groups of patients, despite similar patient referral rates to hospital by the principals and trainees, which is compatible with different types of morbidity between the two groups of patients.

Table III showed a group of patients free from known severe long term health problems, who moved from doctor to doctor in the practice over the years. But the resultant learning value for the trainee with such patients, who may comprise a large part of his continuing caseload, is questionable. Certainly in this study there was no evidence of a nucleus of patients with continuous severe health problems for whom trainees had the main responsibility for continuing care.

Fouracre and Savory showed that it is possible to steer patients with selected conditions to the trainee.[7] Since this study was completed our practice has tried to concern each trainee continuously in the management of patients with major chronic illness, including joint consultations with selected patients throughout the training year to widen the trainee's experience.

Lawson, however, in a survey of over 1000 patients found that three quarters preferred to see the same general practitioner at every consultation.[8] Indeed, Cartwright and Anderson noted that the highest proportion of patients expressing a preference for their present type of general practitioner care occurred when the doctor worked on his own.[9] My conclusion from this study is that those patients who had usually consulted a trainee during a 12 month period were trainee-accepters rather than trainee-seekers.

I thank Miss Margaret Clark from the area medical records office for clerical help during this study and Dr Jane Mitchell, from the mathematics department of Stirling University, for the statistical analysis of the results. I am also most grateful to Professor J D E Knox and Dr S L Barley for their constructive advice for the project.

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Continuing Education

Taking the plunge

J A C HEPBURN

Some 18 months ago, during my customary scan of the *BMJ* advertisements, a notice in the educational column attracted my attention. A new full time MSC course of one year's duration for experienced general practitioners was being offered at Glasgow University department of general practice. The prospectus indicated that roughly half the time would be devoted to an original research project, and the remainder would be largely concerned with aspects of preventive medicine and health education, subjects largely ignored in university curricula of former years.

Since qualifying in 1964 I have attended the usual quota of courses and lectures and found their value somewhat limited, as the memory of even first class meetings soon fades into oblivion. Theoretically, therefore, this new concept of post-graduate education appeared very promising.

Making arrangements

The practical details of leaving a singlehanded dispensing rural practice for 12 months seemed overwhelming, but I had not counted on my wife's unbounded enthusiasm. Perhaps she wanted rid of me for a year. I set about making steps to enrol on this inaugural course, and, not surprisingly, the difficulties were legion. One needs to apply and gain the approval of the local postgraduate dean, the Department of Health and Social Security, and the family practitioner committee and then attend an interview at the university. The other major problem is finding a locum of high calibre so that one has patients to come back to. All these factors are interdependent, and permission from one official body depends on permission from the others. It becomes very complex. Suffice to say after much correspondence all was resolved, and a Glaswegian medical friend of long standing agreed to give me board and lodgings for one year. At weekends I would travel home to north west Durham at half price on British Rail, for as a full time student I was entitled to a young person's railcard, even at the age of 42 years, which caused my teenage daughters much amusement. Finally, I was fortunate in obtaining the services of an excellent locum for a year—a young man seeking a trial run in a rural singlehanded practice before committing himself to this type of existence.

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I wanted to determine whether any generalisations could be made about those patients in our practice who usually consulted a vocational trainee assistant during one year. The term "usually" was applied to a patient who had consulted a trainee at least twice, and for at least half of the total consultations, and had consulted a trainee more often than any partner.

The training practice, whose list of 5440 patients has a distribution by age and sex that is close to the national average, is in a small health centre in a residential village three miles from the county town of Stirling, where there is a district general hospital. There are three men partners aged from mid 30s to late 50s, and we have had a trainee in post each year for 10 years. It is our policy to describe trainees to the patients as "assistant general practitioners." Patients may see the doctor of their choice, subject to his availability. There is a partial appointments system at 10 minute intervals for morning and afternoon surgeries, with patient assessed urgent cases "fitted in" the same day at the end of each surgery (although such patients will not necessarily be seen by their first choice of doctor). The receptionists encourage patients to see the trainee only when one or more of the partners' surgeries are fully booked on a particular day. Our trainees undertake home visits for each partner on the partner's half day and patients are encouraged by the staff to attend the trainee when their usual family doctor is on vacation to try to give the trainee experience of each partner's list.

Method

The A4 records are filed numerically according to the patients' sex and year of birth. It is our policy to record every consultation. Every tenth case record from each year, for both sexes, was examined.

For each of the 274 patients who had consulted at least twice in a 12 month survey period, out of the total sample of 545 patients, the following details were noted: date of registration with the practice; family doctor usually consulted (and registered general practitioner if different); number of recorded general practitioner attendances, home visits, and referrals to the hospital service; number of laboratory reports; number of hospital attendances from the enclosed correspondence; and any known major chronic illness, such as hypertension, obstructive airways disease, arthritis, or psychoses. The choice of family doctor by these patients was then examined for the year before and after the survey period if they had usually consulted a trainee during the survey year.

