

Frequent attendance in a family practice

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IT is well known that much of a general practitioner's time is spent looking after a small proportion of his patients. This is not surprising, as disease and disability are not spread equally over the population, but whether the uneven distribution of care matches the uneven distribution of need is another question.

This study tries to analyse the pattern of patient-doctor contacts during a year in one general practice. Such a survey can give no more than a partial answer to the question posed above; to establish the level of need throughout a practice would involve interviewing and examining patients who seldom or never ordinarily see the doctor. However, much can be learned by identifying frequent attenders and studying them in the context of what is known about the practice as a whole.

As it was not possible to study the whole practice in depth, it was necessary to select a sample. Since many of the questions about frequent attenders which arise concern the family, it was decided to select a sample of families rather than of unrelated individuals, though the concept was stretched to include 'single-member' households so that the sample should be representative of the practice as a whole. In addition we recorded the distance from the surgery, the type of contact, and the diagnosis.

Method

Sampling

The study is based on about 3,400 patients seen at the main premises of a partnership of two doctors, one male and one female, in an industrial area of South London. A part-time female assistant was employed throughout the period. The area includes some new housing estates as well as the older type of industrial housing. An age-sex register has been maintained since 1960.

It is not immediately obvious how to select a statistically representative sample of families where there is no record linking the members of each household or family; the method adopted in this survey is therefore described in some detail. We defined a family as a group of individuals related by blood or marriage and living at the same address. Households comprising one member only were also included in the survey.

The object of the sampling procedure was to pick a random (or effectively random) sample of households in the practice so as to ensure that each *individual* has an equal chance of being picked. This would have presented no difficulty if all the records had

been filed in family folders (Backett and Maybin, 1956), but to pick a sample of families direct from a list of patients involved three stages.

A *first-stage* sample was drawn by listing every seventh name in the age-sex register. This produced a representative (although not strictly random) sample of all the patients on the list. Such a sample does not, however, lead directly to a representative sample of *families*. The larger the number in a household the more likely they are to have a member selected in the listing procedure; for example, five-member families are five times more likely to be picked than those with only one member.

The next step, therefore, was to find the number of patients on the list with the same name and address as each patient in the first-stage sample; this was done by means of the alphabetical file of record envelopes. The list then looked like this:

Name	Address	Number of individuals
Miss A. Brown	12 South Avenue	1
Mrs C. Green	22 West Road	3
Mrs E. Jones	13 North Crescent	5
Mrs B. Smith	42 Station Street	2
Mr D. White	73 East Lane	4

meaning that there were: four Whites at 73 East Lane, Miss Brown lived alone at South Avenue and there were three Green's at 22 West Road.

A sample of complete families based directly on this list would include a disproportionate number of large ones, the Jones family having five chances of being selected compared with Miss Brown's one chance.

To allow for this a *second-stage* sample was drawn, consisting of *all* the patients on this list with a '1' against their names, every *second* patient with a '2', every *third* patient with a '3' and so on. The *second-stage sample* consisted of all the complete families identified in this way. Thus if Mrs Jones was selected by this means the sample would include all five members of the Jones family on the list.

To complete the *final-sample* we added members of the selected families at the same address with different surnames (e.g. mothers-in-law). These could only be identified after the sample had been picked by asking members about the composition of their household. We omitted 51 patients (mostly from single-member families) who had already left the practice before the survey began, but whose records had not yet been withdrawn. These two adjustments cannot be justified on a statistical basis but they are unlikely to have distorted the ultimate findings; indeed the reverse may be true.

Records

The record envelopes of all the patients in the final sample were marked with a red star and assembled in quarto-sized 'family folders' to ensure that all contacts, however tenuous, made by members of the family were recorded and that the household composition (details of which were entered on a label on the outside of the folder and on a special card), could easily be verified.

To record details of each contact we used the form S4 of the Research Unit of the Royal College of General Practitioners. The name, the year of birth, sex, marital state and address of the individual appeared in the appropriate boxes at the head of the card. At each contact we recorded the date, the predominant diagnosis, whether it was by appointment at the surgery or as a casualty or, if it was a call, whether it was on the usual morning round or whether it was a late or night call. Telephone contacts, repeat prescriptions and attendances for certificates only were recorded separately. The person initiating the contact was then recorded, including the doctor in the case of a follow-up contact. Referrals were also recorded. The use of family folders made it easy to ensure that all such consultations ('While I'm here, doctor') were recorded on the card of each member of the family who was provided with a service.

