Trainer audit*

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SUMMARY. Thirty training practices in several regions were visited, and the teaching methods used by trainers were investigated. Trainers and their trainees were asked the same questions. Their answers are compared. The result is an indication of some of the more common teaching methods employed in training practices throughout the country, and a comparison of trainer and trainee perceptions of training methods.

Introduction

FOR some time the emphasis of studies of training in general practice has centred on trainees and their experiences on vocational training schemes, and on suggested methods of teaching trainees in the training practice and on a half-day release course. Apart from brief mentions by Hasler (1976, 1978), there was little information available on what happens in teaching practices until the recent Exeter Trainee Conference Questionnaire results were published (Ronalds *et al.*, 1981). I felt that direct interviews with trainers and trainees would therefore be useful.

Aims

I aimed to discover how trainees are actually taught in teaching practices, to discover whether the methods often discussed by trainers are used (Scottish Council for Postgraduate Medical Education, 1978), and to unearth any potentially useful ideas which may at present be limited to single areas only, or even to a single practice.

Methods

The study was carried out by visiting seven areas, and interviewing trainers and their trainees separately. The areas visited were Sutton Coldfield, Oxford, Plymouth, Reading, Sheffield, Southampton and Worcester. In each area up to five trainers and their trainees were interviewed, a total of 30 trainer-trainee pairs. Each trainer and the majority of trainees were contacted by telephone before being visited. All the trainers and all but three of the trainees were interviewed personally. These three trainees replied to the questionnaires by post. All of the participants willingly agreed to be interviewed.

The questionnaires

I interviewed the doctors myself and explained that their answers would be completely confidential. The questionnaire was divided into three sections and was largely based on the discussion of aims for training in general practice presented by the Joint Committee on Postgraduate Training (1976) and the College (1978). The first section dealt with personal details, the second with practice information, and the third with teaching and teaching methods. There was a final open question asking for comments and questions. The trainer and trainee questions correlated very closely: for example, the trainer might be asked how much teaching he or she gave their trainee in a week; the corresponding trainee question would be, "how much teaching do you get in a week in your training practice?"

The results presented below deal mainly with the findings from the third section of the questionnaire.

Results

The results are not meant to form the basis of a comparison between areas, mainly because the survey was conducted under conditions of complete confidentiality, but also because the numbers involved in each area were too small. The results are not statistically significant because neither the areas visited nor the trainer/trainee pairs were selected at random.

Personal details

Of the 30 trainers, 26 had taken part in at least one residential trainers' course of one week; several had attended more than one. Twenty-seven trainers regular-

*Adapted from an Upjohn Travelling Fellowship report.

ly attended a trainers' workshop; the three who did not were all from the same area, where the trainers had not found the workshop useful and had stopped attending. Twenty-one of the trainers were College members, and 27 of the trainees intended to become College members.

Practice information

In 29 of the practices, the trainer's partners were involved in the training, and in 27 of these practices the partners were interested in teaching. On the trainee side, only 26 trainees mentioned that the partners were involved, but 28 said that the partners were interested in teaching. The difference probably reflects a partner showing an interest in the trainee but not actually teaching.

Teaching

This section of the questionnaire was split into two parts. The first explored the trainees' perception of their work-load and made it possible to compare it with the trainers' perceptions; the second asked about the approach to training within each practice.

Work-load

Table 1 shows that 29 trainers stated that their trainees' work-load was less or much less than their own and their partners'; 21 trainees agreed. However, only 14 trainees put themselves in the work-load category that their trainers had put them into.

Five trainees felt that they were exploited. Three of these felt this had happened at first, although not at the time of questioning. Three trainers thought their trainees would feel they were exploited; one stated that he hoped his trainee felt exploited (the trainee did not).

Twenty-five trainees were covered by a trainer or his partners when they were on call, and 22 shared an equal rota with the trainer and the partners. One was on call with the trainer and they did the night visits together. Of the two trainees who had no night duty, one was at an early stage in his course and had not yet been asked to do night duty, and the other one was working with a practice which used a deputizing service to do their night calls.

Approaches

The approaches used by most trainers fell into two main categories—the apprenticeship model, which holds that trainees learn by example from their trainers and in which educational theory plays no part; and the structured learning model, which involves the use of a curriculum, aims and assessment methods. The majority of trainers favoured a form of the structured learning model, but this approach was freely adapted and extremely flexible.

