

# VOCATIONAL TRAINING 3

## Clinical experience of a trainee in general practice

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**SUMMARY.** A survey of one year's trainee clinical experience in a semi-rural teaching practice is reported.

The trainee saw significantly more acute minor illness and significantly less chronic illness than a principal in general practice. He also saw less life-threatening illness, psychiatry, obstetrics, and gynaecology.

The balance of clinical experience gained in the trainee year is questioned. Careful monitoring, and perhaps control of the trainee workload by trainer and trainee, could provide a more balanced clinical experience of general practice.

### Introduction

SHORTLY before vocational training for general practice becomes mandatory it is surprising to find that there is little known of the clinical experience gained as a trainee. O'Flanagan's (1977) recent paper on this subject gives information about his own and his colleague's experience both in hospital and in general practice. He is doubtful of the use of the experience gained in some of his hospital posts.

Freeman and Byrne (1976) have shown that during three-year vocational training courses one can measure the trainees' learning by assessment before and after the course. How much has been learned from half-day release, hospital experience, and clinical tutorials in the training practice, and how much from clinical experience in general practice, is not known.

Bain (1969) gave a personal review of his experience as a trainee in general practice, basing most of his data on workload figures, and while he comments on differences of clinical material between himself and his trainer, he gives no figures.

Richardson and colleagues (1972; 1974), in their two studies of trainee practitioners, looked at some disease groups and the difference between the experience of

trainees and that of principals, and they concluded that a trainee's clinical experience was representative of general practice.

Whitfield (1966), Irvine and colleagues (1974), and Donald (1975) all looked at the trainee year and trainee workload but did not study the clinical experience during this year, although Irvine comments forcibly on its importance.

Gilchrist and Mackay (1973) gave a careful resumé of their work as trainee and trainer and published a full morbidity survey of their consultations. They felt that a trainee gained clinical experience of most conditions that present themselves to the general practitioner.

Richardson and Howie (1972) and Gilchrist and Mackay (1973) asked for more information but only O'Flanagan (1977) has answered that call and he has been critical of the clinical experience he gained in his three-year course. He suggests that the work of vocational trainees should be monitored.

### Aims

The aims of the study were to record total practice workload with particular reference to the trainee, and to compare the total clinical experience of the trainee and principals by recording morbidity.

### Method

#### *The practice*

The practice is located in a market town in rural Northumberland. It has a partnership of three doctors, and a trainee, with a total list size at the mid-point of the study of 7,216 (46·6 per cent males and 53·4 per cent females). It has an elderly population with 18·4 per cent being over 65 and has an average social class distribution. Twenty per cent of the patients live over three miles from the practice in a rural area covering 200 square miles.

There are a practice manager/secretary, two full-time and three part-time receptionists, attached district nurse, midwife, and health visitor.

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**Table 1.** Monthly patient contacts for trainee and principals.

	Mar	Apr	May	June	July*	Aug†	Sept	Oct	Nov	Dec*	Jan*†	Feb†	Total	Percentage of practice workload
Surgery contacts														
Trainee	310	381	250	414	166	295	412	367	340	272	235	109	3,551	18.4
Principal (average of 3)	409	419	457	360	543	395	382	457	401	472	462	482	5,239	27.2
Home contacts														
Trainee	125	160	104	153	63	54	128	88	106	101	54	64	1,200	14.1
Principal (average of 3)	205	187	205	144	226	152	184	217	174	219	216	288	2,417	28.6
Trainee total workload = 16.6 per cent														

\*Holiday.

†New trainee.

A full appointment system is run for all surgeries, antenatal clinic, well baby clinic, family planning clinic, and cervical smear clinic, all of which the trainee occasionally attends.

#### Vocational trainees

Trainees from the Newcastle Vocational Training Scheme are appointed to the practice at the beginning of their three-year programme (August to January) and at the end (February to July). Thus there were three trainees attached to the practice during the survey.

