

ORIGINAL ARTICLES

Consultants in Scotland: Survey of Educational Qualifications, Experience and Needs of Scottish ConsultantsSJ Schofield¹, D Nathwani², F Anderson³, R Monie⁴, M Watson⁵, MH Davis⁶¹Centre for Medical Education, University of Dundee, Tay Park House, Dundee DD2 1LR²Level 4, Ninewells Hospital, Dundee, DD1 9SY³NHS Education for Scotland, Postgraduate Office, Ninewells Medical School, Dundee, DD1 9SY⁴Respiratory Medicine, Southern General Hospital, Govan, Glasgow, G51 4TF⁵NHS Education for Scotland, 2nd floor, Hanover Buildings, 66 Rose St, Edinburgh, EH2 2NN⁶Centre for Medical Education, University of Dundee, Tay Park House, Dundee DD2 1LR**Correspondence to**

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Commercial interest: None**Funding:** The survey was supported by grant funds from the National Health Service Education for Scotland**Ethical approval:** A waiver of research ethics approval was obtained from Tayside Health Board research ethics committee.**Abstract****Aims**

To survey Scotland's NHS consultants regarding their teaching roles; educational qualifications/training; attitudes to educational qualifications; perceptions of health boards' attitudes to educational activities; usefulness of various educational courses and preferred delivery methods.

Methods

Postal questionnaire (n=3615).

Results

Sixty two percent response rate (n=2246). 98% had one or more roles in education/training. 54% spent more time in educational roles than job-plan allocations. 6% had educational qualifications. 30% rated educational qualifications valuable to their educational role; 21% to their career. 48% had not attended any educational training. 19% of respondents rated their health board as supportive of their educational activities.

Respondents rated dealing with underperforming students (74%), dealing with challenging behaviour (63%), appraising students (63%), trainee assessment (61%) and feedback (58%) as the most useful topics.

Conclusions

Scottish consultant involvement in educational activities is virtually universal but consultants perceive they need more time than allocated in job plans. Most consultants had no teaching qualifications. Nearly half had no formal training for educational activities. Educational qualifications were

valued by a minority regarding both career development and educational activities. Increased access to staff development for teaching is required as NHS sources are not meeting the need for teacher training of consultant staff.

Key Words

Staff development; Educational role; Medical Education; Scotland

Introduction

In "The doctor as a teacher"¹ the GMC set out the educational duties of all doctors. The GMC recognised that teaching skills are not innate² and urged those with responsibilities for teaching to develop the necessary skills, placing the onus on the doctors themselves to identify training needs and ensure these are met. Teaching skills are rarely taught at medical school. Some help is available to junior staff and consultants through individual postgraduate deanery initiatives, university staff development programmes, medical royal college workshops and other initiatives. Uptake of such courses and workshops is sporadic and most are introductory with little potential for progression to a more advanced level.

Against this background National Health Service Education for Scotland (NES) commissioned a questionnaire-based study to gather information needed to drive forward quality-assured medical education at both undergraduate and postgraduate levels in Scotland.

The study aimed to identify consultants' teaching roles; qualifications and training for education and their attitudes to them; requirements for training and their preferred delivery methods of such training; and their perceptions on health boards' attitudes to educational activities.

Subjects and Methods

A literature search of previous studies of consultant training needs for their educational role informed the development of a questionnaire^{3,4,5,6,7,8,9,10,11,12} including questions on demographics (four items); current educational role (four items); any educational qualifications and workshops attended (three items). We also asked about educational qualifications not completed (title, place and reason for non-completion); consultants' views on qualifications, whether there was encouragement at a managerial level for their educational role; and barriers they foresaw for future educational training. Topics identified in the literature review for workshops on education were listed and consultants asked to rate them on a Likert scale of 1 – 5 for usefulness. Consultants were asked to identify the most important five topics for a course for educational supervisors, and make any other comments. The resulting questionnaire was reviewed by a focus group of experts in medical education, and by postgraduate tutors. It was then piloted with a group of consultants who were not specialists in medical education. Minor changes to wording were made at each stage to clarify understanding. The full questionnaire is available from the first named author on request.