Results

The average recorded number of family doctor consultations was 2·8 per patient a year from all 545 patients in the practice survey sample (excluding family planning and maternity services). Table I shows that 36 (13%) out of 274 patients consulting at least twice in the year had usually consulted a trainee. The most common diagnoses among this group were upper respiratory tract infection, gastrointestinal upsets, orthopaedic problems, and, in women only, urinary tract infection. There was one case each of the following acute major conditions: myocardial infarction with left ventricular failure (recurrent) pneumothorax, severe anaphylactic reaction, and depression. Only a handful of patients presented chronic illnesses for continuing management by a trainee apart from a third of the women, who had a history of recurrent or continuing anxiety-depression, were above average attenders, and had tended to consult all the doctors in the practice over the years. (A partner intervened to manage one particularly frequent attender from this group.)

Individually, partners assumed almost exclusive responsibility for maternity care and infant immunisation, but oral contraception services for women in their late teens to mid 20s were more equally distributed among all the doctors.

A single principal undertaking patient care made on average twice as many home visits per patient compared with a trainee (table II). The average hospital outpatient attendance and admission rates for patients referred by the usual partner were also more than double the rates for patients referred by a trainee. The differences in home visit rates between patients were statistically significant ($p<0·05$) by the t test. But a few patients had high annual home visit rates by principals compared with most cases, so that the t test was perhaps not appropriate. Despite the relatively few patients in the study, however, the difference in hospital outpatient attendance rates between patients who usually consulted a partner or a trainee remained statistically significant ($p<0·05$), with the Mann-Whitney test (or 2-sample Wilcoxon test).

TABLE I—*Family doctor usually consulted by patients*

No of consultations per patient a year*	No of patients consulting: Partner	Trainee	Various doctors
Two to three (125 patients)	87	13	25
Four or more (149 patients)	104	23	22
Total (274 patients)	191 (69·7%)	36 (13·1%)	47 (17·1%)

*Excludes family planning and maternity services.

TABLE II—*Annual consultation frequency ratios between patients usually consulting either a partner or a trainee*

Average annual contact ratios	Family doctor consultations* Attendances	Home visits	New referral to hospital	Hospital attendances* Out-patient	Admission
Per patient consulting a partner: per patient consulting a trainee	1:1	2:1	1·2:1	2·5:1	2·4:1

*Excludes consultations for family planning and maternity care.
†Excludes attendances for maternity care or at casualty department.

Patients who had usually consulted a trainee were drawn equally from each partner's list and had been registered with the practice on average as long as those who usually consulted one partner. But these patients comprised a group of mainly younger adults compared with the age and sex distribution of the total sample, which paralleled our age-sex register.

Only five (14%) of these patients had usually consulted each trainee in turn over three years. Just over half of the patients had usually consulted a single principal for at least one of the three years (table III), compared with the practice average whereby over two thirds of attenders each usually consults one partner a year (table I). These findings were also independent of the frequency of consultation with a trainee.

TABLE III—*Family doctor usually consulted in years before and after survey by patients who had usually consulted a trainee during the 12 month survey period*

12 months	No (%) of patients usually consulting: Trainee	Partner	Various doctors	None
Before survey (36 patients)	12 (33)	9 (25)	3 (8)	12 (33)
After survey (36 patients)	9 (25)	10 (28)	9 (25)	8 (22)

The annual consultation rates, morbidity, and choice of family doctor over three years for those patients who had consulted various doctors during the survey year were closely similar to the results obtained for patients who had usually consulted a trainee.

Discussion

I used a 12 month period when there were two young men trainees in post consecutively for equal periods of time in an attempt to focus on the vocational trainee as an assistant and not on a trainee's popularity with our patients. Despite our practice policy to record each consultation, some of the principals may not have entered every consultation; thus the proportion of patients usually consulting a trainee may be overestimated in the results.

My summer holidays were spent in great anticipation and in dreaming up many research projects, all of which eventually seemed to have some overwhelming flaw when I considered the practicalities of actually doing the work. Eventually I decided to follow up a cohort of patients in a geriatric day hospital by assessing them at the time of discharge from the hospital and repeating this assessment later in their own homes. This attempt to measure the duration of any benefits fitted in with my post as hospital practitioner in geriatrics at the local district hospital, especially as a day unit is planned in the near future. A review of publications at the excellent medical library of Newcastle University indicated that such a survey had not been carried out.

Soon the great day dawned and I matriculated as a full time postgraduate student at Glasgow University, having said au revoir to my patients. Rumour in the village had it that I was emigrating to the USA or Spain, or that I was going to become a professor. This last idea added greatly to my self esteem. My fellow students were from Nigeria, Wales, and north east England, with only one from Scotland and Edinburgh at that. University fees, plus some extra cash for out of pocket expenses, were paid by a generous award from General Accident Insurance. One is also entitled to a locum allowance, which is insufficient, and an educational allowance, but the year still proved financially expensive for the British general practitioners. The Department of Health ignored pleas for an extra allowance.

