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Staffing of accident and emergency departments

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Abstract

***Objective*—To determine present staffing levels, to find out problems, and to request solutions.**

***Methods*—A questionnaire was sent on two separate occasions to all major accident and emergency (A&E) departments in the United Kingdom.**

***Results and conclusions*—There are marked variations in recruiting ability across the country. Presently teaching hospitals are having no major difficulty, but others are only able to obtain junior doctors from outside the United Kingdom. Public expectations and charter standards are difficult to maintain. There is evidence of increasing stress among career and senior A&E medical staff. There is an inexorable but slow increase in year on year workload.**

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Key terms: accident and emergency; staffing levels; staff recruitment

Increasing difficulty is being experienced in staffing accident and emergency (A&E) departments. The problem was exacerbated in 1995 and would appear to be worsening. Some parts of the country have been hit harder than others. Job advertisements in the *BMJ* have demonstrated the increasing difficulty in filling posts, especially the senior house officer (SHO) complement.

The aim of this study was to obtain more information about this problem by sending questionnaires to all A&E departments in the United Kingdom. These will continue to be sent on a biannual basis.

Methods

A questionnaire was sent during March and December 1995 to all A&E consultant led departments. This circulation was obtained from the British Association for Accident and Emergency Medicine (BAEM). Inquiry was made of general staffing availability and more specifically about the SHO situation. The questionnaire also asked how A&E departments were coping, about prospects for the coming six months, about ideas of causation, and about possible solutions.

Results

In March 1995, 167 completed questionnaires were returned, and 211 were returned in December. The distribution of responses is indicated in table 1. Two hundred and thirty questionnaires were sent out, for response rates of 73% and 92% respectively. Table 2 shows information on the staffing structure and vacancies from both questionnaires. Table 3 describes the SHO establishments, numbers filled with permanent staff, locums and vacancies. Table 4 shows those SHOs in permanent post by place of qualification.

Tables 5 and 6 indicate those SHOs on rotation and their career intentions, where indicated.

The questionnaire also asked for prospects for 1 February 1996 and showed that 30% of SHO posts had not been filled.

REASONS FOR SHORTFALL

Responders were asked to give their interpretation of the reasons for the SHO staffing crisis. The following were the most frequent explanations:

(1) Change in Royal College of Surgeons regulations: 91/216 (42%)
(2) General shortage SHOs: 102/216 (50%)
(3) Reduction of junior doctors hours
(4) Restrictions on overseas doctors
(5) Stressful working conditions: 46/216 (21%)
(6) Others, including pay, poor morale, teaching problems, etc

STRATEGIES FOR COPING

Responders were also asked how they were coping or how they might deal in the future with an incomplete staffing complement. The most frequent strategies identified were:

(1) More permanent career grade posts
(2) Senior staff working longer and more hours including on the "shop floor"
(3) Use of nurse practitioners
(4) Early advertising, both home and abroad
(5) Encouraging protected teaching time
(6) Trying to make the job as attractive as possible

Discussion

The questionnaires have revealed large variations in staffing problems. Nearly a quarter of responders deny any problems, most of these

Table 1 Responses to the questionnaires

	March	*December*
South & West	17	22
North & Yorkshire	14	25
Trent	10	11
South Thames	21	27
West Midlands	15	20
North & West	23	25
North Thames	14	25
Anglia & Oxford	15	15
Wales	5	12
Scotland	12	21
Northern Ireland	5	13
Total	167	216

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Table 2 Information on staffing structure and vacancies

	England/Wales	*Scotland/ N Ireland*	*Total*	*Vacancies*
Consultants	249; 311	27; 46	276; 357	20; 58
Associate specialists	33; 40	5; 10	38; 50	4; 2
Senior registrars	85; 80	6; 13	91; 93	4; 7
Registrars	77; 85	12; 13	89; 98	3; 11
Staff grades	130; 232	16; 36	146; 248	3; 30
Clinical assistants (sessions)	805; 721	93; 142	848; 863	–; 34

First set of numbers = March 1995; second set of numbers = December 1995.

Table 3 Senior house officer establishments

	England/Wales	*Scotland/ N Ireland*	*Total*	*Percent*
Establishment	1056; 1305	123; 208	1181;1513	
Permanent	876; 1214	112; 198	982; 1465	86; 97
Locum	87; 38	6; 22	93; 60	8; 4
Unfilled	67; 36	5; 4	72; 41	6; 25

First set of numbers = March 1995; second set of numbers = December 1995.