The trainee and partners hold surgeries throughout the day. The partners do not keep individual lists so patients can see the doctor of their choice. The trainer, through the receptionists, controls the number of patients seen by the trainee but there is no direction of patients. The method of booking always allows patients to see the doctor of their choice in an emergency. However, they would first be offered the least booked doctor, who is often the trainee. The trainer controls the visits of the trainee for both new and follow-up calls.

#### Survey

The survey was carried out during the year 1 March 1975 to 29 February 1976. The partners and the three trainees attached during that time recorded every face-to-face contact with a patient by full name, date of birth, and diagnosis. *A Classification of Morbidity for the National Morbidity Survey 1970-71* (RCGP *et al.*, 1974) was used for the classification of diagnoses.

The partners and trainees discussed the use of this classification before the survey, after a pilot study, and regularly throughout the year of the survey.

At each contact it was possible to record no diagnosis or multiple diagnoses. An 'E' Book provided by the Birmingham Research Unit of the Royal College of General Practitioners and described by Eimerl and

Laidlaw (1969) was used for recording the diagnoses. Separate workload figures were kept by the practice secretary for new (patient-initiated) and follow-up (doctor-initiated) surgery, and home contacts.

#### Results

The results of the survey are given in the four tables. All references to a principal are an average of the three principals, and the trainee figures refer to all three trainees during the year.

#### Workload

Tables 1 and 2 give some of the statistics from the number of patient contacts.

The trainee's workload averages two thirds of a principal's and varies little throughout the year. It was affected only by the trainee being on holiday (July, December, January), or in the first month of a new trainee attachment (August, February).

**Table 2.** New and follow-up contacts for trainee and principle for one year (percentages are given in brackets).

	New	Follow-up
Surgery contacts		
Trainee	2,809 (79)	742 (21)
Principal (average of 3)	3,977 (76)	1,263 (24)
Home contacts		
Trainee	469 (39)	731 (61)
Principal (average of 3)	932 (38)	1,486 (62)

**Table 3.** Comparison of percentage distribution between trainee and principals and other surveys.

Group	Trainee	Principals	Statistical significance (p)	Gilchrist	Second National Morbidity Survey	Morrell
1. Communicable	4.0	4.2	NS	3.6	4.2	2.6
2. Neoplasms	0.4	1.2	0.001	2.1	0.8	1.7
3. Allergic and endocrine	1.7	4.6	0.001	3.9	3.7	4.1
4. Blood	0.9	1.5	NS	1.5	0.8	1.4
5. Mental	9.5	13.7	0.001	7.1	7.8	12.0
6. Nervous	12.7	10.2	0.001	7.5	8.3	7.3
7. Circulatory	6.4	10.3	0.001	5.9	4.5	6.7
8. Respiratory	20.6	14.5	0.001	25.2	17.7	25.2
9. Digestive	6.4	5.3	NS	8.7	6.2	7.9
10. Genitourinary	6.5	5.1	0.01	6.7	5.3	4.4
11. Pregnancy	0.8	1.3	NS	4.8	1.5	1.6
12. Skin	8.3	6.2	0.001	7.9	8.2	6.9
13. Musculoskeletal	6.4	10.9	0.001	6.8	6.4	6.9
14. Congenital	0.1	0.1	NS	0.03	0.2	0.02
15. Perinatal	0	0	NS	0.03	0.02	
16. Ill defined symptoms	0.5	0.3	NS	1.3	8.3	1.3
17. Accident	9.5	5.1	0.001	4.5	6.5	5.1
18. Prophylactic	5.1	5.7	NS	2.4	9.0	4.8

NS = Not significant.

Sources: Gilchrist &amp; Mackay (1973); Office of Population Censuses and Surveys et al., (1974); Morrel (1971).

The trainee keeps the same ratio of new or follow-up patient contacts at surgery (4:1) and home (2:3), and a similar ratio of surgery/home visits (trainee 3:1, principal 5:2) as the principals.

The figures show a total consultation rate for the practice of 3.8 per registered patient per year (surgery 2.7: home 1.1).