The course

Throughout the university terms there were two formal lectures or seminars a week on various topics, followed logically from conception to the grave. There were many lunchtime meetings in the department and at local postgraduate centres, plus a weekly update on a relevant subject given by one of the students. We were encouraged to follow our own medical interests, and I spent many useful sessions at a local authority paediatric development clinic. Much of the first term was taken up with epidemiology and research methodology—new ground for most of us, but the staff enthusiastically guided us and closely supervised our research projects. My preliminary work had been invaluable, for time is very restricted, less than 10 months from birth to binding of the thesis. I was soon seeing patients at the Victoria Geriatric Hospital and receiving much support from Professor Caird and several consultant physicians in geriatrics.

As I mentioned above, emphasis was placed on preventive aspects of medicine and it seemed logical to take the Royal College of General Practitioners' examination during this year while time was available for study without burning the midnight oil. I successfully negotiated this hurdle in July.

Now the year has drawn to a close. At the beginning of August I proudly collected the bound copies of my thesis, which were sent to the examiners in front of whom I would conduct a defence. The topics in the recent written examination were related to our tutorials though I found it taxing to write five essays in two and a half hours. Later in the day a modified essay question gave ground for cautious optimism. Four weeks later an oral examination based on my thesis was not too daunting, and at the end of this I was informed of the successful outcome.

Time has passed all too quickly, and I must now reflect on the many benefits, not least of which was the opportunity to engage in study without the stress of looking after a busy general practice. My attitude and thinking have undergone changes after many years of having set ideas, which needed revising and modifying. I believe my outlook will now be much more orientated towards prevention; I also hope to do some teaching of general practice. The contact and prolonged, in depth discussion with my peers on a variety of topics and management problems was immensely valuable.

If you feel tempted take the plunge. The essentials: a good university department to go to (Glasgow), a good friend to stay with, a good locum to cover your absence, and a good wife to come home to.

Diary of Urban Marks: 1880-1949

When the Public Medical Service was formed the chief clerk acted for all the members of the service as collector and appeared for us in the court to prove the debt. He was accepted as our agent by the registrar. Ten per cent was charged on each account for collecting and this went to the general funds of the service. On my suggestion a "black list," consisting of all the people who had been put into court, was circulated to the members of the service so that when a patient made application for his services all he had to do was to look up the list and see if the name was there. By this method bad debts have been avoided to a large extent.

In the middle of 1909 it was announced that a medical officer was required for the Tuxy Tent of Rechabites. On making enquiries as to what it was worth I found that the income was between £250 and £300 per year. Each family paid 8/8d yearly for their medical attention, which meant that there were over 500 families in the tent. It would give me a tremendous advertisement throughout the town if I were lucky enough to get it. I obtained a list of the members from the secretary and began to canvass every night.

Now Rechabites are staunch teetotallers and at every house I was interviewed by the head of it and was asked if I had ever tasted liquor. Of course I had to affirm that I knew not the smell of it and never prescribed it for patients, knowing full well that a Rechabite would rather die than touch brandy even when ordered to do so by the doctor. Needless to say, while I was canvassing I did not go near a public house or hotel for fear that I might be seen. The canvass went on for two months or more. It was tremendously hard work. I had to recite in some places all about myself. Where I was born and why? What were my qualifications and did I intend to sit for something better? Was I willing to become a paying member of the tent? Had I cut my eye teeth? Some of the questions were insulting and some ribald, but I had to keep my temper, thinking that if I became the medical officer those who had asked daft questions would get a pretty stiff purge on the first opportunity that presented itself. I would get some of their nonsense out of their systems. It was a pretty degrading job, this canvassing. Here was I a professional man running the gauntlet of brains in most cases inferior to mine and asking that inferior brain to confer a favour on me by allowing me to become his medical adviser. The idea was all wrong. The tent should have asked selected medical men to apply and then interviewed them by means of a small committee of the tent. However, the canvassing was an accepted procedure, and I had to endure the indignity much against my will.

ONE HUNDRED YEARS AGO A police ambulance system has been for some time at work in Chicago, with, it is said, excellent results; it is a part of a system by means of which the occurrence of a fire, a burglary, or an accident, can be rapidly communicated to the police-stations. Boxes are placed in the streets for which reputable citizens, as well as policemen, are supplied with keys; and in case of necessity, by the mere pressing of a button, an alarm is sent to the police-stations for assistance. Wagons, carrying twelve men, are kept in readiness, and are fitted with appliances for securing prisoners, and also with medical stores and apparatus, so that in case of accidents immediate aid is rendered to the injured. (*British Medical Journal* 1884;i:557.)