Table 4 Senior house officers: qualification by country of origin

	England/Wales	*Scotland/ N Ireland*	*Total*	*Percent*
UK	683; 1053	101; 176	784; 1229	71; 81
EEC	155; 88	7; 16	162; 104	14; 7
Other	159; 80	6; 10	165; 90	15; 6

First set of numbers = March 1995; second set of numbers = December 1995.

Table 5 Permanent senior house officers on rotation

	England/Wales	*Scotland/ N Ireland*	*Total*	*Percent*
GP	167; 195	24; 44	191; 239	19; 16
Surgical	82; 108	14; 20	96; 128	10; 9
Medical	41; 44	7; 3	48; 47	5; 3
Others	55; 57	3; 3	58; 60	6; 4

Percent column indicates percentage of those SHOs recorded in permanent jobs.
First set of numbers = March 1995; second set of numbers = December 1995.

Table 6 Career intentions of senior house officers

	England/Wales	*Scotland/ N Ireland*	*Total*	*Percent*
Surgical	191; 238	11; 25	202; 258	17; 17
Medical	100; 198	9; 19	109; 217	9; 14
GP	210; 210	31; 56	241; 266	20; 18
A/E	61; 84	12; 31	73; 115	6; 8
Others	39; 98	3; 12	42; 110	4; 7
Don't know	78; 146	9; 20	87; 166	7; 11
Not known			427; 201	36; 13

GP, general practitioner; A/E, accident and emergency.
First set of numbers = March 1995; second set of numbers = December 1995.

being the teaching hospitals. At the other extreme some non-teaching hospitals have no United Kingdom graduates at SHO level and have existing vacancies.

There are some hospitals where career grade staff are seeing most of the patients and spending the majority of their working time on the shop floor. This leads to less time for teaching, audit, administration, and management. More than a few responders indicated increasing dissatisfaction, demoralisation, and stress.

Generally A&E work is stressful, with unsociable rostering. The reduction in junior doctors' hours has exacerbated the mismatch between the number of doctors and the number of available posts. Most A&E departments have moved to full shift patterns but this has reduced any reserve in the system.

Public expectations and charter standards—national and local—impose increasing stress. Existing standards are not a measure of quality, and any failure to meet such standards is frequently the basis of complaints. Under such conditions essential communication standards are stretched to the limits and frequently suffer under unremitting and intensive work.

The impending reduction in the duration of general professional training is having an impact, and the effects will increase. A&E departments provide a training ground in the acutest of emergencies and should be acknowledged as such, but they are suffering from the drive to enter a chosen career pathway as soon as possible. Although the Royal College of Surgeons decision to remove the compulsory six months in A&E was suggested as a potent cause of reducing applications, the two surveys show that less than a quarter of those responding to this question indicate an intention to pursue a surgical career.

The number of SHOs nationally has increased by 1500 from 1989 to 1993[1] with a commensurate increase in posts. However, during 1995 a further 700 posts were created without further addition to the number of doctors. Manpower targets are regularly breached with an ever expanding total of available jobs. This mismatch of the number of SHOs and the number of available posts is made worse in the light of evidence indicating that recent graduates (and some medical students) are leaving medicine. Increasing stress is exacerbated by undesirable publicity and young doctors are questioning whether they want to proceed under such circumstances. The BMA cohort study may well throw light on some of the causes. Increasing the number of medical students (500 more recently announced) will help but has a lag period of 5-10 years.

Consultant expansion in A&E has been 7% per annum between 1988 and 1993.[1] but there are now vacancies. The questionnaire revealed 21 such vacancies in March 1995, and 58 of 357 posts (16%) in December. At least 70 posts have been advertised in the *BMJ* in the last 12 months. One hundred senior registrar posts are insufficient to cope with the rising demand. If these, and the 100 registrar posts, are amalgamated from July of this year, then at least a 50% increase is required.

The number of staff grade posts has increased in relation to consultants: 146 (53%) to 248 (69%) over the two surveys. These post holders are probably satisfied in the short term but may eventually become dissatisfied and want to continue training and career progression.