Frequent attenders

The main purpose of this survey was to study frequent attenders. For this it is not enough simply to take an arbitrary number of contacts—say ten in a year—and study the patients who made more than this number. As figure 1 and table 1 show, the average frequency of consultations varies and depends greatly on age and sex (the average ranging from two per year for males aged 15–24 to more than ten for women over 75).

In order to allow for this well-known pattern we have determined the upper quartile of the distribution of number of contacts for each of the age groups given in table 2. For example, there are 35 males aged 5–14. A quarter of these (to the nearest whole number) made five contacts or more. Five is then the upper quartile of this age-sex group.

In this way 98 patients (26 per cent of the sample of 382 patients) have been identified, each of whom made a number of contacts equal or greater than the upper quartile for his or her age and sex. These patients are referred to as frequent attenders in the analysis. The main purpose of the following analysis is to determine whether frequent attenders have any special characteristics.

Distance

When the families had been identified, the distance they lived from the main surgery was measured (as the crow flies) on a large-scale map. They were then classified into four groups: those living within a quarter of a mile of the surgery, those living between a quarter of a mile and half-a-mile away, and those living further away with or without an easy journey to the surgery by public transport.

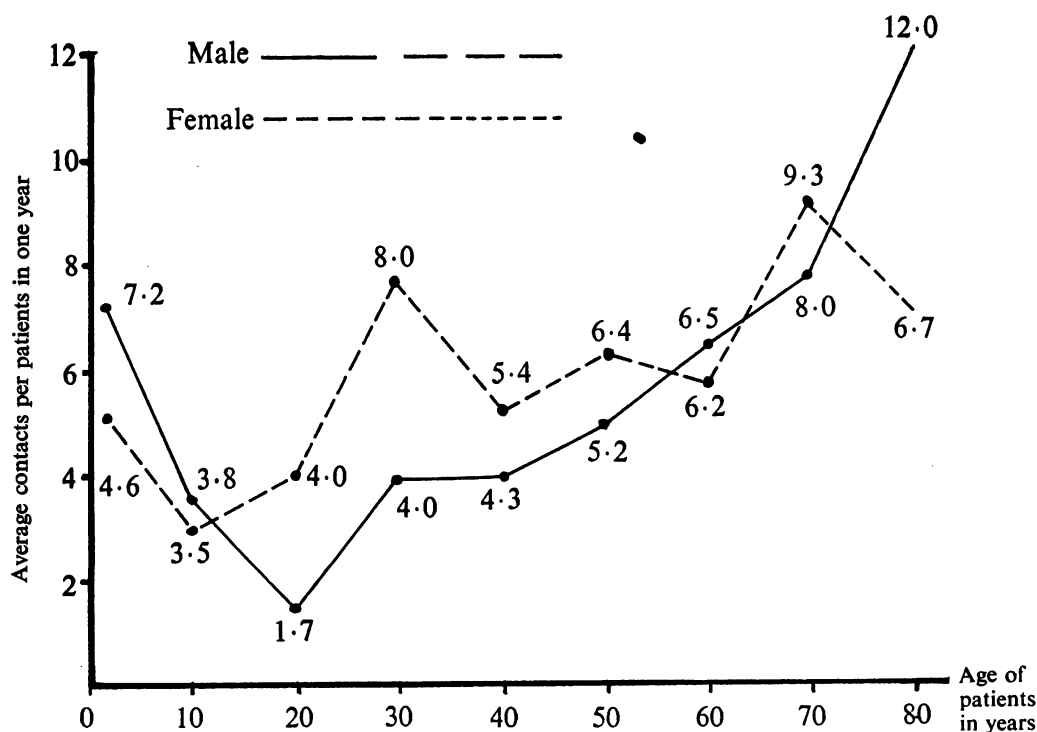


Figure 1
Number of contacts in the year per patient. Complete distribution.