The Information Services Division (ISD) mailing list for all Scottish consultants was used to distribute the questionnaire in October 2006¹³ and non-respondents were followed up on three occasions. Responses were anonymous, but questionnaires were assigned a unique number to enable repeat circulations to go only to non-respondents. Quantitative data was scanned by eForms (<http://www.nes.scot.nhs.uk/eforms/>) and qualitative data was input manually. SPSS version 14.0 and Microsoft Excel were used for quantitative data analysis. Statistical significance was calculated using the chi-squared test. The qualitative data was sorted manually for recurring themes.

Results

Response rates

Two thousand, two hundred and forty six responses were received from 3,615 valid names on the ISD list, giving a response rate of 62.2%. Response rates were not significantly different across postgraduate deaneries ($p = 0.39$); health boards ($p = 0.52$); or specialties ($p = 0.06$); but were higher for females ($p = 0.006$).

Demographics

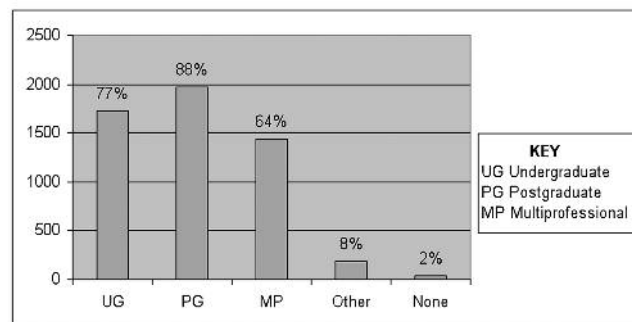
One thousand, five hundred and forty eight (70%) respondents were male and 693 (30%) female. One thousand, five hundred and forty two (69%) qualified in Scotland, 436 (19%) in England and Wales, 35 (2%) in Northern Ireland, 38 (2%) in Eire and 187 (8%) overseas. Year of qualification ranged from 1958 to 2002: 1021 (45%) qualified between 1980 and 1989, 656 (29%) between 1970 and 1979, and 492 (22%) between 1990 and 1999. Two thousand and sixty eight (92%) respondents were employed by the NHS and 147 (7%) by a university.

Involvement in Education

Respondents were asked to indicate in which areas they taught: undergraduate; postgraduate; multiprofessional; or other (Figure 1).

Of the 184 (8%) indicating "other", the majority specified NHS staff training. Thirty-eight (2%) respondents had no teaching role, including 5% of responding public health physicians, 3% of

Figure 1: Area of Teaching



responding anaesthetists and 3% of responding clinical laboratory specialists.

Time Allocated for Teaching / Training

The consultants were asked how much time per week was allocated in their job plan to their educational role, how much time they actually spent, and how much time they felt they needed. The results were banded into <2 hours, 2 to 5 hours and more than 5 hours and are shown in Table I.

Table I: Hours / Week on Educational Role Allocated in the Job Plan, Actually Spent, and Estimated Time Needed.

Hours / week on	<2	2-5	5+	Unspecified
educational role				/ other
Time allocated in job plan	926 (41%)	890 (40%)	194 (9%)	206 (9%)
Actual time spent	334 (15%)	1165 (52%)	593 (26%)	124 (6%)
Estimated time needed	224 (10%)	1131 (50%)	675 (30%)	186 (8%)

Fifty four percent of consultants spend more time on their educational role(s) than allocated in their job plan and 69% estimated that they needed more time for educational roles than specified in their job plan.

Support for Teaching

Nine hundred and fifty one (43%) respondents had access to staff development for their educational role, 431 (20%) did not and 833 (37%) were unsure. Eight hundred and twenty five (40%) NHS consultants compared with 126 (86%) university employees knew they had access to staff development.

Educational Qualifications

Ninety four percent of respondents had no educational qualifications, 5.6% had one educational qualification and 0.4% had more than one educational qualification. The most popular qualification was the post-graduate certificate in (medical/higher) education (78 respondents). Thirteen had a diploma in medical education and 14 a masters in medical education.

Specialty

Table II shows the number and type of educational qualification by specialty.

