For Debate

Educational improvement of the preregistration period of general clinical training

Peter Richards on behalf of the Council of Deans of United Kingdom Medical Schools and Faculties

This paper proposes that the preregistration period of general clinical training should be extended to two years, with the main aim of improving practical supervision and education. The proposal has three essential features. Each educationally approved post would be shared between a first and a second year house officer, with the second year house officer providing immediate supervision to the first year house officer. At the same time structured educational programmes would be introduced for both first and second years to enable them to benefit fully, from their experience. Preregistration job sharing would also enable hours of duty throughout the two year scheme to be reduced to well below the national target figure of 72 hours.

Background

A one year period of compulsory general clinical training through supervised experience in hospital was introduced in 1953; medical practice had become too complex for medical graduates to enter independent practice straight from medical school. The General Medical Council then granted (and still does) provisional registration after graduation and full registration one year later, after the graduate had completed 12 months as a preregistration house officer in approved posts.

House officer posts which were satisfactory 40 years ago are no longer acceptable for a variety of reasons, including long hours of far more demanding work than before (last year an estimated one in four junior doctors were working over 83 hours per week[1]); inadequate support resulting in much time spent on inappropriate duties and on tasks such as audit; a far greater and faster throughput of patients; and higher expectations by patients of their doctors and by doctors and their families of their personal lives. Public concern mirrors professional dissatisfaction. For example, after a preregistration house officer and a senior house officer were convicted of manslaughter following a therapeutic tragedy the legal correspondent of the *BMJ* wrote in November, 1991: "Bringing the full weight of the criminal law to bear on two fledgling doctors will do little to remedy a system which lets juniors loose on patients with too little training, two little support, and too little sleep."[2]

Educationally, the preregistration period is also unsatisfactory and has recently been described as "dominated by service work to the virtual exclusion of education" with the result that "the large amount of practical experience gained in the preregistration year with little teaching or direct supervision may result in confidence without competence."[3] It is likely to be even less adequate if, as expected, the balance of basic medical education shifts from training to education, becoming less comprehensive and factual and more intellectually stimulating. Much is and can only be learnt by experience. But experience needs to be supplemented by an appropriately designed programme of education and assessment, commonplace at this stage of medical education in the United States but rare in the United Kingdom, and for which house officers currently would have little time and less energy. Yet this is the final stage of their basic medical education, and they should be building on their theoretical knowledge and supplementing their practical apprenticeship. Discussion about the wider aspects of medical practice, communication, and career opportunities have little meaning until doctors assume clinical responsibility. Attitudes and work patterns acquired (or not acquired) will have long lasting consequences in future years of medical practice.

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The proposal

The crucial differences between this proposal for a two year period of carefully supervised experience after qualification and all previous suggestions are, firstly, the principle of job sharing to ensure readily available practical supervision and, secondly, the introduction of first and second year educational programmes designed to consolidate relevant knowledge and to ease the transition into professional practice. Because equal sharing of routine duties might halve experience, the scheme allows twice the time. Programmed job sharing will make it possible to reduce immediately the excessively long hours house officers work in their first two years to well below the figure of 72 hours set by the Minister for Health as a national maximum to be achieved by 1996.[4]

On qualification the new doctor will be appointed as one of a pair of first and second year house officers to a post in which each will have appropriate individual professional responsibility for a share of the patients. These two doctors will divide between them the rostered duties currently undertaken by a single house officer. Both will as far as possible attend the regular ward rounds and pathology, radiology, and audit conferences of the firm and the grand rounds of the hospital. Each will cover the other for attendance at separate first and second year educational programmes. They will alternate on night and weekend duties, under the supervision of the registrar and consultant, who at those times are relatively unencumbered with duties in outpatients and elsewhere.

The essential educational complement to the proposal must be that each medical school, in partnership with the postgraduate dean, will set up first and second year educational programmes (for which ingenious timetabling will be necessary), not confined to the specialties themselves but extending to many aspects of the task of being a doctor. Indeed the educational programme might best be common to all the specialties; junior doctors should play a major part in its design. The design of these programmes will require careful thought, but a continuing systematic strand of professional training and academic education should span the house officer years.

The General Medical Council is likely to continue to require broad general experience in medicine and surgery for at least half the total training period to consolidate skills in diagnosis, decision making, and treatment. The remainder will be available either for more of the same (to make the two years equivalent to

the current two six months periods of medicine and surgery); for medical and surgical subspecialties; for psychiatry; for disciplines which currently do not have preregistration posts but could well do so, such as obstetrics; or for general practice.[5] Preregistration experience in general practice would be a much more practical proposition if the second year house officer was allowed to prescribe outside hospital (something preregistration house officers are not now permitted to do).

