TALKING POINT

Anaesthetic staffing and work in the North-western RHA

JAMES PARKHOUSE, HILDA F PARKHOUSE

During 1977-8 we made a detailed study of anaesthetic staffing and work in the North-western RHA to help provide a rational basis for allocating additional posts. We submitted a full report to the RHA and the main findings are summarised in the table.

The threefold variation in operations performed shows that more sophisticated data than overall hospital catchment population figures are required to estimate the current demand for anaesthetic services in the operating theatre. Whether this demand is appropriate is, of course, another question.

The number of anaesthetists of all grades (excluding clinical assistants), estimated as the total number of available whole-time equivalent “pairs of hands,” varied from 6.8 to 18.1 per 200 000 hospital catchment population in non-teaching areas and districts, and was as high as 31.7 in one of the teaching areas. An approximate indication of the individual case load for anaesthetists in the operating theatre was obtained by dividing the annual number of operations by the available number of whole-time equivalent “pairs of hands” (including clinical assistants). The lowest figure, 566 operations per anaesthetist per year, was seen in a non-teaching district with a high proportion of cardiothoracic work. Elsewhere, the range was from 773 to 1469 in non-teaching areas and districts. Similar variations were noted by the Association of Anaesthetists in its report on manpower and staffing in 17 districts in England. Its figures suggested that work loads increased in proportion to distance north of the Wash but we have observed the same range in a single region. There was no clear relation between the average number of patients anaesthetised and the amount of work that might have made particularly heavy demands on the anaesthetist — cardiothoracic, neurosurgical, and major paediatric surgery; epidural analgesia; intensive treatment, or pain clinic work.

In some cases anaesthetics had to be given in six or seven different hospitals and these might be several miles apart. For various reasons, emergency work might be done in two or three hospitals each night and there were sometimes outlying maternity units. These geographical considerations were an important factor in determining the efficiency with which an anaesthetic service could be provided.

There was a wide disparity in the anaesthetic services available for maternity work in the region. In many areas and districts only a small number of obstetric epidurals were given and the main anxiety was that once a service was initiated the consequent demand would overwhelm the available staff. Many requests for additional registrars were based on the desire to initiate or expand epidural services.

Intensive treatment; treatment of pain

There were five well established intensive therapy units, one a respiratory care unit and another run by a full-time practitioner without anaesthetic commitments. Intensive treatment was sometimes combined with coronary care and sometimes carried out in the recovery area of the theatre suite. The predominant feeling among anaesthetists, which would be shared by many others, was that coronary care was best carried out in a separate area from intensive treatment, though the two areas might with advantage be adjacent. In some of the smaller districts, where patients could easily be transferred to a well-established unit fairly close at hand, the demand for comprehensive, long-term intensive treatment would always be small; here the best solution might be to develop a well equipped and well-staffed recovery area which, as well as providing for immediate postoperative care, could accommodate various types of patients requiring intensive treatment for no more than a few days. Some areas and districts favoured the in-depth participation of a few consultant anaesthetists in intensive treatment. Others preferred all the consultant anaesthetists to work on rotation, being relieved of theatre work during that time. There was a general desire for junior anaesthetic staff to gain experience of intensive treatment and the point was often made that this training could usefully also be available to junior surgical and medical staff.

Almost every area and district had at least one consultant anaesthetist who was devoting some of his time to the treatment of pain, patients being referred either by other consultants in the hospital or directly by general practitioners. The need for collaboration with consultants in other disciplines was universally recognised and this could usually be arranged on an ad hoc basis. Two anaesthetists in the region had an established practice in hypnototherapy and at least one was practising acupuncture.

Teaching and administration

Undergraduates from the Manchester University Medical School undertake surgical attachments throughout the region and time is made available at this stage for teaching and practical experience in anaesthetics. In addition, virtually all consultant anaesthetists in the region were concerned with postgraduate teaching in the form of locally organised seminars, morbidity meetings, and teaching in the operating theatre and intensive therapy unit. One district organised an annual basic science course in collaboration with the local technical college. All areas and districts were keen to provide junior anaesthetists with adequate time for study and for attendance at day-release courses but good intentions clearly could not always be carried out. Several districts were worried about their heavy dependence on junior anaesthetists to provide a service, particularly for maternity commitments. By the time that study leave, illness, annual leave, and on-call duties had been allowed for there was often little time left for juniors to be with a consultant in the operating theatre.