TABLE 1
CONTACTS IN THE YEAR BY SEX AND AGE OF PATIENT: MEAN AND UPPER QUARTILE

	<i>Age</i>							
	0-	5-	15-	25-	35-	45-	55-	65-
<i>Male</i>								
Number of patients	24	35	21	24	27	19	13	11
Contacts per patient:								
mean	7.2	3.8	1.7	4.0	4.3	5.2	6.5	9.5
upper quartile	12	5	3	4	8	12	6	13
<i>Female</i>								
Number of patients	26	35	25	29	35	15	17	26
Contacts per patient:								
mean	5.2	3.5	4.1	8.0	5.4	6.4	6.2	8.3
upper quartile	9	6	7	11	9	11	11	13

Diagnosis

The pitfalls of diagnostic classification in general practice are well known and we have not tried to make a complete analysis of diagnostic labels. At each contact throughout the year a single diagnosis was recorded—that of the condition judged to have been the principal reason for seeking advice or treatment on this particular occasion—and classified by the Royal College of General Practitioners' method. We attempted to identify a group of those conditions which might warrant referral to a consultant at some stage if difficulties arose, and would also be likely to bring the patients into regular contact with their general practitioner.

Before the survey a list was drawn up of 'major' diagnostic headings defined as follows:

- Class (1) Somatic disease which might meet the requirements given above,
- Class (2) Psychological disease similarly defined with the neurotic and depressive conditions labelled 'formal' by Shepherd *et al.* (1966),
- Class (3) All other diagnoses.

The list of diseases in these three groups is inevitably arbitrary. However, by applying a diagnostic label at each contact, before the frequent attenders had been certainly identified as such in the minds of the doctors, we think we have been able to make a more objective classification independent of the rate of attendance. Preventive procedures were recorded separately.

Composition of the sample

The final sample consisted of 382 patients from 148 households. The only check we have on the validity of the sampling procedure is to compare the age-sex distribution of the sample with that of the whole practice. This is done in table 2 which shows reasonably close agreement.

It may be that the sample gives a truer picture, for the total figures include patients

TABLE 2
SEX AND AGE DISTRIBUTION OF WHOLE PRACTICE AND SAMPLE

	<i>Total patients (=100)</i>	<i>Sex and age (per cent)</i>										
		<i>M</i>	<i>F</i>	0-	5-	15-	25-	35-	45-	55-	65-	75-
Practice	3399	45	55	11	16	13	18	13	11	9	6	3
Sample	382	46	54	13	18	12	14	16	9	8	6	4

who had left the practice but whose records had not been recalled. Many of these were young single people and this might explain the fact that the sample included 14 per cent in the 25–34 age group compared with 18 per cent in the whole practice.

The 148 households in the sample included 39 members *not* on the practice list. Husbands formed 20 of these and seven were wives; the remainder were mostly children with only one parent on the list. The distribution of family sizes (including the 39 members on other lists) were as follows:

Number in family	1	2	3	4	5	6–8
Number of families	35	36	29	28	12	8

In exactly half the families (74) there were no children under 20 at home. Most of these were either single-member households (14 men and 21 women) or married couples with no other family at home (27). Almost one third of the patients in these groups were over 65. Of the 74 families with children there were 36 with the youngest child under five, and 26 with the youngest child between 5 and 14; there were one motherless and five fatherless families and only four three-generation families.

About 20 per cent of the patients in the sample had been on the list for more than ten years and half (52 per cent) for less than five years when the survey started.

Just over a third (39 per cent) of the families lived within a quarter of a mile of the surgery and a third (34 per cent) lived between a quarter and half a mile away. Of the remaining 41 families (only 27% of the total), 24 were regarded as having an easy journey, and the remainder a difficult one. No family lived more than two miles away.

Results

Contacts between doctor and patient

The total number of contacts made in the year by the 382 patients in the sample was 2,025 (5.3 per patient). This figure includes a small number (105) of attendances for preventive purposes (e.g. well-baby clinic, immunisation, antenatal care, and contraceptive advice). It also includes 465 contacts (1.2 per patient) with the receptionist alone to obtain a repeat prescription, and 63 where the patient consulted the doctor by telephone.

The proportion of such indirect contacts varied from 17 per cent in children to 30 per cent in the 45–64 age groups, and 52 per cent in the over 65s. Face-to-face contacts therefore amounted to 1,497 (3.9 per patient), and visits accounted for nearly 11 per cent of these. Contacts made on the initiative of the doctor amounted to 13 per cent of the total.

The face-to-face contacts were classified as *routine* if the contact was by appointment at the surgery or on a visit on the main morning round. Thus casualties (18 per cent of surgery attendances) and visits in the afternoon, night or at weekends (28 per cent of all visits), were considered *non-routine*.

As was to be expected, there was a big range in the frequency of contacts. At one end of the scale were 56 patients who made no contact during the year, and at the other end was a patient who made 53. The complete distribution is given in figure 2.