There were a number of trainers who had no time for the educational approach to teaching, but the majority were aware of the value of the educational triangle of aims, methods and assessment, which is clearly explained by Gray (1979) in *A System of Training for General Practice.*

Table 1. Trainer and trainee assessments of trainee work-load.

Work-load compared with partners'	Work-load as perceived by		Trainer/trainee agreement
	Trainer	Trainee	
Much less	9	4	2
Less	20	17	11
Same	1	8	1
More	0	1	0

Table 2. Methods of assessment used by trainers.

Rating scales or similar	7
Feedback from staff/patients	4
Sit in	4
Multiple Choice Questions (MCQs)	2
General feeling	2
Modified Essay Questions (MEQs)	1
Analysis of trainee's notes	1

Seven trainees, when asked about personal aims in their trainee year, replied positively, but in only two practices was the trainer correct in saying that his trainee had specific aims.

The aims stated were mostly to become competent general practitioners, to identify and fill in gaps in knowledge, and to find a suitable practice at the end of the time as a trainee. No trainers apparently helped their trainees to update their aims, but five of the seven trainees did update their aims during their time with their training practice.

Twenty-one trainers said that they assessed their trainees, whereas only 13 trainees thought they were assessed. Eleven trainer–trainee pairs agreed that assessment was made. Only one trainer made the point that assessment was a problem. Table 2 shows the method of assessment used.

One question asked about the length of time spent in teaching trainees. Formal and informal teaching was asked about separately. The variation in formal teaching, in which joint surgeries were included, was from nought to five hours as perceived by the trainer (with an average of two and a third hours), and from nought to five and three quarter hours as perceived by the trainee (with an average of two hours). In only three cases was there a difference of more than an hour a week between what the trainer and his trainee stated.

Informal teaching appeared to consist mostly of what can be termed 'post-surgery' teaching, which varied from practice to practice and from week to week within practices. In some cases it was no more than a few minutes a day and in others up to two hours a week.

Table 3. The methods used by trainers in deciding what to teach their trainees. (Methods mentioned by both trainers and trainees.)*

Check-list	12
Trainee request	11
Topic list	9
Problem consultations/patients	7
Weaknesses in trainee	7
Mutual agreement	6
Ad hoc	6
Random case analysis (RCA)	5
Referrals/letters analysed	4
Trainee notes reviewed	3
Follow-up of cases	2
Sitting in with trainee	2

*Other methods, mentioned once each, were: MCQ, MEQ, discussion of visits, project, discussion of patients rebounding to a trainer or partner.

Table 4. Teaching methods used as perceived by trainers and trainees.

Method	Positive replies by Trainers	Trainees
Trainer watching trainee consult	17	16
Trainee watching trainer consult	29	30
One-to-one tutorials	30	29
Random case analysis	26	22
Role play	5	3
Lecturettes by trainer/trainee/partner at practice meeting	8	5
Tape recording consultations	9	6
Topic discussions	29	27
Research project by trainee	13	8
Practice project by trainee	16	8
Set reading	15	13

Table 5. Other teaching methods mentioned.

Methods	Number of times mentioned by Trainers	Trainees
Joint visits	17 early on only 3 occasionally 3 regularly	16
Attending partnership meetings	18	12
Video-tape recorder	3	1
Drug company lunches at surgery	2	0
Checking referrals made by trainee	2	0
Regular lunch with partners	2	0

Being flexible in deciding what teaching a trainee needs is as important as the teaching, since the programme for one trainee is generally not suitable for every trainee. Therefore, trainers and trainees were asked how they decided what trainees were taught. There was little correlation between what trainers and their trainees said. This inconsistency may be because trainees are often unaware of how trainers decide what to teach, although they may be aware of some of the methods used.

In addition to the list in Table 3, most trainers mentioned that they gave their trainees sessions on basic information about general practice and practice management.

Teaching methods

There are several commonly discussed teaching methods, and information was sought about how often these were used. The methods asked about were drawn from a list of methods which have been discussed on trainers' courses at the University of Exeter Department of General Practice. Table 4 shows that the most commonly used methods were the trainee watching the trainer consult, one-to-one tutorials, random case analysis and topic discussions. Less commonly used methods included watching the trainee consult, set reading and a research or practice project.

This list of teaching methods is by no means comprehensive, and Table 5 shows other strategies mentioned by trainers and trainees. This table includes those methods which were mentioned more than once by trainer and trainees, but there was a long list of other methods which were mentioned only once (Table 6).