#### Clinical experience

Table 3 compares the clinical experience of the trainee with the principals' by a morbidity survey, and compares this with other trainee and practice surveys.

Diagnostic groups showing a statistically significant difference ( $p < 0.01$ ) between the trainee and the principals are discussed. There are 10 groups that are significantly different. The figures for the three principals (not given here) showed only two groups each that were statistically different.

The survey showed that the trainee sees fewer neoplasms, endocrine, mental, cardiovascular, and musculoskeletal diseases, and far more accidents, skin, central nervous system, and genitourinary and respiratory illnesses than the principals.

The number of occasions that partners and trainees made no diagnosis was not recorded but may account for the low level of ill defined symptoms when compared with the other surveys.

In Table 4 I have selected certain diagnoses from these groups and show the results in terms of the number of doctor/patient contacts and percentage of consultations.

The trainee saw a great deal of acute minor illness, such as otitis media, upper respiratory illness, and urinary tract infection. He saw far less chronic illness, hypertension, osteoarthritis, and myxoedema.

Finally, it highlights the difficulty that a trainee has in seeing and dealing with acute emergencies such as myocardial infarction because of the low incidence.

#### Discussion

The workload figures show that in the survey practice the trainee carries out a significant part (16.6 per cent) of the practice work and averages 98 doctor/patient contacts a week. This compares with Gilchrist and Mackay (112), Bain (63), and Richardson and Howie (93).

It is of interest that the ratio of trainee new or follow-up, surgery, and home contacts is similar to that of the principals. In this practice the trainer selects the trainee's new and follow-up visits. The trainer therefore controls their ratio, but it is the trainee and patients who control the surgery figures. These figures, with the similar ratio of surgery/home contacts, show that the

**Table 4.** Selected diseases (percentages are given in brackets).

Group	Disease	Principal consultations	Trainee consultations
Long-term illness	Myocardial ischaemia	113 (1.9)	6 (0.15)
	Hypertension	213 (3.6)	52 (1.3)
	Osteoarthritis	230 (3.9)	89 (2.2)
	Myxoedema	64 (1.1)	12 (0.3)
Acute minor illness	Otitis media	92 (1.5)	143 (3.6)
	Acute tonsillitis	120 (2.0)	176 (4.4)
	Upper respiratory infection	551 (9.4)	587 (14.9)
	Urinary tract infection	110 (1.8)	112 (2.8)
Acute major illness	Myocardial infarction	36 (0.6)	10 (0.25)
Mental illness	Anxiety	260 (4.4)	170 (4.3)
	Depression	347 (5.9)	79 (2.0)
	Obstetrics	322 (5.3)	32 (0.8)
	Gynaecology	192 (3.3)	100 (2.5)
	Contraception	149 (2.4)	74 (2.0)

trainee follows the practice model, as was shown by Richardson and Howie (1972) in their first survey.

In spite of the difficulties inherent in the classification of illness by individual doctors it is important to compare the diagnoses made by trainees and principals. The morbidity survey of Table 3 is relevant for, whatever the workload, it must be of the correct clinical material. Table 3 shows the differing content of the clinical material seen by the trainee and principals and confirms Gilchrist's figures. While O'Flanagan's figures are not quite comparable, they do confirm in every instance those groups of which the trainee sees more or less.

In its approach to learning and teaching about disease (Area 1), *The Future General Practitioner* (RCGP, 1972) gives five groups of diseases: acute diseases threatening life; early signs of disease which may be aborted; dangerous complication of conditions; common conditions; and conditions of a chronic nature. Of these the trainee sees only the common conditions in a reasonable proportion; all the other groups come from those categories in which the trainee sees far less in his general practice experience.

Chronic illness makes up a large part of general practice workload (30 per cent; Council RCGP, 1973). However, this survey shows that the groups that the trainee sees less of are those that contain much long-term illness, such as endocrine, cardiovascular, and musculoskeletal disorders, and this is shown in Table 4 in the case of myxoedema, hypertension and osteoarthritis. The central nervous system group of diseases, which may appear at first sight to be contrary to this, is affected by the fact that in the classification

used acute illnesses such as otitis media and conjunctivitis are included in the group.