The 98 frequent attenders (26 per cent of the sample) as defined previously, accounted for 1,234 (61 per cent) of all contacts during the year. Figure 3 shows that there were proportionately fewer frequent attenders in large than in small families, the percentage decreasing steadily from 31 per cent in single-member households to 21 per cent in those of six or more.

There is only slight evidence of clustering of frequent attenders within families. The largest number of frequent attenders in any family was four (one family only); there were two families with three frequent attenders and 19 with two. This is much

TABLE 4
TYPES OF CONTACT

Number of patients	<i>Frequent attenders</i>		<i>Rest of sample</i>	
	98		284	
Number of contacts	1234	% 100	791	% 100
Attendances:				
for preventive purposes	50	4	55	7
for prescription/certificate	310	25	150	19
for all other purposes	757	61	507	64
Visits	74	6	63	8
Telephone contacts	43	3	16	2
Non-routine* contacts	127	10	151	19
Contacts initiated by doctor	215	17	83	10

**i.e.* attendances other than by appointment and visits outside normal visiting hours.

In table 4 are compared the *types* of contact made by the frequent attenders and the rest of the sample. The proportions are similar, the chief differences being that the frequent attenders accounted for relatively more contacts for repeat prescriptions and for doctor-initiated contacts, and for fewer non-routine contacts (as defined above) than the rest of the sample. Incidentally, a different definition of frequent attender (e.g. one which ignored attendances for preventive purposes or for repeat prescriptions) would not produce a very different sample of patients.

Illnesses

Table 5 shows that 62 (63 per cent) of the frequent attenders were diagnosed as having had a major condition recorded on at least one occasion during the year, compared with 45 (16 per cent) of the remainder. Among the most frequent 'somatic' conditions recorded were asthma, eczema, migraine, hypertension, heart disease and various musculoskeletal conditions. Many of these conditions are regarded as psychosomatic by other workers. Almost all the 'psychological' diagnoses were classed as 'neurosis'.

The 42 (43 per cent) frequent attenders with a class 1 diagnosis were almost equally divided between the sexes and most were aged 25 or more; 20 (77 per cent) of the frequent attenders with a class 2 diagnosis were women.

Frequent attenders without a major diagnosis (class 3) were mostly children and young people, minor respiratory conditions figuring prominently among their diagnoses. Six patients entered the frequent attender group because of a large number of attendances for preventive purposes.

One feature of the contacts made by frequent attenders with a class 2 diagnosis was that a high proportion (36 per cent) were made on the initiative of the doctor. This compares with proportions of 12 per cent for all other frequent attenders and ten per cent for the rest of the sample.

Follow-up study

After the main survey was completed a small study was undertaken with two objects—to see to what extent the phenomenon of frequent attendance persisted in a subsequent year and to see whether the pattern of attendance was likely to be modified by the intervention of a social worker.

At the end of the original survey period a sub-sample of 40 families was picked from the original sample, all of which satisfied the following criteria:

- (1) they were unlikely to move from the practice in the foreseeable future,
- (2) they included children under 15,
- (3) they were thought likely to agree to a visit from a social worker.

The sub-sample was randomly divided into two groups of 20, a test group and a control group. During the year immediately following the main survey each family in the test group was visited by a social worker. Throughout the third year complete contact records were kept of all patients in both groups in exactly the same way as in the first year.

The original purpose of the social worker's visit was to obtain additional information about a small sample of families and in particular to see whether those families with frequent attenders had any identifiable social problems (this part of the survey was planned before the analysis of the first part had revealed that frequent attendance was not an obvious family phenomenon).

The social worker was introduced to the family by the doctor and in the course of one to three visits met most members of the family. She explained that the doctor was anxious to learn how people used their general practitioner and what improvements might be made. The social worker asked few direct questions and took no notes. In the social worker's view the general discussion helped families to be aware how the doctor could help them and may have reduced some of the guilt felt by frequent attenders in approaching their general practitioner so often.