Table II: Educational Qualifications (%) for each Specialty

Specialty	Certificate in Teaching in Higher Education / Post Graduate Certificate in Education	Certificate in Medical Education	Diploma in Medical Education	Masters in Medical Education	Other	Total (% of that specialty)
Dentistry (n=78)	6	3	0	1	1	11 (14%)
Community (n=33)	0	0	1	0	3	4 (12%)
Public Health (n=59)	2	1	0	0	2	5 (8%)
Psychiatry (n=292)	5	10	3	0	6	24 (8%)
Anaesthetics (n=332)	0	16	1	5	3	25 (8%)
Clinical Laboratory (n=157)	2	3	2	2	1	10 (6%)
Medicine (n = 581)	6	11	4	3	11	35 (6%)
Accident & Emergency (n=38)	0	1	1	0	0	2 (5%)
Surgery (n=384)	0	6	0	2	9	17 (4%)
Obstetrics & Gynaecology (n=99)	2	1	0	0	1	4 (4%)
Radiology (n=116)	1	1	0	0	0	2 (2%)
Occupational Medicine (n=12)	0	0	0	0	0	0 (0%)
Not known (n=65)	1	1	0	0	2	4 (6%)
All specialties (n=2246)	25	54	12	13	39	143 (6%)

Educational Workshops Attended

Figure 2 shows the number of educational workshops attended by respondents.

Figure 2: Number of Educational Workshops Attended

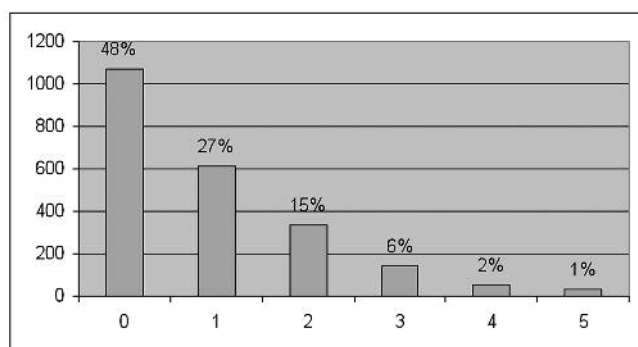


Table III shows the workshops most frequently attended by consultants.

The major providers of workshops were the royal colleges (19%) followed by the universities (16%), SCOTS (Supporting Clinicians On Training in Scotland) (14%), NES (7%) and the hospitals (5%).

Higher Education Academy Membership

Forty-nine (2.2%) respondents were full members of the Higher Education Academy (the body for all who teach in higher education 14), 10 (0.4%) associate members, 2139 (95.2%) not members and 48 did not specify. Twenty-one NHS employees were full members and eight were associate members.

Table III: The Ten Most Attended Workshops

Topic of workshop	Number (%) of people who have attended
Generic teaching and learning	524 (25%)
Educational supervision	285 (14%)
Advance Life Saving course (including tutor training)	168 (8%)
Assessment skills	157 (8%)
Appraisal skills	120 (6%)
Dealing with underperforming and challenging students	68 (3%)
Teaching skills specific to a specialty	64 (3%)
Problem based learning	56 (3%)
Small group teaching	35 (2%)
Other / various	57 (3%)
Mentoring	25 (1%)

Value of Educational Qualifications and Responsibilities

The value consultants placed on an educational qualification is shown in Table IV.

Table IV: Value Placed on Educational Qualifications

	Not at all valuable / not valuable	Uncertain	Valuable / extremely valuable
For their educational role	863 (38%)	657 (29%)	704 (30%)
For their career	1145 (51%)	590 (26%)	489 (21%)

Sixty one percent of those with qualifications thought educational qualifications valuable for their educational role as opposed to 29% of those without. 44% of those with qualifications thought qualifications valuable for their career as opposed to 20% of those without.

Health Board Support for Educational Activities

The consultants were asked to give their view on the extent to which their health board encouraged their educational activities. Of the 2218 answering the question, 463 (21%) perceived their health board discouraged their educational activities whilst 452 (20%) felt encouraged in these activities.

Barriers to Training

Seven hundred and forty six (34%) foresaw no barriers for their future training for their educational role, 1463 (66%) did and thirty-seven (2%) did not reply. The commonest barrier was time (1184); followed by time allocation for training in their job plan (202); funding (177); age (63), availability (50); personal (17); geography (10); being part-time (6); and resources (3).