Problems and solutions

Duration of basic education and general clinical training

Most students would not welcome a further year in addition to the normal undergraduate course of 4 years 9 months followed by one preregistration year. On the other hand, students learn more quickly and effectively given responsibility, for example when they deputise for a house officer by undertaking a student assistantship. Could they not in fact safely qualify earlier provided they had the close and immediately available supervision of a second year house officer? At one British university students already qualify after a clinical course of 2 years and 3 months and at another after 2 years and 6 months without any evidence that they become inferior house officers. Students would not be averse to qualifying earlier. Staff might also be persuaded, provided they could be assured that the biological and behavioural scientific base of medical education would not be eroded. Some would also want to be certain that the formative elective period, usually spent abroad, would not be sacrificed.

A general move towards more "vertical" integration of basic medical science with clinical science and practice and towards a core course with various options might well diffuse arguments about shortening the course by blurring the interfaces between preclinical and clinical periods. But if the course is shortened closer supervision of initial house officer posts is essential. This is where the suggested job sharing comes into its own as the first (but not only) line of advice: the registrar and consultant would continue to be in support subject to commitments in outpatient clinics, theatres, and outside the hospital.

Reduced earnings of house officers in their first two years

Enabling hours to be substantially reduced through job sharing would abolish long hours and the additional payments associated with them. As things stand therefore, two years instead of one as a junior house officer would diminish career earnings. If, however, students qualified sooner and began earning six months earlier their earnings over the first two years of the new scheme might be (and could be constructed to be) no less than in the first 18 months now. Also there would be six months less in which to accumulate debts as a final year student. One small additional financial benefit of earlier qualification would be an extra six months of pensionable service. Overall the proposed scheme should be financially neutral for the doctors: the benefits would be a better education under less harrowing and exhausting circumstances, improved quality of life through working more reasonable hours, and achievement of the status and responsibility of a doctor sooner.

Increased demands on clinical teachers

While much of the educational programme for the house officer years would be a rigorous improvement of existing in service activities, it would make increased demands on senior medical staff and on non-medical staff in hospital and community, such as nurses, paramedical staff—and managers, for this would be an appropriate time to introduce training in clinical management. To some extent new demands would be offset by a smaller number of clinical medical students and be compensated for by a more receptive audience. None the less, it is difficult to see how staff, faced by the pressure of increased patient turnover and increasing demands for participation in management, will have time to take on the extra task. Additional contractual time will be needed, a need which has already become apparent for postgraduate medical education generally and could be consolidated with it.

Location of initial house officer posts

Some smaller hospitals that currently have preregistration house officers will not have enough staff to mount an effective educational programme. If geographically feasible they might construct a joint programme with a neighbouring hospital. Alternatively, they could exchange the challenge of training recently qualified doctors for the more comfortable proposition of using senior house officers in the front line of service. If the initial house officer scheme fulfils its promise senior house officers will be even better than they are now.

Cost to the NHS of reform and of failing to reform

Substantial savings will accrue from abolishing extra duty payments. Medicolegal costs might also be greatly reduced if junior doctors were better supervised and less exhausted. The money spent will procure better value, but clearly employing more doctors by starting them sooner will incur additional costs. Accommodation needs will rise (offset to some extent by fewer medical students and possibly by a decrease in the number of senior house officers in hospitals employing more doctors in their first two years), but for most hospitals this will be only a marginal cost against a large accommodation pool.

One economy for which the house officer scheme must not be used as a pretext is saving on improving the quality of management and staffing of an infrastructure sufficient to spare junior doctors secretarial, portering, and other duties which are no part of their proper responsibilities.

A greatly improved educational programme for house officers will require more than commitment and effort from NHS and academic staff: it will also need protected time, enshrined in contracts. Attempts are already being made to determine whether the excess service costs of education and training in the preregistration year should be funded from the service increment for teaching and research (SIFTR) or from the new budgets for postgraduate medical education.

While there will certainly be increased employment and educational costs, the cost now and in the future to the NHS and to health care in Britain of failing to provide reasonable working conditions and excellent education and training will be higher still. Unfortunately, those costs will fall on a wide variety of budgets and on patients' lives, undetected in the financial balance sheet of the preregistration period.

Cost to universities

For the universities there will be costs in time spent constructing and helping to mount the house officer programme, but the universities will also save from a shorter undergraduate course. The costs of the new arrangements will almost certainly outweigh the savings on the old but it is unrealistic to expect the Universities

Funding Council to meet them. On the contrary, the danger is that if undergraduate medical education is reduced by six months the Universities Funding Council will be tempted to reduce the funding of medical schools. Such a reduction would stop dead in its tracks the proposed reform. The educational content of the preregistration year is the formal but unfunded responsibility of the medical schools, and preservation of the current level of funding for the medical course as a whole is logical and justifiable. A mechanism needs to be found to achieve this, either by allocating a double unit of resource to the last six months of the undergraduate course or by conferring the MB on qualification and the BS after two years as a part time preregistration student of the university. The University of Cambridge has traditionally awarded the MB on graduation and the BChir one year later but without continuing registration as a student.

