

Trainee assessment — a regional survey

L MALCOLM CAMPBELL

T STUART MURRAY

SUMMARY. A postal questionnaire was sent to all 140 trainers in the west of Scotland region and to the 102 trainees who had completed their training three months prior to the survey. The aim of the study was to identify the types of trainee assessment in use, the proportion of trainers using the various methods, the attitudes of trainers and trainees to the assessment methods employed, and their views on a regional assessment programme. Response rates of 89% for trainers and 71% for trainees were obtained. Almost all respondents reported the use of some form of assessment. The mean number of assessment types reported by trainees was 3.7 and by trainers 5.2. The most commonly used method was videotaping of trainee consultations, used by 76% of respondents, and the least common the use of hard data, for example prescribing statistics or referral rates. Videotaping was also rated the most useful method by both groups. Those with experience of the assessment methods gave them a higher score for usefulness than those without such experience. Approximately half of the respondents favoured a regional protocol for assessment.

This study has shown that if trainers and trainees can be encouraged to use assessment methods they will find them helpful. However, universal assessment will only become a reality when it becomes a requirement for accreditation as a trainer.

Introduction

THE west of Scotland region is a large area and has on average 140 trainees in post at any one time, most of whom start in August. Just under half of the trainees are on three year schemes. Training practices vary from large inner city health centres to single handed isolated rural practices. There is one regional adviser, one assistant adviser and 15 associate advisers. Most of the associate advisers have an equivalent role to that of a course organizer and are responsible for running the 11 trainee day release programmes in the region.

For several years the region's priority objective in training has been to satisfy the criteria of the Joint Committee on Postgraduate Training for General Practice for the structure and organization of training practices. Considerable work on assessment has been carried out, with particular emphasis on an annual multiple choice questionnaire and on training courses for trainers on the consultation using the techniques described in *The consultation*.¹ In 1989 it was decided that increasing emphasis would be placed on trainee assessment and an associate adviser (assessment) was appointed. It was agreed that the first task of the new associate adviser would be to measure the use of, and attitudes to, a range of trainee assessment methods among trainers and trainees in the region. In addition an attempt would be made to gauge the attitude to a region wide stan-

L. M. Campbell, MRCP, general practitioner, Kirkintilloch and associate adviser (assessment), West of Scotland Committee for Postgraduate Medical Education. T. S. Murray, FRCP, regional adviser, West of Scotland Committee for Postgraduate Medical Education and senior lecturer, Department of General Practice, University of Glasgow. Submitted: 20 February 1990; accepted: 26 June 1990.

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dardized assessment programme and the use of the MRCGP examination as an endpoint assessment for trainees.

Method

In October 1989 a postal questionnaire was sent to the 140 trainers in the region and to the 102 trainees who had completed their trainee year in July 1989. The questionnaires sent to both groups were identical apart from minor changes in wording to make the questions relevant to each group. Each questionnaire was accompanied by an explanatory letter which contained an assurance of anonymity. It was felt that anonymity was necessary to maximize the response rate as trainers might well be reluctant to disclose data which could then influence reapproval of the practice for training.

The first part of the questionnaire asked about the use of the following well known assessment tools: videotaped trainee consultations, trainer sitting in on trainee surgery, Manchester rating scales,² topic checklist, written work in the practice and an objective structured clinical examination. For each of these methods the respondent was asked if the particular method was used in the trainee year.

The respondents were then invited to rate the particular method on a five point scale for usefulness in assessment from useless (1), through ambivalent (3), to very useful (5).

The remaining five questions required yes/no answers: Is hard data used for assessment, for example prescribing statistics or referral rates? Are any other assessment methods used? Is there a standard trainee assessment programme in the practice? Should there be a standard region wide assessment programme? Is the MRCGP examination a valid assessment at the end of the trainee year?

Respondents were invited to add comments at each stage.

Statistical comparison of groups was carried out using the chi-square test with appropriate degrees of freedom.

Results

Of the 140 trainers in the region 125 (85%) responded to the questionnaire. Only 61 of the 102 eligible trainees (60%) responded to the first mailing. This low response rate was at least partly due to the difficulty of tracing the trainees, many of whom had moved away from the area and after a second mailing a total of 72 trainees had responded (70%).

