

Motivation of general practitioners attending postgraduate education

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SUMMARY

Background. The 1990 Contract encouraged general practitioners to participate in continuing medical education by providing a financial incentive.

Aim. The study was designed: to determine the motivation of general practitioners attending education events; and to compare motivation and reasons for attendance pre- and post-Contract at commercial and non-commercial meetings, and at the different educational categories of Disease Management (DM), Health Promotion (HP) and Service Management (SM).

Method. Two structured questionnaires were used. The first was sent to all general practitioners in the West of Scotland and asked about motivation pre-1990 Contract and the second, post-Contract, looked at motivation and reasons for attending a course as part of post course assessment. This latter was part of a much larger study evaluating continuing medical education.

Results. A total of 1161 practitioners responded to questionnaire I and 552 general practitioners attended 27 randomly selected postgraduate meetings. Finance was a motivator in 3.8% pre-Contract, and this increased to 33.3% post-Contract and was the most commonly stated reason for attendance in 81.3%. Financial incentive had the biggest influence on those attending HP sessions (91.5%), then SM (87.2%) and finally DM (78.6% ($\chi^2 = 8.68$; $P \leq 0.013$). It was also important to 73% attending drug-company-sponsored meetings compared with 83.7% going to non-commercial ones. Interest was a good motivator both pre- and post-Contract, but more so for DM than other categories and drug company as opposed to non-commercial meetings ($\chi^2 = 9.4$; $P < 0.002$). Lack of knowledge became a less important motivator post-Contract, and doctors felt least knowledgeable in SM (62.2%), as opposed to DM (57.9%) and HP (23.6%) ($\chi^2 = 38.8$; $P < 0.001$, with each differing significantly from both others). Doctors found the topics provided by the pharmaceutical companies more interesting ($\chi^2 = 9.4$; $P < 0.002$) and the hospitality provided more alluring than scheme meetings ($\chi^2 = 28.6$; $P < 0.001$).

Conclusions. Finance has a major effect on attendance at postgraduate meetings but may not be a good incentive for learning. Planning for education must take into account the different motivational factors for the different categories. Reasons for attending commercial meetings differ from non-commercial ones and these events should be closely monitored.

Keywords: motivation; education; general practitioners.

Introduction

THE introduction of the 1990 Contract led to major changes in the provision of education for general practitioners.¹ Continuing medical education now finds itself in the market place, and doctors are offered a wide-ranging choice by the provision of educational meetings from postgraduate centres and commercial companies. By introducing the postgraduate education allowance, which currently stands at £2175, and linking this to attendance at meetings, the Government hopes that general practitioners will maintain a balanced programme of continuing education. However, the consumers may tend to choose activities that are thought to be attractive and comfortable rather than those that satisfy an educational need,² and present evidence does not allow many firm conclusions about the effect of financial incentives.³

Will the Government's hypothesis that attendance at meetings will increase knowledge, and thus, improve patient care be shown to be correct? It has been found that the standard of care offered by a doctor is linked less to his other knowledge than to factors that affect its application, and the most important of these is motivation.⁴ Motivation has been highlighted as one of three closely linked problems of continuing medical education along with isolation and a reduction in job satisfaction.⁵ Pickup *et al*⁶ also found a problem of motivation with 82% of respondents encountering obstacles to their continuing education. Despite this, previous literature has concentrated on doctors' views on their preferred type of teaching, the timing of courses, their content, the contributors and their views on continuing medical education.⁷⁻¹⁵

This paper aims to identify the motivating factors for doctors participating in continuing medical education pre- and post-contract so that the information can be used when planning future education.

Method

A structured questionnaire (I) asking about doctors' views on continuing medical education was sent to general practitioners registered on the database at the West of Scotland Postgraduate Office before the 1990 Contract changes came into force. Part of this questionnaire dealt with doctors' motivation for attendance at courses pre-1989 and took the form of an open question: 'What motivated you to go to educational meetings pre-1989?'

A second study was carried out from 1 September 1992 to 31 March 1993 inclusive. This was part of a larger project evaluating continuing medical education in the West of Scotland. One aspect was to look at the effect on knowledge and intention to change by going on a course; another was to look at motivation and reasons for attending an educational event. This latter aspect was assessed in two ways. First, by an open question, 'What motivated you to attend this course?' and secondly, by asking the doctors to indicate their reason for attendance against nine prepared statements which were developed from the information gathered previously by the open question on motivation in questionnaire I. The distinction was made between motivation and reason for attendance as motivation is defined as factors causing a certain action either conscious or unconscious, while reason is a justification for something. By separating these two factors, it was hoped to uncover more detailed information in what is an extremely complex issue.

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Submitted: 27 April 1995; accepted: 4 December 1995.

© British Journal of General Practice, 1996, 46, 353-356.

