Senior house officers and their training

I. Personal characteristics and professional circumstances

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Abstract

To assess the experience and perceptions of training of senior house officers in medicine a population survey of senior house officer training was conducted on senior house officers, registrars, senior registrars, and consultants in six medical specialties in South East Thames region by interview and postal questionnaire. The overall response rate was 72%, varying from 62% to 83% according to status and from 61% to 80% according to specialty. Although most of the 226 senior house officer respondents were aged 28 or under (168/225), had been qualified for four years or less (168/225) and were British (176/223), a quarter were older and had been qualified for five years or more; in all, 17 other nationalities were represented. Twenty two were aged over 33, and 17 had been qualified for more than 10 years. Thirty five senior house officers worked more than the mode of the distribution of duty rotas (one in three). Among postgraduate qualifications achieved or pursued, those related to general practice were highly represented (164 examinations); 111 senior house officers intended becoming general practitioners, 63 non-teaching hospital consultants, and 34 university or NHS teaching staff. Analysis of career progression showed that an appreciable number (31/221) had had more than three senior house officer posts.

The findings indicate that the main implications for training and education are time for study, careers advice, and revision of educational programmes.

Introduction

That the training of senior house officers needs to be improved is accepted; the personal and educational problems of senior house officers are recognised in Britain¹ and have been reported in Canada.² Although suggestions and recommendations have been made that might ameliorate the situation,^{3,4} systematic information, which might form the basis of proper understanding or rational planning, is lacking. We report the results of a survey of training of senior house officers in medicine and related specialties in the South East Thames region. Hitherto no other detailed study of senior house officer training has been undertaken.

Subjects and methods

Subjects were all doctors of senior house officer status and above in general medicine, medical subspecialties, accident and emergency, paediatrics, geriatrics, and psychiatry in the South East Thames region.

Data were obtained mainly with a questionnaire of 282 closed and open ended questions, whose content was derived from a properly conducted,⁵ small scale, in depth interview study with 25 subjects in the region representative of the intended survey population. The semistructured interview was designed to elicit views and experiences about the perceived effectiveness of training and its organisation, learning needs not included in the present system, purposes of a future

revised scheme, the role of postgraduate examinations, current and future learning methods, study leave, and the relation between training and service. In addition, space was given for free comment. The questionnaire was constructed on the basis of the interview data, and the items were almost exclusively drawn from quotations from the interviews. Basic principles of constructing questionnaires were closely followed.⁶ The questionnaire was sent to the subjects after an introductory letter from one of us (RCK) and was followed up with a letter of reminder and personal communication from ourselves and other colleagues.

Statistical analysis—Data analysis used tabulated frequency counts by actual numbers and percentages, cross tabulations and matrices, χ^2 analysis, and analysis of variance. Significance was set at $p < 0.05$. Although data from 608 subjects on 282 items might seem to be amenable to more complex analyses, a simple form of analysis was deliberately chosen.

Results

The overall response rate was high, at 72%; table I shows the size and response rate of each group of respondents. The results are presented, firstly, for the personal characteristics of the senior house officers (table II) and, secondly, for their professional circumstances (tables III-V).

PERSONAL CHARACTERISTICS

Although most senior house officers were aged 28 or under, a quarter were older; of these, a tenth were aged 33 or over. Similarly, most had been qualified for four years or less, about half of whom for only two or three years, after which they had moved to other posts. Of the quarter who had been qualified for five years or more, 17 have been qualified for more than 10 years.

Almost half of the senior house officers were married, and 34 also had children. A lower proportion of married senior house officers were women, and a lower proportion of women had children than did men (26% v 39%). Most senior house officers in the region were British; the next largest group, which constituted a substantial minority, was from the Indian subcontinent

TABLE 1—Number of respondents to questionnaire and response rates according to position and specialty

	No responding	Response rate (%)
<i>Position</i>		
Consultant (n=326)	270	83
Senior registrar (n=54)	43	80
Registrar (n=94)	64	68
Senior house officer (n=366)	226	62
<i>Specialty</i>		
General medicine (n=178)	137	77
Medical subspecialty (n=69)	55	80
Accident and emergency (n=116)	73	63
Paediatrics (n=155)	111	72
Geriatrics (n=83)	51	61
Psychiatry (n=239)	177	74
Total (n=845)*	608	72

* Data missing for five subjects.