Calman requires more and protected teaching for the specialist registrars. Regular assessments are needed and time will have to be allotted for this. The training grades tend to be concentrated in the teaching hospitals and larger district general hospitals. While some hospitals are coping, others without trainers are turning more towards career posts and reduced flexibility.

As the reduction of junior doctors' hours continues, there is increasing pressure on middle and career grades to stay on the "shop floor". In turn this reduced availability for teaching, administration, and special interests.

A&E departments need to beware of this spiral, for much can be forsaken in the interests of time sensitive standards. Relaxation of restrictions on overseas doctors would ease recruitment and already many A&E departments are advertising on other continents, sometimes with great success.

There has been and continues to be a relentless year on year increase in the number of A&E attenders. The reasons are multiple and complicated, but in part reflect demands for more immediate, and convenient, treatment. Some patients may be more appropriately seen in the primary care setting but this presently is fraught with problems. Some A&E departments have adapted to this by running primary care services adjacent to or within the department. This practise has much to commend it and could be arranged locally, perhaps even with European Commission funding.

Publicity can help reduce A&E attendances, but efforts tend to be short lived and require both regular and repeated reinforcement. Some may say the effort is not worthwhile. Triage at the entrance by senior doctors is time consuming and wasteful. Experience in Australia has shown that a national triage scale can reduce attenders—those patients in category V being turned away. In this country such an experience would be time consuming and probably against the public interest. However, if the staffing crisis continues to deteriorate such measures will assume increasing importance.

The introduction of emergency nurse practitioners and other physician helpers can reduce the demands on the medical staff, though there is not an equivalent reduction in workload for the doctors to see the more complicated (and time consuming) problems. Some departments have found such posts more useful than others, but it is essential that any such appointments should be additional to the nursing establishment. Minor injury units (MIUs) run by nurses and associated with large A&E departments may reduce attendances. This experiment is gathering pace but such units tend to provide additional facilities, particularly if closely related to primary care, instead of spreading the workload. MIUs, however, may enable centralisation of A&E services in those urban areas with more than one district general hospital.

The questionnaires were ambivalent about SHO rotations. Some departments were increasing the numbers on surgical rotations, while others were abandoning them in favour of other grades. The general reduction in general professional training time mitigates against rotations, though some junior doctors choose to be stable for one to two years. Some specialties are reluctant to take doctors in this first post-registration post, though this can be overcome by appointing at six-monthly intervals and beginning the rotation, if necessary, in A&E.

It is well known that potential earnings can attract a workforce. Previously a peripheral allowance was available, but abandoned once the supply of doctors increased. Many A&E departments using locums have found that there is a significant increase in cost. It would be possible to remunerate above the national pay scales for A&E work without upsetting the system too much on a short term basis. It is already remarked that some junior doctors are being attracted on a bounty basis at the end of the contract.

The contracting process can and should be used to balance realistic and achievable workloads according to the staff available. It is no longer reasonable to expect an inadequate number of senior doctors to provide full cover and deputise for staffing shortfalls.

The shortage of junior doctors is being felt most in A&E departments, being the largest specialty employer at that grade, but is beginning to be apparent in other specialties. This shortage is expected to worsen over the next few years. All the Royal Colleges could help by promoting A&E for general professional training. In the final analysis it may be necessary to make A&E compulsory, perhaps with equal time in general practice, as an extended preregistration time.

A&E department workload is measured simplistically at present, for example by transit times etc. Little work has so far been done on outcome and efficacy, and herein lies a challenge. The varying practice of A&E departments can make direct comparisons difficult. Unfortunately over the last few months A&E workload has become inextricably mixed with further discussion on emergency admissions and intensive care units, though in many places these facilities are quite separate. Now is an opportune time to plan for the immediate and longer future. A&E medicine has established itself as a specialty and must seize the initiative.

SUMMARY

A great disparity exists across the country in staffing structures and vacancies. Many A&E consultants and senior staff are greatly stressed. Common belief and future projections indicate a worsening problem over the next few years.

Various courses of immediate and longer term remedial action are suggested. In the final analysis there is presently a mismatch between the number of junior doctors and the number of posts available. A&E need to tackle the problem but bearing in mind the differing departmental needs.

CONCLUSIONS

There is no simple answer to a national problem. Often the solution is made locally according to the circumstances. Large numbers of staff grade appointments have been made, which may in itself cause problems in the future. It is intended to continue to investigate staffing problems by repeated circulation of questionnaires.

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