Results

Questionnaire I

A total of 1959 questionnaires were sent, and after a second mailing, 1611 were returned giving a response rate of 82.1%; 83 were excluded because 36 (2.2%) general practitioners had retired, 19 (1.8%) were not applicable (e.g. trainee or researcher), 19 (1.8%) had left the practice, three (0.2%) were on maternity leave, five (0.3%) were sent to the wrong address and six (0.4%) had died. Therefore, there were 1523 suitable for analysis.

Out of the 1523 general practitioners, 1374 (90.2%) were working in the West of Scotland area, 71 (4.7%) were from other parts of the UK and the Health Board was not known for 78 (5.1%). The demographic features of respondents were representative of general practitioners within the region.¹⁵

Motivation pre-1989

Out of the respondents, 285 (18.7%) failed to answer this particular question. Of those that did, the replies fell into 18 different categories which have been combined into broad areas (Table 1). Interest was the sole motivator in 506 (33.2%) cases. In only a small number was financial gain important.

Questionnaire II

A total of 27 courses were randomly selected using random-number tables during the study period previously mentioned. Twelve were in Disease Management (DM), nine in Health Promotion (HP) and seven in Service Management (SM). Five of these courses (three DM and two HP) were not part of the West of Scotland Educational Scheme but were sponsored by drug companies. This was representative of the spread of meetings available in the region at this time. A total of 552 doctors attended these meetings. Not all completed the evaluation sheets but the relevant figures are shown (Table 2).

Table 1. Motivation of responders pre-1989.

Motivation pre-1989	Number	Per cent
Interest	842	55.3%
'Old allowance'	58	3.8%
Improved knowledge	664	43.6%
Contact with colleagues	208	13.7%
Educational need	12	0.8%
Location, venue, food	25	1.6%
Professional development	10	0.7%
Don't know	7	0.5%

Table 2. Number of doctors attending the courses and completing the evaluation sheet by educational category and scheme versus non-scheme.

	Disease management		Health promotion		Service management	
	Number attending courses	Number completing courses	Number attending courses	Number completing courses	Number attending courses	Number completing Courses
Scheme	153	146	110	107	121	111
Non-scheme	123	112	44	40	0	0
Total	276	258	154	147	121	111

Statistical methods

The chi-squared test was used for comparison of proportions and follow up comparisons were done using Bonferroni's method of adjusting *P*-values.¹⁶ As there were no commercial meetings in the SM category, these were excluded when comparisons of category and scheme versus non-scheme were being made.

Motivation

In all, 33 different responses were obtained but these were condensed into eight broad categories (Table 3). Ninety-five (17.2%) failed to answer this question, leaving 457 to be analysed. A total of 198 (43.3%) general practitioners mentioned interest as one of the motivating factors and 132 (28.8%) highlighted it as the sole influence; 76 (16.6%) attended purely for the postgraduate education allowance and a further 82 (17.9%) felt that this was a motivator in conjunction with other factors. Seventy-nine (17.3%) were keen to improve their knowledge and cited no other factors. Only two (0.4%) mentioned changing the way in which they practised. A larger number than before the Contract changes were motivated by the venue, food and social contact.

Interest in a topic was more likely to influence people to attend DM meetings than HP or SM ($\chi^2 = 21.3$; $P \leq 0.001$), whereas the postgraduate education allowance had greater influence on attendance at HP than either DM or SM ($\chi^2 = 63.02$; $P \leq 0.001$).

When commercially sponsored meetings were compared with scheme meetings, doctors found the subject matter of the drug company meetings more interesting ($\chi^2 = 9.4$; $P \leq 0.002$) and the venue, food and speaker were statistically significant motivating factors. (Table 4). A desire to increase knowledge and gaining PGEA did not influence the decision to attend these meetings.

Reasons

A total of 516 (93.6%) general practitioners responded to this question (Table 5). Doctors were free to tick more than one reason. Only 25 indicated a single reason with the remainder indicating a combination of two to seven reasons. The majority (146) gave three reasons.

Financial gain was more likely to be a reason for attending HP meetings than DM ($\chi^2 = 8.68$; $P \leq 0.01$). Doctors felt that gaining knowledge was good reason for going to SM courses and they were also more likely to attend these meetings if they had identified an educational need. The most statistically significant reason for attending DM courses was a desire to update knowledge ($\chi^2 = 11.78$; $P \leq 0.003$). Interest in topic, contact with colleagues and a desire to change practice were not significant influences on choice of category.

Discussion

Motivation has been shown to be one of the major influences on quality of care¹⁷ and yet there is a dearth of literature on this

topic. Although this study is based in the West of Scotland, the numbers are large and cover a variety of practice circumstances, and therefore, information gained can be used in other parts of the UK.