Many consultant anaesthetists took part in teaching nurses, midwives, and operating department assistants. Consultants in the non-teaching areas and districts estimated that they spent about one hour a week teaching. Time spent on administration varied. The consultant in administrative charge, or chairman of the division, usually spent about four to 10 hours a week on committees and other administrative work. Other consultants averaged one to two hours a week. Several consultant anaesthetists had served or were currently serving as chairmen of medical executive committees.

In most areas and districts medical assistants in anaesthetics, most of whom were full time, had their own theatre sessions and worked independently on the same basis as consultants.

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HILDA F PARKHOUSE, BA, research associate
Occasionally they worked in the same way as registrars, being attached to consultant anaesthetists in the theatre. Some medical assistants took regular nights on duty in the same way as consultants; others were used to supplement the junior anaesthetic rota.

Medical and clinical assistants

The use of clinical assistants varied. Ten of the 19 areas and districts had 10 or more such anaesthetic sessions a week and one had 34. As they were settled in the neighbourhood clinical assistants could provide continuity of service. But it was a common experience that general practitioners, though honouring their sessions in the theatre, took little part in preoperative and postoperative care, departmental meetings, or other activities. Moreover, a "clinical assistant session" might become increasingly complex and demanding; such sessions needed to be kept under constant review and this was a source of anxiety about the hospital practitioner grade. Clinical assistants had few on-call commitments, though a few were used to support the junior rota when SHOs or registrars were unavailable, and one or two others were prepared to take calls until midnight.

For emergency work an SHO was usually first on call in the larger areas and districts. A registrar or senior registrar would function either as second on call or as the person on call for specific commitments such as obstetric emergencies or the intensive therapy unit. In smaller districts SHOs and registrars took turns as first on call and shared weekend duties between them. Emergency commitments of SHOs and registrars usually worked out at one night in three or four. There was always at least one consultant on call to support the emergency service as required. There seemed to be no logical reason for the widely varying ratio of junior to senior anaesthetic staff (see table). The pattern often went back into history and had sometimes been disturbed by the 1974 NHS reorganisation.

Technical and nursing help; secretarial staff and accommodation

In three districts the anaesthetists were satisfied with the employment of operating department assistants, and in two they were considered preferable to nurses. The more general feeling, however, among anaesthetists in the region was that the operating department assistant grade had proved disappointing. Low pay, unattractive hours, and poor status in relation to theatre nurses had affected recruitment. The training and examinations were beyond the scope of many, and day release to attend courses created problems unless additional staff were available. A six-month anaesthetic nursing course had started in the region at the time of our study. There was considerable interest in this and several hospitals have now seconded nurses to attend the course. The help given by well-trained and well-motivated nurses was much appreciated but because of the need to lift patients and the fact that men are sometimes "better with mechanical things" a combined staff of anaesthetic nurses and operating department orderlies was gaining favour.

The anaesthetic department of the largest teaching area had two full-time NHS secretaries; eight other areas and districts had one full-time secretary, six had a part-time secretary, and four had no specifically designated secretarial help. Considering that there were 130 consultants in the region this was a meagre provision but it represented a considerable improvement compared with a few years before. Even more striking was the inadequacy of accommodation—often a whole department of perhaps five consultants and four juniors had one small room or nowhere at all to meet, file papers and records, and keep books and journals.

Comment

The general picture is of a dynamic, overworked specialty constantly trying to catch up with the demands made on it and the additional demands created for itself. The need for anaesthetic services in the operating theatre increases as new surgical staff are appointed and new techniques are developed. Activities outside the operating theatre, such as intensive treatment, treatment of pain, epidural analgesia, and preoperative and postoperative care, make professional life more interesting for the anaesthetist and help in recruiting staff but they require more time. Highly specialised surgery makes particular demands and the problems of providing a service are magnified when emergency cover has to be provided in three or four hospitals simultaneously. Most anaesthetists would like more time in which to do a better job and provide a fuller service to the patient. Many would welcome more opportunity to teach and there are undoubtedly many

Summary of anaesthetic staffing and work in the North-western RHA

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<th>District/area</th>
<th>Operations per 1000 hospital catchment population</th>
<th>anaesthetists/200-000 resident population</th>
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<th>Clinical assistant sessions</th>
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*Teaching areas. †Includes anaesthetic staff of all grades but excludes clinical assistants.
opportunities for clinical research that are lost through lack of time.

How should demands for additional staff be assessed? Some requests are based on an appraisal of which grades are most likely to be approved—for example, SHOs rather than registrars. Many are based on traditional ideas about who should do particular kinds of work rather than on the difficulty and responsibility of the work itself. For example, additional registrars are considered necessary to ease the emergency rota or to enable an epidural service to be set up. Some anaesthetists seem to be fairly clear that there are activities constituting "Registrar work" as opposed to "consultant work." This view is not universal and even among those who hold it there would be no uniformity of criteria. The true task of the junior anaesthetist and the proper balance between training and service are important questions. Estimates of the numbers and grades of staff necessary or desirable to develop particular services, such as epidural analgesia, vary widely and the problem requires much study. Theatre commitments are more easily defined but adequate time must be allowed for preoperative and postoperative care.