Educational standard on graduation

Shortening the undergraduate course is not a necessary part of the proposed house officer scheme but it would be attractive. The qualifying examinations would, however, have to be reviewed. The final professional outcome of the whole process of general medical education and training is not in question. Indeed, there is good reason to believe that after a two year house officer programme doctors will be better than before; only the content of the degree itself needs reconsideration. A review will in any case be necessary if the General Medical Council's core plus options course is introduced.

Public concern

Public concern about safe practice by recently qualified doctors is more a matter of concern about supervision, hours of work, and the effects of exhaustion than about the adequacy of medical education itself. Shortening the undergraduate course might fuel this disquiet. The solution is to emphasise the improved supervision, the better educational programme, and the shorter working hours. In practice, students and doctors learn so fast by experience that the effects of relative inexperience will be shortlived and safely compensated for by careful supervision.

Medical manpower

The proposed scheme will have an insignificant effect on medical manpower. In the second six months of the introduction of the scheme it would be necessary to persuade those of the last cohort of the old style preregistration house officers who are occupying an educationally approved post in the new scheme to stay on for an extra six months. New entrants to the senior house officer pool would be delayed once and for all for six months, but the senior house officer pool should be large enough to sustain this.

General Medical Council

The General Medical Council has long been seeking improvement in general medical education and clinical training, with a seamless transition from undergraduate basic medical education to general clinical training as a preregistration house officer. This scheme could achieve its objective. Legislation would not be necessary to increase the statutory preregistration period to two years, but new regulations requiring the approval of the Privy Council after consultation between the education committee of the General Medical Council and the universities would be needed.

The way forward

The Council of Deans of United Kingdom Medical Schools and Faculties is taking the initiative to stimulate debate partly because the deans are statutorily responsible for stating that their graduates have satisfactorily completed the preregistration year, and by implication for endorsing its educational effectiveness, and partly out of concern for their graduates, many of whom are currently disillusioned by their experience.[6]

Clearly others also wish to improve the preregistration period. Regional postgraduate deans are responsible for auditing preregistration posts. The Department of Health has to ensure that there are enough preregistration posts in the country for all United Kingdom medical graduates. The NHS Management Executive, through regional health authorities, would be involved in finding the necessary resources for reform. The BMA negotiates the terms and conditions of service of doctors. Finally, the General Medical Council is responsible for standards of medical practice and for setting the conditions on which full registration is granted. The time has come for debate to lead to decision and decision to reform.

Ultimately, only the secretary of state for health can ensure that the additional NHS resources needed are provided and only the secretary of state for education and science can ensure that university funding for medicine is not diminished. This, even in an election year, is not a party political matter, and we look forward to support for reform of the preregistration period in whatever form may finally be agreed from secretaries of state of any colour.

1 Ford J, Simpson P. Juniors' hours of work survey: additional findings. *BMJ* 1991;**302**:118.
2 Dyer C. Manslaughter convictions for making mistakes. *BMJ* 1991;**303**:1218.
3 Dowling S, Barrett S. *Doctors in the making: the experience of the pre-registration year*. Bristol: SAUS, University of Bristol. 1991.
4 Delamoth A. Juniors' new deal on hours. *BMJ* 1991;**302**:1482.
5 Harris CM, Dudley HAF, Jarman B, Kidner PH. Preregistration rotation including general practice at St. Mary's Hospital Medical School. *BMJ* 1985;**29**:1811-3.
6 Spindler S. *Doctors to be*. London: BBC publications (in press).

ANY QUESTIONS

Is it all right for young women to swim while menstruating? What is the position if they choose not to use tampons?

The underlying question is presumably whether women are more prone to infection from contaminated water entering the vagina during menstruation. Under normal circumstances the vaginal walls are in apposition and only a little water would enter by capillary attraction. Appreciable amounts of water can enter the vagina only under force, such as when a woman falls awkwardly while water skiing. Salpingitis after such an event has been described.[1] It is therefore wise for women to wear a wetsuit while water skiing whether they are menstruating or not. If tampons are not worn the question of swimming during a period is one of aesthetics and not health risk.—IAN DUNCAN, *reader in obstetrics and gynaecology, Dundee*

1 Kizer KW. Medical hazards of the water ski-ing douche. *Ann Emerg Med* 1980;9:268-9.