Motivation was looked at pre-1989 because, during 1989–1990, doctors could attend enough educational sessions to qualify for their new allowance, and also the postgraduate training allowance, which was payable until the first seniority payment; therefore, this was not a typical year. Interesting differences have been seen pre- and post-Contract. Finance had little impact on doctors before 1989, with only 3.8% mentioning it as a motivating factor compared with 33.4% post-Contract and this difference rose even higher, to 81.3%, when the consumers were asked

to indicate specifically their reasons for going. The financial carrot is a more important factor when attending health promotion and service management sessions than disease management, and this was found by both the open question on motivation and indicating reasons for attendance. It is possible that doctors are familiar with disease management courses both in their undergraduate and postgraduate training, and can only be encouraged to attend the other categories by giving them a reward. Whether this is a good foundation for learning remains uncertain.

Interest was the main sole motivator pre-Contract and was still a major factor post-Contract, especially for DM. Perhaps general practitioners see this as more relevant to their day-to-day work than HP or SM.

Every doctor has a different educational need, and lack of knowledge was recognized by 29.3% pre-Contract as opposed to 15.3% post-Contract. When asked to indicate the reason for attendance, a lack of knowledge was recognized in 41.8%. This finding would suggest that this is not a main motivator but is still a factor in attendance at meetings. The doctors felt they were least knowledgeable in SM as opposed to DM or HP, the differences between the three being statistically significant; this was supported when doctors were asked about educational need. Service Management covers areas such as fundholding, staff appraisal and time management, and these may be alien to the general practitioner, whereas DM and HP deal with clinical work with which he or she will be more familiar.

Encouragingly, 46.7% intended using information gained to alter their practice. The number of drug company meetings included in this study was small but a reasonable number of people attended them. Differences emerged between the commercial and the scheme meetings. Doctors found the topics of the commercial meetings more interesting, and the speaker and level of hospitality provided were statistically significant influences on attendance.

The differences between the groups with relevance to financial incentive is less apparent when asked an open question on motivation. This may be because doctors will tend to put down one factor which comes to mind, whereas the question on reasons behind attendance uncovers a more complex group of motivators which are important for the individual.

Table 3. Motivation of general practitioners post-Contract.

Motivation post-Contract	Number	Per cent
Interest	198	43.3%
PGEA	158	34.6%
Improved knowledge	134	29.3%
To change practice	2	0.4%
Quality of speaker	23	5.0%
Location, venue, food	38	8.3%
Don't know	4	0.8%
Suitable timing	12	2.6%

Table 4. Motivating factor for attendance at commercial and scheme meetings.

Motivator	Commercial (%)	Scheme (%)	P
Interest	74 (55.2)	88 (38.5)	< 0.002
PGEA	38 (28.4)	74 (32.5)	0.4
Increase knowledge	15 (11.2)	44 (19.3)	0.04
Venue, food, speaker	37 (27.6)	16 (7.0)	< 0.001

Table 5. Reasons given for attendance.

Reasons	Disease Management (DM)	Health Promotion (HP)	Service Management (SM)
1. To gain sessions for PGEA	114 (78.6%)	97 (91.5%) <i>P</i> < 0.01 HP > DM	97 (87.8%)
2. Genuine interest in topic	102 (70.3%)	70 (66.0%) <i>P</i> = 0.39	69 (62.2%)
3. I know little about the topic and wanted to learn more	66 (57.9%)	25 (23.6%) <i>P</i> < 0.001 SM > DM > HP	69 (62.2%)
4. To meet colleagues	33 (22.8%)	33 (31.1%) <i>P</i> = 0.16	23 (20.7%)
5. To use the information gained to change my practice	75 (51.7%)	54 (50.9%) <i>P</i> = 0.7	44 (39.6%)
6. I recognize this area as a gap in my knowledge and wanted to fill this educational need	71 (49.0%)	38 (35.8%) <i>P</i> < 0.02 SM > HP	60 (54.1%)
7. I feel knowledgeable about this topic and wanted an update	43 (29.7%)	25 (23.6%) <i>P</i> < 0.003 DM > HP, SM	13 (11.7%)

The 1990 Contract has definitely altered the motivation of doctors at educational meetings. The financial incentive has been effective in terms of numbers attending, but will it ultimately improve patient care?^{18,19} Doctors are now spending a great deal of time attending educational activities which have yet to prove their worth. Until recently, it was thought that doctors were motivated by the need to keep up to date.²⁰ This paper has exploded this myth and exposed a complicated web of factors underlying doctors' attendances. The challenge now is for educational organizers to relate motivation to methods appropriate to adult learning. We must look at ways of making courses in HP and SM more attractive to doctors so that they are not purely 'going for the money'. There do appear to be subtle differences in the reasons for attendance at commercial meetings, and these are not necessarily the ones most conducive to learning, although their topic selection seems to be more attractive to the general practitioner consumer. Therefore, it is important that these are closely monitored to maintain high educational value so that there are no inequalities in the provision of continuing medical education.

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