ARCHIVES OF DISEASE IN CHILDHOOD

The Journal of the British Paediatric Association

Annotation

Paediatric medical manpower

Over the past year, several documents have been published in the United Kingdom about paediatric medical staffing and the heavy workload falling on consultants and junior staff.¹⁻⁴ The results of the British Paediatric Association (BPA) 1992 manpower census are also now available.

The BPA¹ and Dowie reports^{3,4} illustrate the nature of this workload while the BPA census data show consultant expansion, shortages of trainees, and serious deficiencies in the 'safety net' of intermediate grade staff.

Paediatric medical staffing for the 1990s¹

This document describes practice in district general hospitals, community child health, and regional centres; it recommends that the NHS in England and Wales requires 1500–1960 consultants (general and community child health 1100 to 1500; specialties 400 to 460). At the current rate of consultant expansion, from the 974 posts in place in 1992 these numbers could be reached in 15 years. Standards for intermediate grade cover (safety net) are also given. The document does not consider adequately how many academic posts are needed.

Patterns of hospital medical staffing—paediatrics³

This details workload in five health districts taking into account the socioeconomic characteristics of the population served and the availability of NHS facilities.

Paediatrics was studied at the same time as seven other specialties; consultants and junior doctors kept workload diaries and were interviewed. The subsequent analysis demonstrates the complexity and variety of the work undertaken by district hospital consultants and their involvement in community paediatric practice. Consultant posts in community child health were filled over the period of the study and their contribution to the overall work in a district was identified. This work varied considerably between districts and the report concludes that no obvious relationship was found between staffing and work activity.

Junior medical staff

Of the specialties examined, paediatric senior house officers (SHOs) were the busiest out of hours. Together with colleagues in obstetrics and gynaecology they recorded the longest work times on duty overnight—on average six hours. Moreover, newly appointed junior doctors tend to suffer the occupational risk of absence due to catching infections from their young patients and creating difficulties in covering sick leave. Most registrars and senior SHOs in paediatrics were resident when on call. Areas highlighted as

providing particularly heavy workload are involvement in assessment of possible abuse in children attending the accident and emergency department, care of very young children, and care of the sick newborn. This supports the BPA view¹:

'junior staff need to be able speedily to establish diagnoses and to initiate therapies using techniques which are especially difficult in very young patients, yet may be life saving or effective in preventing long term handicap . . . the establishment of intravenous infusions or even blood sampling may prove outside the competence of an SHO and the consultant paediatrician may have to be recalled for simple procedures routine in adult practice'.

All these factors have led to the recognition by regional task forces on reduction of junior doctors hours that paediatric posts are hard pressed and onerous and attempts are being made to reduce hours with the specialty involved early in many hospital's review. This threatens to place work more appropriately undertaken by junior doctors onto already overburdened consultants.

Paediatric teams are frequently involved in intensive or high dependency care both in the neonatal unit and children's wards.¹ Junior staff numbers were found³ to be very low often with one SHO covering children's wards, the accident and emergency department, special care baby unit, and labour wards.³ In non-teaching units, approximately one quarter of all deliveries were attended by a paediatric trainee, often very inexperienced, the majority taking place out of normal working hours.

SHOs spoke of difficulties in taking study leave and of less time available for meetings and teaching than those in other specialties because of the pressure of their duties.

Consultants

The Dowie reports recognise the heavy commitments of 'hospital' consultant paediatricians in such areas as child abuse which may involve attending discussions with police, local authority social service case conferences, and acting as professional witnesses in courts with all that entails in providing reports, undertaking examinations, and travelling.^{3,4} Many are also involved in tasks such as producing reports for adoptions, counselling of parents, and involvement in recruitment of frequently changing junior staff. Where they had peripheral clinics or attend special schools or development centres consultants identified problems

with cover when there were no junior intermediate grade experienced staff to support general practitioner (GP) vocational trainee SHOs. The findings confirm the BPA view that community paediatrics need not be practised entirely in a community setting,¹ that a hospital role can be an important part of the duties of a consultant paediatrician (community child health) (CPCCH), and more of these posts are needed.

In 1991 the BPA sought data on involvement in hospital work as a measure of the degree of integrated patterns of working, from the 125 CPCCHs identified in the 1990 census: 106 responded; the majority (68%) undertook hospital sessions and 77% were able to admit children to hospital under their care. Overall, 35% of the CPCCHs took part in an acute on call rota but the proportion varied from 14% of those working in large city posts to 49% of those who worked in more typical districts.