While acute illness of a minor nature (otitis media, upper respiratory infection, urinary infection) are seen much more often by the trainee, acute illness of a life-threatening type, such as myocardial infarction, is seen very rarely by the trainee.

Obstetrics and gynaecology provided fewer patients (132) than otitis media (143). Contraception, which is mainly dealt with in normal surgery time, provided a further 74 patients. This must give very little experience of these subjects and with the changing role of the general practitioner obstetrician must show in-practice training to be inadequate.

The lack of trainee experience in mental illness was commented upon by Bain (1969) and shown by Gilchrist and Mackay (1973). It is confirmed by this survey but in the selected diagnoses it is shown that it is depressive illness that is either not seen or recognized by the trainee.

Finally, neoplasia was seen very little by the trainee, and while it is a small proportion of any practitioner's work, its importance in training cannot be over-emphasized. This group, with the small number of life-threatening acute episodes seen, must limit the trainee's experience of terminal care, and the treatment of bereavement.

### Conclusion

In my opinion, these findings raise five points about the clinical content of the trainee's year in practice in a three-year vocational training programme:

1. Dealing with acute minor illnesses is a valuable way of meeting patients and establishing confidence in the trainee; for example, the mother who sees a trainee deal competently with her screaming three-year-old may return with her own complaints. Nevertheless, the amount of time spent on treating such illnesses should not be such as to encroach excessively on experience of other important subjects.
2. Chronic illness can be controlled by the trainer, so that while the trainee may not detect many new hypertensives or diabetes, the opportunity must be grasped when he does so, to use such learning situations to the utmost. Similarly some patients suffering from long-term illness may be directed to the trainee to enable him to learn how to control it in general practice.
3. Neoplasms, myocardial infarction, and other important clinical situations such as terminal care, must be used for trainee involvement so that he learns to deal with these important episodes and the teaching opportunity must not be missed.
4. As O'Flanagan (1977) has stressed, further experience must be gained in gynaecology and obstetrics over and above that which will be gained in general practice. However, his call for further psychiatric experience must be queried, for while the quality of psychiatric experience needs to be altered there is certainly sufficient material.
5. This survey shows that it is possible to monitor a trainee's clinical experience, but this can be done much more simply by the use of check lists, one-week surveys, and random selection of surgeries. When deficiencies are found it should be possible, by channelling patients and by involving the trainee in acute situations, to alter his clinical experience so that it is much more balanced.

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## Medical evidence of incapacity

The issuing of Med 3s by the general practitioner ensures continuity of care by the same doctor. Advice on whether a patient should work or rest is one aspect of treatment and one which the person most familiar with the patient's history, present condition, and motivation—the patient's family doctor—is uniquely able to decide. The patient may gain in another fashion from having to attend the surgery for a doctor's statement. He may attend for an apparently minor illness that would not otherwise take him there but is in fact serious. Treatment may then be started at a satisfactorily early stage. Such cases, however, are rare. The issue of a doctor's statement is also helpful in relieving the genuinely ill patient of financial anxiety. It provides readily available evidence of incapacity to substantiate his absence from work. Payments of benefit might be delayed and outside pressures might prove intolerable to someone who is sensitive.

Although doctors are conscious of a conflict about issuing Med 3s most patients seem satisfied. They would say they are unlikely to tell lies about symptoms and capacity for work to family doctors on whom they know they are dependent at times of medical crisis. Like doctors, they may resent attendance for disorders that would respond to self-medication, and they may similarly think that their time is being wasted. The system also seems to satisfy employers, admittedly not an argument likely to impress a doctor. Increasingly they ask to see National Insurance certificates as a check on sickness absence. Implicit in this view, as in that of the guardians of the National Insurance Fund, is that the doctor is pre-eminent in his ability to assess capacity for work.

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