Table 1 shows the reported use of assessment methods. There

Table 1. Use of assessment methods reported by trainees and trainers.

Method	Number (%) of respondents reporting use of method	
	Trainers (n = 125)	Trainees (n = 72) ^a
Videotaped consultations	95 (76)	50 (76)
Trainer sitting in	86 (69)	33 (50)
Manchester rating scales	77 (62)	33 (51)
Topic checklist	107 (86)	41 (63)
Written work	82 (66)	35 (54)
Objective structured clinical examination	65 (52)	29 (45)
Hard data	60 (48)	17 (27)
Other methods	55 (44)	12 (18)

n = total number of respondents. ^aNot all the trainees answered all the questions so for some methods n < 72.

was a close correlation between the two groups for videotaped consultations, Manchester rating scales, the objective structured clinical examination, and written work but a marked difference for the remaining methods. In all cases a higher proportion of trainers than trainees claimed to use the techniques.

Figure 1 shows the number of assessment methods reported by each group. The mean number of methods reported by the trainers was 5.2 (standard deviation 1.6) and by the trainees 3.7 (standard deviation 1.8). Two trainees claimed to have had no assessment of any kind while one trainer claimed to have car-

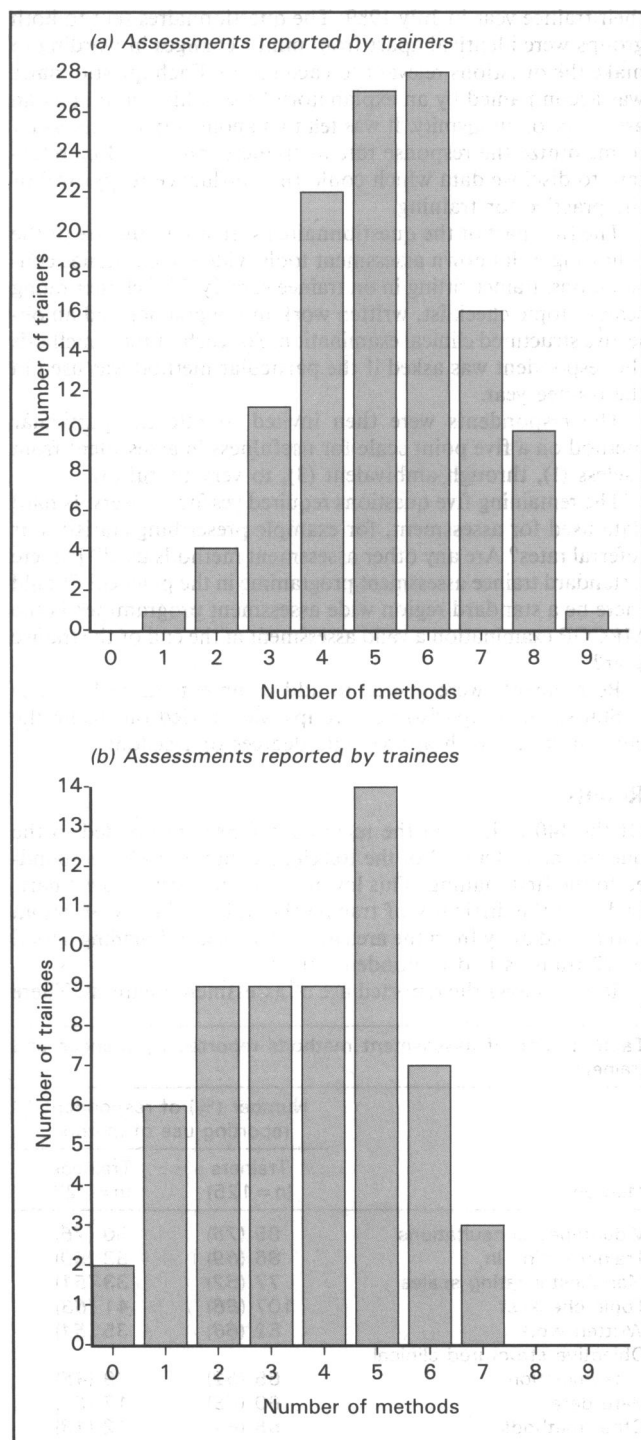


Figure 1. Number of assessments reported by trainers ($n = 120$) and trainees ($n = 59$).

ried out at least nine forms of assessment. Both sets of results approximate to a normal distribution, suggesting a homogeneous group.