Finally, in the teaching section of the questionnaire trainers were asked which teaching methods they thought their trainees found most and least useful; their trainees were asked which methods they actually found useful. The trainees were also asked which method of teaching they would like to use which they did not use. Table 7 summarizes the results, which show that three of the more commonly used methods of teaching (trainee watching trainer consult, one-to-one tutorials and topic discussions) were also considered to be the most useful teaching methods.

The question did not limit trainers and trainees to one single method, and quite often two or three were mentioned.

In only 16 instances were trainers able to identify correctly the methods of teaching which their trainees had found most useful, and on no occasion were trainers able to identify the methods of teaching which their trainees had found least useful. On 12 occasions trainers made statements which directly opposed what their trainees said.

Discussion

It seems (Table 1) that most trainers do not expect their trainees to have the same work-load as themselves, and

that the majority of trainees are aware of this (*Journal of the Royal College of General Practitioners,* 1979). It may well be that those trainees who felt they worked harder than their trainer had planned had problems or grievances which would best be solved by discussion. Four of the five trainees who felt they were exploited stated that their work-load was less than that of their trainer, so that work-load alone was not the only factor involved.

As far as out-of-hours duty is concerned, three trainees who had an equal rota with the trainer and his partners were given no night cover. This is not perhaps the best way of training, and leaves the trainer open to accusations of exploitation. One trainee was always on call with his trainer. This arrangement represents the opposite end of the spectrum, whereby the trainer is able to see how the trainee performs under the extra stress of night visits, and discusses this with him.

It is not necessary to follow educational theory before drawing up a curriculum, and so more trainer-trainee pairs drew up curricula than discussed aims. Quite frequently there was no comprehensive curriculum to cover the full time spent in the teaching practice, although there was broad agreement between trainer and trainee about what the plans were for the following few weeks.

Assessment was carried out by 21 of the 30 trainers. The result of the assessment, if full use is to be made of it, is probably best discussed with the trainee; however, only 13 trainees thought they were assessed and, of these, two were not. This suggests that either trainees do not know what assessment means, that trainers do not always discuss their assessment with the trainee, or that trainees do not realize that they have been assessed and that this is being discussed with them. The methods of assessment used (Table 2) show that at least 10 trainees should have been aware that they were assessed, as they would have had to fill in forms or answer questions (rating scales, MCQ, MEQ). It is questionable whether "feedback from staff and patient" and "general feeling" are valid assessment methods (Table 2) in that they often mean "no effective assessment is carried out".

There was fairly close correlation between trainer and trainee perception of teaching time, although it is extremely difficult to assess the total amount of time given to teaching in a week, as the informal teaching is not timed, and can vary so much. Only two or three of the trainers interviewed set aside anything approaching the amount of teaching time suggested by the JCPTGP, and although one or two thought they gave this much, their trainees disagreed.

One method of finding out how much teaching is given is by asking the trainees themselves. Often, however, even trainees will not be aware of this, and will say, "But that does not count" when they have perhaps had a joint session with the health visitor or had their

Table 6. Teaching methods mentioned by one trainer or trainee.

College tapes
Sitting in with partners
Writing report on the practice and training received
MEQ
Audit of prescriptions
Analyse notes
Exposure to paramedical staff
Two-way mirror
Two-monthly clinical meetings
Two-weekly Balint seminars

Table 7. Usefulness of teaching methods. (Numbers add up to more than 30 as respondents were free to mention more than one method.)

	Trainee opinions			Trainer replies correlating with trainee replies		Trainer replies opposite to corresponding trainee replies	
	Most useful	Least useful	Would like to use	Most useful	Least useful	Most useful	Least useful
Trainer watching trainee consult	10	3	4	3	0	1	1
Trainee watching trainer consult	13	9	2	6	0	3	2
One-to-one tutorials	14	3	0	6	0	0	3
Random case analysis	1	3	3	0	0	1	0
Role play	1	0	1	1	0	0	0
Lecturettes by trainer/trainee/partners at practice meeting	0	3	6	0	0	0	0
Tape-recording consultations	0	0	6	0	0	0	0
Topic discussions	7	2	1	0	0	0	1
Research project by trainee	0	2	2	0	0	0	0
Practice project by trainee	0	1	4	0	0	0	0
Set reading	0	1	2	0	0	0	0

trainer sit in on their surgery, for example. This subject is therefore a very difficult one to assess accurately. There is no doubt that the present study has shown that much less teaching time than is recommended is frequently given. The average was two and a third hours per week formal teaching, together with a stated maximum of two hours per week informal teaching.