There was a lack of any uniform policy in relation to proposed expansions of service. In some areas or districts the anaesthetists tend to accept additional theatre commitments in the hope that this will strengthen the case for more staff. Elsewhere, there is a firm refusal to agree to extra sessions until a sufficient anaesthetic staff is assured. Again, the anaesthetists in some districts have refused to initiate an epidural service or to take responsibility for an intensive therapy unit because of the constantly increasing demand for their services in the operating theatres. In other districts the surgeons think—and sometimes told us—that their work is limited by the fact that the anaesthetists choose to engage in these other activities.

At district level decisions repeatedly have to be made about the deployment of anaesthetic staff that mean, or should mean, consideration of these priorities. What are the "costs, risks, and benefits of surgery"? Is the expansion of a particular type of surgical work likely to mean a higher standard of health care in the local community? What are the relative benefits of setting up an obstetric epidural service, establishing an intensive therapy unit, providing a pain relief service, or, for example, expanding and improving the organisation and teaching of resuscitation and the immediate management of major trauma? Each district might form a corporate view of the value of these activities in relation to cost but comprehensive discussion is unusual. Most often, the question of who gets a little more of the anaesthetists' time is decided by who shouts loudest, gets in first, or is most skilful at manipulating or bypassing the local committees. An effective theatre users committee could help but the general impression is of haphazardness, with arbitrary decisions falling on the division of anaesthesia chairman.

In the North-western Region, which is probably fairly typical, the provision of a truly comprehensive service with satisfying working conditions for all concerned would require many more anaesthetists than are available at present. Such provision, however, both in the operating theatre and elsewhere, could be facilitated by well-trained nursing and technical assistants. Two general points should be reaffirmed. Anaesthetic work loads need to be assessed much more critically and sensitively than in terms of "notional half days," and the use of area or district population figures is an inadequate guide to the need for anaesthetic staff.

We are grateful to our colleagues for their help and to the North-western RHA for financial support.

References

Annual General Meeting

Notice is hereby given that the Annual General Meeting of the British Medical Association will be held in the Banqueting Hall of the Newcastle upon Tyne Civic Centre on Thursday, 10 July 1980 at 12.30 pm to transact the following business:

(1) Confirmation of Minutes of the last Annual General Meeting held on Wednesday, 27 June 1979.
(2) Approval of balance sheet and income and expenditure account for the year ended 31 December 1979.
(3) Appointment and remuneration of auditors.
(4) To consider and, if thought fit, pass the following resolution which will be proposed as a special resolution:

"That the Articles of Association be altered in the following manner:

Amendment of Articles

ARTICLE 4
Delete the heading "Eligibility for Temporary Membership" and Article 4 in its entirety.

ARTICLE 9
In the first sentence delete the words "Temporary Member." In the third sentence delete (i) the words "Temporary Members or" (ii) the words "a Temporary Member or" and (iii) the words "as the case may be".

ARTICLE 10
Delete the last sentence of the first paragraph.

ARTICLE 12
In the heading delete the words "Temporary Membership." In subparagraph (b) delete the words "Temporary Member or", "a Temporary Member or," "his Temporary Membership or" and "(as the case may be)" wherever they appear.

ARTICLE 14
(1) In the heading delete the words "Temporary Membership." (2) In the opening paragraph delete the words "or Temporary Membership." (3) In subparagraph (c) (i) delete all the words after "Medical" and substitute "Registrants under sections 7, 10, and 23 of the Medical Act, 1978." (4) In subparagraph (c) (vii), insert after the word "Ireland" the words "or upon ceasing to hold limited registration under Section 22 of the Medical Act, 1978." (5) Delete subparagraph (c) (viii). (6) In subparagraph (d) delete the words "Temporary Member" whenever they appear.

ARTICLE 15
(7) In subparagraph (f) delete the words "a Temporary Member." (8) In subparagraph (f) delete the words "Temporary Membership." (9) Insert after the words "Temporary Membership" and "Temporary Member" the words "or Temporary Member." (10) Delete the words "or Temporary Membership" and "Temporary Member" wherever they appear.

ARTICLE 64
Delete the words "Temporary Member and." (11) Delete the words "Temporary Member or" wherever they appear.

J D J HAVARD
Secretary