Tables 2 and 3 show the trainer and trainee ratings of usefulness for each assessment method together with the ratings for users and non-users of the methods. The only mean rating from users which failed to reach the midpoint of the usefulness scale was the trainees' rating of the Manchester rating scales. In all cases the mean scores were higher in the group with experience of the technique. For trainers this difference was statistically significant for all methods except the objective structured clinical examination and for trainees the positive difference was significant for all methods except the Manchester rating scales. It is interesting that many of the group comparisons reached a significance of $P < 0.001$.

Table 4 shows the responses to the questions on standard assessment programmes, the desirability of a regional programme and the validity of the MRCGP examination as a method of assessment. Further analysis of these groups showed statistically significant correlations with the answers to some of the other questions. Those trainers who stated that they operated a standard assessment programme were significantly more likely to use a larger number of assessment methods ($P < 0.001$), to use videotaped consultations ($P < 0.025$), to rate videotaped consultations highly ($P < 0.005$) to rate the Manchester rating scales highly ($P < 0.005$), to use written work for assessment ($P < 0.025$), and to mention additional assessment methods ($P < 0.001$). Analysis of those trainers who favoured a regional assessment programme

Table 2. Trainers' ratings of the usefulness of assessment methods.

Method	Mean (SD) rating by trainers			Users versus non-users	
	All	Users	Non-users	χ^2	
Videotaped consultations	4.0 (0.9)	4.2 (0.8)	3.1 (0.8)	37.5	$P < 0.001$
Trainer sitting in	2.8 (1.3)	3.2 (1.1)	1.9 (0.7)	32.4	$P < 0.001$
Manchester rating scales	3.1 (0.8)	3.3 (0.8)	2.7 (0.7)	18.6	$P < 0.001$
Topic checklist	3.7 (1.0)	3.8 (0.8)	2.3 (0.9)	36.3	$P < 0.001$
Written work	3.6 (0.9)	3.8 (0.8)	2.7 (0.8)	27.1	$P < 0.001$
Objective structured clinical examination	3.6 (0.9)	3.8 (0.8)	3.4 (0.9)	9.3	NS

SD = standard deviation. NS = not significant.

Table 3. Trainees' ratings of the usefulness of assessment methods.

Method	Mean (SD) rating by trainees			Users versus non-users	
	All	Users	Non-users	χ^2	
Videotaped consultations	3.7 (1.0)	3.9 (0.8)	3.0 (1.1)	11.3	$P < 0.025$
Trainer sitting in	2.8 (1.3)	3.3 (1.2)	2.4 (1.3)	16.0	$P < 0.01$
Manchester rating scales	2.9 (0.9)	2.9 (1.1)	2.9 (0.7)	8.7	NS
Topic checklist	3.4 (0.8)	3.7 (0.8)	2.9 (0.3)	17.6	$P < 0.005$
Written work	3.5 (0.9)	3.8 (0.9)	2.9 (0.7)	12.6	$P < 0.025$
Objective structured clinical examination	3.5 (0.9)	3.8 (0.8)	3.1 (0.6)	21.5	$P < 0.001$

SD = standard deviation. NS = not significant.

Table 4. Responses to questions on standard assessment programmes, regional programmes and the MRCGP examination.

	No. (%) of respondents ^a	
	Trainers	Trainees
With standard programme in practice	36 (30)	5 (9)
Approving of a regional programme	57 (48)	36 (57)
Regarding MRCGP exam as valid assessment	65 (53)	29 (44)

^a Not all respondents replied to these questions.

showed that those using the topic checklist tended to be against a regional programme and vice versa ($P<0.025$), but there were no other correlations. There was no apparent relationship between trainers' or trainees' views on the MRCGP examination and any of the assessment methods. There was a correlation between those trainees who had been in a practice with a standard assessment programme and those giving high ratings of usefulness over the whole range of procedures ($P<0.01$).