The methods trainers use in deciding what to teach their trainees are shown in Table 3, and were collected without any prompting. They were fairly widespread throughout the regions, and it is clear from them that much of the teaching is not planned a long time in advance. One could call this flexibility or lack of a co-ordinated plan, according to one's viewpoint. However, it is surprising to see "ad hoc" mentioned so frequently, as this can usually be interpreted as "no method".

It was evident that trainees had ambivalent feelings about their trainer watching them consult. Table 4 shows that this was a method used by only 16 trainer–trainee pairs, and of these only 10 used the method regularly, a figure which correlates exactly with the number of trainees who found this method of teaching most useful (Table 7). Similarly, although 29 of the trainers had their trainees watching them consult, only 13 used this as a regular teaching method; again, 13 trainees found this to be most useful. This suggests that where these methods are regularly used, the trainee finds they are most beneficial. There are many arguments against having a third party in a consulting room when he or she is not actively involved in the consultation (Elliott-Binns *et al.*, 1976; *Update,* 1979), but there are ways of ensuring that the patient does not suffer, and in the end many patients are not surprised to see two doctors in the consulting room when they walk in.

Not once was a trainer able to identify a method of teaching which the trainee had found least useful (Table 7). Trainers may not therefore have been aware when a trainee was not benefiting from a teaching method, especially if it was a method which the trainer liked for one reason or another. Indeed, in a small number of cases, trainers said the opposite to their trainees about a particular method. However, this happened with the more commonly used methods, so that opposing statements would be more likely.

Tables 5 and 6 present methods of teaching which were being used in addition to those specifically asked about. They show a large number which were not mentioned very often, including some, like two-way mirrors and video-tape recorders, which are not widely available. Joint visits were mentioned most frequently, but only six trainers continued to do joint visits with their trainees throughout their time in the practice, and only three trainers did this on a regular basis. The analogy here is with trainers sitting in on trainees, and if trainees are to be helped to improve their techniques, then only by watching them at work can this be done successfully.

Conclusion

There is a wide scatter of standards amongst teaching practices and trainers, and this report has only scratched the surface of the subject with trainers who volunteered to be interviewed. The majority of trainers were extremely keen, sensitive and able, as is reflected in the variety of answers and ideas expressed in this paper. One or two trainers were concerned about their own knowledge, one in particular stating, "I feel a bit out on a limb, I don't know what the others are doing". Another relevant statement, this time made by a trainee, was, "I am learning more about how I do not want to practice". Another trainer stated that he felt the trainee year is an "easy ride"; his trainee was one of those who felt exploited.

Such comments were not common. More often I heard statements like, "It is essential that trainees have time to study and think about things", "General practice cannot be learned from books", "Medical school is no good for teaching general practice", "I would recommend anybody, no matter what their speciality, to spend a year in general practice" (this from a trainee who had gone to America and was working as an intern).

After the interviews had been completed, the provisional results of the Exeter Trainee Conference questionnaire (Ronalds *et al.*, 1981) became widely known. They also point to a wide variation of standards amongst trainers and training practices, much more so than this study suggests, so that perhaps further work should be done in this area.

Furthermore, it is clear that although there is widespread agreement between trainers and their trainees on the range of methods used by trainers in teaching, there is much less agreement, and indeed disagreement between corresponding trainers and trainees, on the methods which trainees find most useful. This disagreement suggests a communication failure between trainers and their trainees on this point and that if teaching methods were discussed more fully, the trainees may benefit. This paper has shown that the effectiveness of the various teaching methods in use merits further investigation.

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Malaria

In 1980 the number of cases (1,670) notified to the Malaria Reference Laboratory at Colindale decreased for the first time since 1970. Nine people died, 368 cases were aged under 20 and most of the patients were aged 20 to 59 years. The previous pattern was continued: nearly a third were tourists who were short-term visitors to endemic areas, including previous immigrants returning home and children born in the UK of immigrant parents. There is no doubt that business travellers and their doctors are better informed than they used to be, but any general practitioner who has had to advise someone going to a malarious area will know that the problems of prophylaxis are increasing as resistance to chloroquine and to the antifolate group of drugs becomes more widespread—many people still got malaria (and some died in this country in 1980) believing that they had taken every precaution.

Source: *Communicable Disease Report*, 81/49.