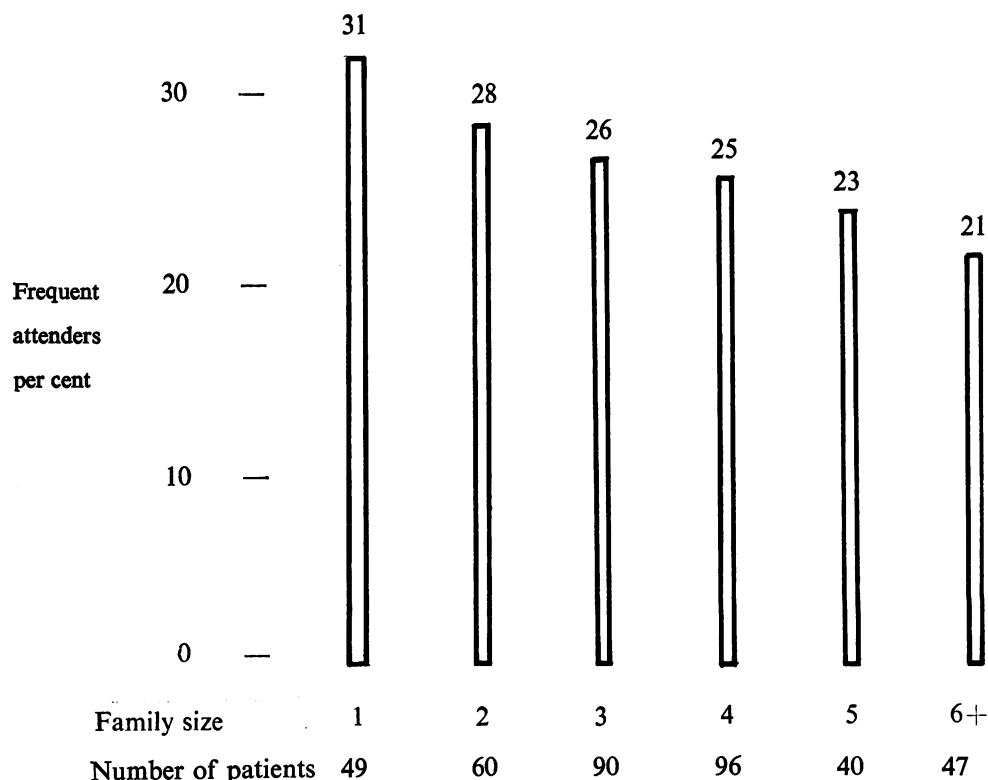


Figure 3

Frequent attenders as a percentage of all patients in the sample according to family size.

TABLE 5
NUMBERS OF PATIENTS WITH 'MAJOR' DISEASES DURING THE YEAR

	Frequent attenders		Rest of sample	
	Number	%	Number	%
Total number of patients	98	100	284	100
Patients with at least one major somatic diagnosis*	42	43	39	14
Patients with at least one major psychological diagnosis*	26	27	12	4
Patients without a major diagnosis	36	37	239	84

*There were six patients in each group with both a major somatic and a major psychological disease during the year.

In view of the smaller number of families seen and the wide variety of problems encountered the information collected by the social worker has not been formally analysed.

From the 40 families originally selected there were 34 (17 in each group) who remained in the practice throughout the third year. These 34 families consisted of 132 patients, 65 adults and 67 children. The number of frequent attenders in these families fell from 35 in the first year to 24 in the third, including 15 patients who were frequent attenders in each year.

However, the reduction in the number of frequent attenders was entirely confined to the group of families whom the social worker did *not* visit. In view of the smallness of the sample and the fact that the families were not necessarily representative, too much significance should not be attached to this finding—but it does support the social worker's view that her visit might well have served to maintain the family's dependence on the doctor. Of the 15 patients who were frequent attenders in both years all but two had similar diagnoses in each year.

Discussion

The attendance pattern is typical for the number of contacts per person per annum as reported by Logan (1953) and the proportional consultation rates by age and sex similar to those in *Report from General Practice No. 8, General Practice in South-west England* (Wright, 1968); the proportion of repeat prescriptions over the age range agrees with Balint *et al.* (1970). No clear-cut characteristic shared by frequent attenders emerges, again reinforcing the results of many other studies.

An unexpected feature was the negative finding that there was little evidence of clustering of frequent attenders in families. Certainly the family with four frequent attenders was a well known 'problem-family', but as the percentage of frequent attenders decreased steadily with family size, it seems that although problem families may be large, not all large families are problem families. It also appears that the threshold of complaint increases with family size, but the reasons for this cannot be shown by a study of this kind.