Discussion

Considerable work has been done on developing assessment methods. In 1976 Freeman and Byrne published the Manchester rating scales² and since then many other methods have been developed and used for formative trainee assessment. The objective structured clinical examination has gained popularity because of perceived inadequacies in the use of rating scales and it has been used on a region wide basis for formative assessment.³ A recent informal postal survey of all regions in the UK indicated that all of the methods covered in this study are widely promoted at regional level (personal communication). However, there is little evidence that trainers are entering enthusiastically into assessment and a recent study of a small number of trainers indicated that few saw a need for either educational or endpoint assessment of trainees.⁴

The Joint Committee on Postgraduate Training for General Practice strongly supports the use of a wide range of assessment methods in the trainee year⁵ and it seems clear that academic opinion is in favour of formative assessment in the education of trainees. Without such assessment it is impossible to determine areas of unmet need or the effectiveness of teaching. The Joint Committee has produced no firm guidelines on assessment although the working party report⁵ recommended the use of the Manchester rating scales. It seems clear that as yet no single form of assessment can provide all the information needed and it is therefore important to use a wide range of assessment methods. In this survey the trainers reported a higher usage of all methods of assessment than the trainees. It is possible that the distribution of the groups was skewed but the similarity in the figures for videotaped consultations suggests that there is a degree of over reporting by trainers and under reporting by trainees.

If the trainee figures are taken as being the lower end of the probable range it would seem that 81% of trainees are exposed to between two and six assessment methods per year while 14% are exposed to less than two methods. This may underestimate the number of methods used but if the trainees were unaware of or could not recall an assessment taking place it was unlikely to be of great value. There are therefore a considerable number of trainees who appear to be inadequately assessed on a quantitative basis.

The quality of the assessment carried cannot be measured directly in this kind of survey but from the comments made by respondents it appears that some trainers carried out the assessment with skill while others did not. Several trainees commented that videotaping of consultations took place but nobody look-

ed at the tape. A recent retrospective survey (Kelly D, unpublished results) reported that in 1979 only 5% of trainees in the region were video or audiotaped; there has thus clearly been a considerable increase in the use of videotaping over the years.

On the positive side it is very encouraging that those who had experience of the assessment techniques rated them as more useful than those who had not. This might be expected among the trainers who chose to use the techniques. However, among the trainees only videotaping and the objective structured clinical examination were regarded as useful among non-users whereas among users all methods were rated as useful except the Manchester rating scale. This indicates that if trainers and trainees can be encouraged to use assessment methods they will find them helpful.

It is interesting that while 30% of trainers claimed to use a standard assessment programme only 89% of trainees were aware of this. Since assessment of trainees is primarily formative it is essential that they should know if they are being assessed, how they are being assessed, and the results of the assessment. It seems unlikely that if a standard programme had been discussed with the trainees they would have no recollection of this within three months of completing their trainee year.

The question of a standard regional programme produced a fairly even split among respondents with just over half of the trainees in favour and just over half of the trainers against. It might be thought that those trainers who already had an extensive assessment programme would be particularly opposed to a regional system but in fact there was no such correlation. Similarly those trainers who did very little assessment showed no particular enthusiasm for a regional scheme.

In its instructions to the panel of examiners in 1978 the council of the Royal College of General Practitioners stated that 'the examination must now be regarded as a method of assessing the satisfactory completion of vocational training'. More than half of the trainees and nearly half of the trainers in the survey population did not feel that the MRCGP examination was a valid assessment. The most common reasons advanced for this view were the lack of a clinical component and a belief that the examination represented only one view of the characteristics of a general practitioner.

As a result of this survey it is clear that those trainees who undergo assessment procedures believe that assessment is of value. It is also clear that a minority of trainees are denied such assessment. While the voluntary use of assessment has brought about the current situation, universal assessment will only become a reality when it becomes a requirement for accreditation as a trainer.

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Address for correspondence

Dr L M Campbell, West of Scotland Committee for Postgraduate Medical Education, University of Glasgow, Glasgow G12 8QQ.