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TABLE II—Personal characteristics of senior house officers in study

	No (%)
Age (years) (n=225):	
<29	168 (75)
29-33	35 (15)
>33	22 (10)
Sex (n=223):	
Men	124 (56)
Women	99 (44)
Interval since qualification (years) (n=225):	
1-4	168 (75)
5-9	40 (18)
≥10	17 (7)
Marital state (n=226):	
Single	123 (54)
Married	103 (46)
Men	57 (55)
Women	46 (45)
With children	34 (15)
Men	22 (39)*
Women	12 (26)*
Nationality (n=223):	
British	176 (78)
Indian†	25 (11)
Other‡	22 (10)

* As percentage of married men or women, respectively.

† From India, Pakistan, Bangladesh, and Sri Lanka.

‡ Includes 16 different nationalities.

(India, Pakistan, Bangladesh, and Sri Lanka). In all, 18 different nationalities were represented.

PROFESSIONAL CIRCUMSTANCES

Duty rotas—Table II shows the distribution of duty rotas worked; although the modal rota was one in three and 82 senior house officers work less than this, 35 senior house officers worked more.

Postgraduate qualifications—Table IV shows the postgraduate qualifications achieved and intentions of the 226 senior house officers in the survey. Among the qualifications being studied for, general practice related examinations (DCH, DRCOG, and MRCPGP) were highly represented, 164 such examination passes being sought.

Career intentions—Of all senior house officers, 111 intended entering general practice. The next most popular choice (62) was to become a non-teaching hospital consultant and the third (34) was a teaching career in hospital, whether as a university or NHS

TABLE III—Duty rotas worked by senior house officers

	No
1 in 1	3
1 in 2	32
1 in 3	91
1 in 4	35
1 in 5	21
>1 in 5	26
Total	208

TABLE IV—Qualifications achieved and intended in 226 senior house officers in study

	No(%) senior house officers*	
	Qualification achieved	Qualification intended
MRCP {Part I Part II}	43 (19) 11 (5)	42 (18) 45 (20)
FCAnaes Part I	4 (2)	2 (1)
MRCPsych {Part I Part II}	2 (1)	24 (11) 13 (6)
Primary FRCS	9 (4)	13 (6)
MSc or MPhil	5 (2)	
DCH	11 (5)	53 (24)
DRCOG	16 (7)	65 (29)
MRCGP	5 (2)	46 (20)
Other	7 (3)	20 (9)
Total	113	323

* Multiple qualifications achieved/intended.

TABLE V—Number of previous senior house officer posts held*

No of posts	No of senior house officers		
	Men	Women	Total (%)
None	8	7	15 (7)
1	44	38	82 (37)
2	24	20	44 (20)
3	23	16	41 (19)
4	17	12	29 (13)
5-7	7	3	10 (5)
Total	123	96	221

* No response in 5 cases.

employee. Overall, this ratio of choices is probably realistic.

Career progression—Table V shows the distribution of senior house officers according to the number of posts held, which is predictable given their years since qualification. Eighty three per cent (182/221) had had three senior house officer posts or fewer whereas an appreciable number (39/221, 18%) had had more.

Discussion

The aim of the survey was to describe the experience and perceptions of training in medicine as reported by senior house officers, as well as by registrars, senior registrars, and consultants. The survey was designed to elicit views of how the training should be altered to fulfil its educational purposes.

Simple methods of analysing the data were chosen for several reasons. Firstly, in common with current methods in educational research,⁷ the survey was intended to be descriptive rather than analytical; we therefore chose analyses that would allow us to retain a feel for the responses rather than a more complex form of analysis, such as factor analysis or regression analysis. Secondly, there was a predictably uneven distribution of responses across what would be cells and, for example, even though χ^2 was calculated, it was rarely reported as the data rarely met the necessary criteria for its use.⁸ Thirdly, the questionnaire comprised 16 sections, each having different numbers of items and, depending on the topic, different item designs and was constructed to describe 16 major aspects of senior house officer training rather than 282 details.

From the data obtained on the personal characteristics and professional circumstances of the senior house officers in this survey the main implications for training and education seem to be time for study, careers advice, and educational programming.

TIME FOR STUDY

That their conditions of work afford senior house officers only a minimum of time for education is well known.⁹ This survey showed that senior house officers had serious intentions of gaining higher qualifications, which not only require learning from clinical practice but also demand academic knowledge acquired through private study and formal learning. In this respect the responses for duty rotas are not encouraging; apart from the legal aspects, even the modal rota of one in three hardly leaves sufficient time for private study: if one evening is spent recovering from 32 hours' working only one evening in three remains for private study, assuming no time for socialising or positive relaxation. This arrangement has the inherent contradiction of implicitly designating free time as time for study.