ON CALL COMMITMENTS

Consultants spent most time on emergency recall of any of the specialties studied by Dowie and frequently stayed in the hospital until later in the evening when on call. The report discloses close consultant involvement in direct care and treatment, especially with neonatal intensive care. These observations confirm similar data from the Office of Health Economics reported by the BPA.¹

In her review of all specialties, Dowie commented on the extra responsibilities for consultants in the 1990s such as involvement in management, resource management initiatives, and medical audit.⁴ She notes these to have been added to an already existing heavy workload and recommended that medical assistance should be provided to sustain the clinical services normally provided by consultants who become clinical directors or clinical tutors. She quotes a study by the Standing Committee for Postgraduate Medical Education,⁴ which showed that paediatricians in non-teaching departments with limited or no safety net were not taking up much of their entitlement to study leave.

She discusses fatigue in doctors as they grow older⁴ and suggests that if consultants are asked to take a greater share of the on call burden so that junior doctors hours can be reduced, those in specialties with considerable emergency workloads, such as paediatrics, must be allocated an uncommitted half day after each duty night or weekend.

Dowie's report summarised trends in paediatric work over the past 15–20 years³: inpatient admissions have nearly doubled and children under 1 year form about one third of all admissions; perinatal and neonatal mortality rates have been nearly halved so that many more babies of low birth weight now survive; and the rate of children detected as having been abused has risen rapidly.

Children stayed longer in hospital where there were high levels of deprivation,³ and very high occupancy levels occur in winter, readmission rates are high and occupancy is underestimated by the traditional midnight count. Social factors also determine the rate of outpatient referrals. Dowie comments that shorter length of stay with earlier discharge might be achieved with improved general practitioner experience and training in paediatrics and that paediatric community nurses may prevent or shorten hospital stay but provides no evidence to support these contentions.

The complexity of work in teaching hospitals was recognised where teams provided specialist and general paediatric cover and also cover for the neonatal unit, frequently requiring more than one junior team on call.³ In these regional centres, tertiary specialist care often is provided from an academic department, with competing pressures on staff who are responsible for undergraduate and postgraduate teaching and research.¹

Safety net

The BPA document sets standards for junior medical staff in paediatric departments (the safety net),¹ which have recently been re-emphasised by the President of the Royal College of Physicians in a letter to the chairmen of the regional task forces dealing with implementation of the junior doctors hours agreement.

In the BPA February 1990 census, 122 out of 430 district general hospital consultants were still on a rota commitment of one in two (reduced in 1992 to 56). In nearly half of district units, no safety net was in place for all or most of the time. The on call team was made up of a consultant and GP vocational trainee, usually with less than six months' experience in paediatrics. This sort of on call team is rare in other major acute specialties and is compounded by the fact that an SHO GP vocational trainee, in paediatrics, on starting has rarely practised any postgraduate paediatric medicine. In contrast the GP vocational trainee in general medicine or surgery has had six months of preregistration experience in the specialty. In 1990 there was no paediatric registrar in 55/192 districts (29%) and in 1992 this is still the case in 25% at a time when manpower restrictions are decreasing the number of career registrar posts in paediatrics.

Inadequate numbers and lack of experience of junior doctors were confirmed in the Dowie report:

[11.14]: 'There are at least 6 reasons for grave disquiet about the current level and composition of paediatric medical manpower.

1. The rate of increase in paediatric medical staff since 1977 does not appear to have kept pace with the increase in patient activities in the various branches of the discipline.
2. 67% of paediatric WTE [whole time equivalent] doctors are in the training grades compared with 57% for all hospital specialties.
3. Nearly 70% of junior doctors in paediatrics are in the SHO grade compared to 54% for all hospital specialties (if pre-registration house officers are excluded), and more than a third of paediatric senior house officers plan to enter general practice and have not had any previous experience in the specialty, apart from a few weeks as a student.

NOTE (BPA census data shows: of the 1117 paediatric SHO posts in England and Wales identified in the census, 591 (53%) were used by GP trainees. A further 300 to 450 SHO posts in paediatrics would be needed to provide all entrants with the advised postgraduate experience in the specialty before they enter GP as a principal.

4. There are almost no doctors in the specialty below the grade of consultant who can provide acute care in departments across the years. In 1989 only 15 associate specialists in paediatrics were recorded in England in the 30th September census.
5. The specialty has become increasingly technical both in terms of the equipment now used (for the special care of babies in particular) and the treatment procedures.
6. Many consultants are now having to spend a lot of time unexpectedly on matters relating to child abuse'.

Total staff numbers

The BPA censuses in 1990 and 1992 shows consultant growth greater than in any major acute specialty largely due to numbers of CPCCH posts (see figure) with little expansion in tertiary specialties and only moderate expansion in general paediatric posts.