Proximity to the surgery does not seem to be a factor in encouraging frequent attendance. There was indeed an excess of frequent attenders living in a belt intermediate between the centre and the periphery of the practice area. Hopkins *et al.* (1968) recorded a similar finding, though in their study the increase was a function of the whole practice and largely determined by an excess of home visits.

Diagnosis is always a thorny question in general-practice studies. Apart from personal idiosyncrasies of classification which Marinker (1967) has discussed, the doctor inevitably gathers more information about patients who attend more often, and

this may affect his diagnosis, particularly where a neurotic condition is suspected. An attempt to minimise this effect was made by recording the diagnosis of the ostensible traditional diagnosis for each contact, with no attempt at recording the underlying illness (if any).

About half of the frequent attenders had a major somatic diagnostic label on at least one occasion. This compares with the findings of Wamoscher (1966) who was surprised to find that 43 per cent of his frequent attenders came with pure [sic] organic complaints. He clearly had shared the expectation of Marinker and the doctors in the present study that vague complaints from known family groups would account for a major proportion of the frequent attenders. However, this is not to say that the frequent attenders always came on account of these diagnostic labels. For example, an asthmatic attended during the first year of the study with boils and colds and only requested prescriptions for antispasmodics from time to time.

Ten per cent of the sample were given a formal psychiatric diagnostic label, the criteria following those of Shepherd *et al.* (1966). This percentage falls within the range of their study of 80 practices. These patients comprised a quarter of the frequent attenders, but also carried the highest percentage of doctor-initiated contacts, so it seems that the diagnosis did not so much emerge from repeated contacts but rather that the doctors considered that more care for these people was indicated.

Children present a different problem, as in almost all cases contact was initiated by a parent or another responsible adult. The diagnoses were mostly of minor or vague illness, often acute upper respiratory infections or gastrointestinal upsets. Clearly it is some function of the parent which determines whether the children should attend the doctor, and again the reasons do not emerge from this study, though it does not seem to be a habit learnt by one generation from another.

Although the equivocal results of the follow-up study suggest that for a fuller understanding of the problem a much longer period than a year is needed to determine whether frequent attendance is a habit, it seems that the frequent attender is not the nuisance that prejudice has indicated.

Many questions are raised by the study, especially the nature of the threshold leading to contacts with young children, and the cause of the large number of neuroses in middle-aged women, but these must be the subject of further research.

Summary

1. Special records were kept for a year of all contacts made by a sample of 382 patients (in 148 families) on the list of a two doctor practice.
2. Frequent attenders, defined in a way which take account of age and sex, were not drawn exclusively from any easily identifiable section of the practice although there was a tendency for them to be in smaller rather than larger families.
3. A major diagnostic label (i.e. of a disease liable to be referred to hospital) had been attributed during the year to 63 per cent of the frequent attenders. In more than a third of these patients (mostly women aged 25–44) a formal psychiatric diagnosis had been made, and many of the contacts were on the doctor's initiative. Most of the frequent attenders without a major diagnostic label were children.

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RECRUITMENT OF UNRESTRICTED PRINCIPALS IN GENERAL PRACTICE

Country of origin

The number of unrestricted principals in England and Wales born elsewhere than in Northern Ireland, Eire or the Channel Islands has risen every year since 1965 when it was 11·3 per cent to 1972 when it was 15·7 per cent.

Age

At 1 October, 1972 there were fewer unrestricted principals under 45 years of age (8,889) than at 1 October, 1967 (9,072), although the number of those under 30 years of age has risen by 68 per cent from 613 to 1,030 during this period. The highest number of doctors now is in the 45–49-year age group, whereas in 1967 it was in the 40–44 year group.

Previous medical experience

Of those doctors born in the United Kingdom of Eire, 64 per cent had less than two years' postregistration training in hospital and ten per cent none at all. Of those born overseas 45 per cent had worked for less than two years after registration in hospitals in the United Kingdom and ten per cent had no postregistration experience.

Trainee practitioners

The number of trainee practitioners which fell to the low level of 120 in 1967 had risen to 315 (provisional) by 1 October 1972. Since the number of doctors who become unrestricted principals for the first time in England and Wales each year is on average 850, it follows that at most only one third are undertaking appropriate training for general practice, but not all trainee practitioners spend two years in addition in relevant hospital posts and therefore the proportion who are fully vocationally-trained on entry to general practice is less than one third.

At present about 271 doctors are receiving the vocational training allowance at full rate (i.e. before qualifying for the first seniority payment), and 233 at reduced rate.

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