Senior house officer training posts should include time for study not only on principle but also as a practical consequence of the necessary human physical and psychological conditions for effective learning.¹ Psychological well being comes from spending time with spouses and families and from having time for a life apart from work. The training component of the post should be planned rather than an implied way of spending time away from the hospital, and in medicine some topics cannot be learnt out of a clinical setting.

CAREERS ADVICE

A need for careers advice is indicated by our observation that nearly a fifth of senior house officers were experiencing difficulties in career progression. This may arise because of posts incorporating insufficient training or experience; inappropriate choice of career; inappropriate selection of posts; lack of oppor-

tunity for study; lack of study skills, examination skills, and skill in career planning; or the reason may be individual to each senior house officer.

The need for careers advice for senior house officers is already widely recognised,^{1 10 11} and postgraduate deans are recommended to be aware of any senior house officers who have been in the grade for more than three years.¹ Our data indicate the scale of the problem; 39 senior house officers within a 62% sample may be projected to a total of 63 senior house officers in the region who are in need of careers advice because of problems of progression. If pro-active careers advice is to be provided earlier the logistics of providing it on such a wide scale require consideration and careful planning.

Another study being done in South East Thames and Merseyside indicates that not all junior doctors require much more than library sources of accurate careers information, one or two lectures early in their postgraduate years, and an informal talk with their consultant (J Grant, unpublished). Whether this is sufficient for all senior house officers remains to be evaluated.

EDUCATIONAL PROGRAMMES

One of the most important factors disclosed by the survey is the wide variety of qualifications that senior house officers have and are pursuing. Planning improvements in senior house officer training must therefore encompass many curricula. There is a widely held view,¹¹ however, that there is an identifiable common core of learning for all senior house officers; the identification of a rational training programme must involve not only the region but also the royal colleges and their regional representatives.¹

That some senior house officers are doctors from overseas should also be taken into account; their methods of learning and their educational environments may well differ from those of their British peers.

Examination technique, approaches to learning, and acquisition of appropriate study skills may well form an important part of the training programme.

Designating time for study is also central to educational planning, meaning more than providing lectures and meetings, but also ensuring that the senior house officers can attend. Recognition of the value and indispensability of individual study as an obligatory and legitimate part of a senior house officer post is possibly more difficult to attain. The transition from student to practising doctor is not straightforward. Senior house officers seem to be regarded as doctors in the hospital—therefore there primarily for the service—and as students when off duty—and therefore expected to study. This expectation is no longer tenable, and this point will be taken up in the subsequent paper.

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II. Perceptions of service and training

Abstract

Aspects of teaching and learning at senior house officer level in South East Thames region were investigated by analysis of the responses of consultants, senior registrars, registrars, and senior house officers to a postal questionnaire. Responses to sections about who teaches senior house officers, how senior house officers learn, and the relation between the service and training elements of these posts varied significantly, according to the status of the respondents; certain grades commonly overestimated their own contribution when compared with the estimates of the other grades. Although the replies of senior house officers showed that they were taught by various grades, 47% of this group did not regard the consultant as their main teacher. Senior registrars and registrars rather than consultants were regarded by senior house officers as best at teaching (63% v 48% respectively). Consultants and registrars were considered to require more commitment to training, personal educational training, and to be more approachable. Inquiry about teaching methods used most by senior house officers showed absence of a systematic approach to training. Only about half of senior house officers cited ward rounds with consultants. Views on the relation between training and service were significantly different among grades, but there was general dissatisfaction.

Overall, the findings disclosed the ineffectiveness

of senior house officer training posts. This arises from lack of a clear distinction between training and service elements, of educational training for teachers, of a clear contractual obligation to teach in the consultant grade, and of allotted time for training and study for the teachers and senior house officers respectively. Reversal of these current trends is needed for senior house officer posts to fulfil their main training function.

Introduction

This paper describes teaching and learning at senior house officer level and, in particular, considers the uneasy relation between training and service, which is reflected in the incompatibility of the views of senior house officers compared with those of registrars, senior registrars, and consultants. The paper deals with training; specifically, who teaches senior house officers, how senior house officers learn, and the relation between service and training.

Subjects and methods

The subjects and methods are described above. From the postal questionnaire of 282 closed and open ended questions completed by 608 doctors of consultant to senior house officer status in South East Thames region we report the findings of three of the 16 sections. Results of frequency counts, cross