Growth in number of consultant paediatricians from BPA census data.

This is still insufficient to meet the workload. For example, the BPA recommends that districts with more than 3000 births per year should have six to seven consultant paediatricians.¹ In 1990 and 1992, only 14 out of the 108 districts of this size had this level of staffing. In 1992, 70 districts (35%) had no CPCCH.

Consultant expansion is occurring at a rate greater than can be met from the number of trainees. There are shortages of senior registrars to provide future consultants and in 1991 it was not possible to fill 21 of the 100 consultant posts advertised.

Despite this senior registrar posts allocated to the specialty by the Joint Planning Advisory Committee (JPAC) in 1991 have still not been set up; the shortfall, by June 1992, was of 50 senior registrar posts from the allocated 296 based on 1990 growth. To match 1992 growth, an additional 80 posts are needed with funding and training programmes. This is partly a consequence of how the JPAC works. This was set up by the profession and the Health Department to achieve a balance between consultant opportunities and trainees to prevent an excess of trained doctors unable to obtain consultant appointments. By adopting a cautious approach and restricting allocation of training posts on *observed* rather than *predicted* consultant growth, paediatrics has been disadvantaged because of its rapid growth rate. In February 1988, the BPA predicted the current rate of expansion; had this been accepted the current major shortfall of senior registrar posts would have not occurred.

Conclusions

The Dowie reports suggest:

- (i) that the number of paediatric departments in England should be reduced in number.

The BPA 1992 census has identified, in the 192 districts in England and Wales, 351 sites with SHO rotas and 219 sites where an intermediate grade rota should be in place. Some centralisation of split site working and amalgamation of smaller units is likely to be possible. Access by parents to their sick children and geographical considerations will limit such possibilities and transfer of the workload will mean that more staff will be needed in the centralised facilities.

- (ii) that a quota of new consultant posts in general paediatrics could be agreed by the Government based on service need and that priority could be given to hospital departments that provide a full range of Paediatric services but which have no intermediate tier of junior medical staff.

A strong case is made for greater use of the staff grade. That doctors in the community health services could be given further training in fields such as child abuse and community paediatric nursing services could be formally evaluated. A case is also made for examining data to determine the provision of paediatric medical staffing in areas of greater social deprivation, morbidity etc.

There is little reference in Dowie's reports to involvement of clinical and senior clinical medical officers in child health in the acute on call rotas with patterns of working for all paediatric staff arranged in such a way so that the needs of the community child health service as well as the hospital service can be met. In the 1990 BPA census of medical manpower there were as many doctors working in the community child health service in England and Wales as there were hospital paediatric staff above SHO level.^{2,5} Even if additional consultant posts were allocated as suggested there is a major shortage of trainees to fill any posts created.

- (iii) that there be a separate funding scheme for SHO posts designated for general practice vocational training scheme from central resources

It is clear there will be a major crisis of delivery of acute paediatric care until the targets referred to in *Paediatric Medical Staffing for the Nineties*¹ are achieved especially if extra work is forced upon consultants. New consultant posts are being created without adequate supporting junior staff. However difficult it may seem to meet the safety net standards set,¹ those who have a responsibility to implement them should note that they are no higher than those existing in most other major acute specialties. There are already suggestions that recruitment into the specialty of acute general paediatrics is suffering because the work is perceived as unattractive.

An illogical restriction on SHO numbers at a time of reduction of junior doctors' hours is particularly troublesome for paediatrics. There should be no change in consultant practice which would result in their undertaking work more appropriately carried out by juniors, until an adequate number of consultants has been trained. It would be unjust to those already in post and should be made explicit and not imposed under the moral pressure of a doctor's commitment to patients.

The care of children should be in the hands of doctors who are not grossly overworked, can benefit from career development and continuing medical education, are not tired or 'burnt out', and who can enrich their practice with children by being able to enjoy their own family life.

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- 1 British Paediatric Association. *Paediatric medical staffing for the nineties*. London: BPA, 1991.
- 2 British Paediatric Association. *Report of the 1990 British Paediatric Association manpower census*. London: BPA, 1991.
- 3 Dowie R. *Patterns of hospital medical staffing—paediatrics*. British Postgraduate Medical Federation. London: HMSO, 1991.
- 4 Dowie R. *Patterns of hospital medical staffing—overview*. British Postgraduate Medical Federation. London: HMSO, 1992.
- 5 MacFaul R. Paediatrics in the nineties: a time for change. *Br J Hosp Med* 1992;47:799–801.

⁵Consultants 848; senior registrars 190; registrars 339; senior clinical medical officers 530 (WTE); clinical medical officers 857 (WTE).