Most Useful Training Topics

The consultants rated 24 training topics identified from the literature review using a Likert scale of one (not at all useful) to five (extremely useful). Table V shows the highest rated ten topics.

Table V: Top Ten Topics as Rated by the Consultants

Topic	Not at all useful / not useful / Uncertain / Useful / extremely useful			Mean of rating (1: least useful, 5: most useful)
	10%	16%	74%	
Underperforming students	10%	16%	74%	3.8
Challenging behaviour	15%	21%	63%	3.6
Appraising students	13%	24%	63%	3.5
Trainee assessment	14%	25%	61%	3.5
Feedback	15%	24%	60%	3.5
Mentoring	16%	25%	58%	3.4
Small group teaching	21%	21%	58%	3.4
Assessing needs	17%	29%	54%	3.3
Educational supervision	20%	30%	50%	3.3
Keeping up-to-date	21%	30%	49%	3.2

Preferred Method of Delivery of Educational Support

The consultants' preferred methods for delivery of educational support are shown in Table VI (more than one option could be selected).

Table VI: Preferred Method of Delivery of Educational Support

Method of delivery	Number (%)
Workshop	999 (44%)
Blended learning (mix of face to face and distance)	981 (44%)
Face to face courses	594 (26%)
Distance learning (print based or electronic)	567 (25%)
Other	30 (1%)

Contents of Educational Supervisors Course

The consultants were asked to list up to five items they thought should be included in a course for educational supervisors, and 719 (32%) responded. Table VII shows the top nine items.

Table VII: Respondents' Suggested Content for a Course for Educational Supervisors

Topic	Number of respondents	% out of those responding
	listing this topic	to this question
Underperforming students	416	58%
Trainee assessment	356	50%
Appraising students	328	46%
Feedback	194	27%
Written objectives setting	147	20%
Challenging behaviour	142	20%
Mentoring	135	19%
Assessing needs	133	18%
Small group teaching	132	18%

Additional Comments made by Respondents

Four hundred and twenty (19%) respondents added extra free text comments. Of these comments, the main themes were difficulty in balancing work and teaching (23%), a positive outlook on training for their educational role (18%), the need for education to receive more recognition and support from management (17%), a positive attitude to the survey (14%) and a positive attitude to qualifications in medical education (14%).

Discussion

The survey documented responses from a representative sample of Scottish consultants across deaneries and health boards, but there was a significantly higher response rate from female consultants. Other surveys have reported a higher response rate from females and have speculated as to the reasons.^{15,16}

The self perception nature of the study is acknowledged as a drawback.

Involvement in teaching / training is virtually universal, but job plan estimates of time needed for teaching seem to be too low.

Increased access to staff development for teaching is required, more so for NHS staff than university. This may reflect recent moves in universities to recommend teacher training as part of a lecturer's probationary terms.³ There is good evidence that a well-devised training programme can develop instructional expertise¹⁷ as well as indicating to the participant that the institution values teaching.¹⁸

The majority of Scottish consultants are unqualified in teaching. Furthermore, teaching qualifications are valued only by a minority, particularly with regard to career development, but also for their educational roles. Motivation drives learning, and is

particularly important in self-directed learning.¹⁹ It is therefore important to increase the value consultants attach to training if they are to take part in training for their teaching and training roles. Perceived lack of support for educational activities replicates findings of previous research,^{10,20} and was also highlighted as a major reason for not undertaking training in additional comments made by respondents.

The education topics consultants thought would be most valuable were helping underperforming students and dealing with challenging behaviour. These two topics grouped together made up 3% of the workshops attended, suggesting a lack of availability of such workshops despite having been prioritised by participants in a previous study with consultants,²¹ Australian preceptors,²² and clinical trainers.¹⁸ There is a need for greater training in dealing with underperformers and challenging behaviour.

Workshops and blended learning (a combination of on-line and face-to-face learning) were the preferred delivery methods for teaching training. There was clarity regarding the training required for educational supervisors compared to other studies.^{23,24}

This work is being used to inform future training for Scottish consultants.

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