TALKING POINT

Depth as well as breadth for postgraduate education

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There was a request recently to categorise aspects of postgraduate medical education as either "academic" or "vocational." This raises a question about the meaning of words and about the logic behind such a distinction. In common parlance "academic" means impracticable and irrelevant to the real business of living. A "vocation" was once a calling to the higher rungs of a profession but now "vocational" describes the more humdrum aspects of practical instruction in the branch of medicine in which a student hopes to earn his living. "Postgraduate" is indiscriminately applied to students with widely disparate intentions and at many stages of their career, to deans and to tutors, to medical centres, and to hospitals and institutes, as well as to courses of instruction. Now, however, as the demand grows for standardised programmes of postgraduate training and the competition for scarce resources sharpens, we should be more precise about our meaning and our objectives.

In all education there is a trend towards a breadth of study that ensures coverage of the whole discipline and a less-acknowledged requirement for depth of study. It would be tempting to apply the words "vocational" and "academic" to these two aspects but more profitable to look critically at our present provision for both.

Diverse origins

Historically, initiatives in postgraduate medical education have sprung from many sources and diverse activities have been concealed under a common denomination. Some priority must be given to the Royal College of Surgeons of England, which conducted its first fellowship examination in 1844. This was well before the Medical Act that set up the GMC and at a time when a London University degree did not carry a licence to practise surgery. The examination was the first of a series of diplomas set up by the colleges to regulate the advanced education of the profession by examination and prescription of required experience. The term postgraduate was not used until university degrees came to supplant the Conjoint and other college qualifications. The students were expected to gain their knowledge by "apprenticeship" appointments in hospitals and by private study. This tradition has been carried forward into the accreditation programmes of higher specialist training committees with their determination that the intending consultant should have opportunities for study in all branches of his specialty.

The provision of courses of instruction for postgraduates had an entirely different origin, with the London specialist hospitals leading the way. After many years of informal teaching a London Postgraduate Association was set up in 1898 by the Brompton, the National (Queen Square), and Moorfields Hospitals and the Hospital for Sick Children, Great Ormond

Street, with the co-operation of most of the undergraduate teaching hospitals. This was the first attempt to formalise the education in depth that could be provided in specialist units. The association ultimately failed but the principle was established and has passed the test of time.

The idea that general medicine and surgery would also be the subject of separate postgraduate instruction was first floated by the West London Hospital in 1893. But it was the initiation of the British Postgraduate Hospital and Medical School (now Royal Postgraduate Medical School) at Hammsmith that established the principle of in-depth teaching of advanced medicine in 1935. The teaching in courses and in hospital appointments was by a scientifically oriented group of medical academics actively engaged in research. The principle has been increasingly accepted by the undergraduate and general medical schools.

The postwar surge in postgraduate education for returning officers produced the "supernumerary registrars" and the concept of all junior hospital appointments as training posts. This led ultimately to the chaos of today's disequilibrium between trainee numbers and career posts. Nevertheless, the wide dissemination of educational facilities for junior doctors has been enormously valuable to the profession. In 1948, the Ministry of Health asked the universities to oversee this activity though, in contrast to the arrangements for medical schools, the regional boards were to provide the funds. At first, the development of the administrative structure was slow, with the appointment of regional postgraduate deans and ultimately of clinical tutors and general practice advisers. But it gained momentum with the establishment of postgraduate medical centres in most of the larger district hospitals, often financed by local enterprise. Only this system can provide the personal supervision and the appropriate local teaching for the doctor in the first years of his postgraduate career.

Not surprisingly the college-oriented system of higher diplomas and accreditation, the UGC-supported general teaching hospitals and specialist institutes, and the regional/university apparatus funded by the DHSS mesh together poorly. The fourth element, mandatory vocational training for GPs regulated by statute but administered regionally, is unlikely to simplify the problem, despite the co-ordinating effort of the Council for Postgraduate Medical Education.

Two educational principles

In the endeavour to bring some logic into the disorderly ferment of postgraduate activity, the more educationally minded medical academics have tried to establish two general principles. The first is attractive in theory but unhelpful in practice. It is the doctrine of "the indivisibility of study," which proclaims that medical education is a continuum stretching, if not from the cradle to the grave, at least from school to retirement, through the progressive stages of undergraduate, postgraduate, and continuing education. This doctrine finds its most effective preachers in the undergraduate schools. But the concept of a life of study evolving with increasing maturity is philosophically satisfying to all of us. It ignores, however, the widely differing

requirements of the student at various stages in his progress, his changing attitudes and objectives, and his increasing concern with the practice of his profession and with the income which it produces. He must inevitably change the environment of his work from time to time; he can scarcely find opportunities for both breadth and depth of study in one place; and administrative changes aimed primarily at securing the appearance of continuity will not contribute to the excellence of education.

The second doctrine, the "inculcation of flexibility," is essential in any policy statement and can be given as many interpretations as there are authors. It demands that students are taught to think rather than to know the answers, to be capable of a logical approach to new events rather than simply to allow their acquired reflexes to guide their actions, to be educated rather than trained. There can be no dispute about the advantages of flexibility, though some diehards will defend the advantages of having a doctor who knows what to do in common and predictable conditions. The doctrine is, however, in danger of exaggerating the degree to which education in its later stages can change our predilection for original thought on the one hand or for the safer and simpler reliance on transmitted knowledge on the other. Some of us are born investigators whose inquisitive enthusiasm can be suppressed only by the most rigorous pedagogy. Others will give of their best by applying the maxims of their masters. We need to ensure that postgraduate medical education caters both for the curious and for the competent, and for that unstable amalgam that constitutes the majority. Instruction must be broad enough to ensure that the student covers the specialty in which he will work but must also offer the opportunity for study in depth, without which there will be no advance.

Breadth of study

A curriculum defines the breadth of the subject to be studied but cannot indicate where to sink mineshafts to the unknown. The clinical undergraduate course is inevitably concerned more with breadth than with depth, however much the universities would like to keep it "academic," and must in general accord with GMC's requirements. The earlier objective was to produce at qualification a doctor who could face any of the known problems of his patients with as much confidence as the relative ignorance of pathology would then allow. Nowadays it is recognised that postgraduate study will be essential to make any doctor safe but the broad basis remains essential as a background and to allow the student to choose his path. An obeisance may be made to flexibility and to study in depth in the tripos part II or the intercalated BSc, but the demands of the curriculum must still be observed.

The postgraduate phase begins after graduation and the preregistration year. The concept of general professional training seems to have disappeared and all students are now potential specialists, even when aiming at general practice. Their study narrows, the ground must be gone over much more carefully; but it is still mapped out by an examination or a curriculum, and it must still be fully covered. The programmes of college diplomas and higher specialist training have been successful in ensuring that the consultants appointed now are generally well equipped for their jobs, and in this respect the NHS stands well in the international league table. There may still be minor problems at the interface between the college side and the university as represented by the regional postgraduate deans—for instance, in the supervision of the individual and in the timing of examinations—but there will be little dissatisfaction with the breadth of experience obtained or with the standards set.

A serious criticism of our present system is its lack of flexibility and its failure to stimulate research. Both the treadmill of rotating appointments designed to ensure complete coverage of the specialty and the rising rewards of clinical appointments

mitigate against anything but steady progress towards a comfortable consultant appointment, if possible well away from academic responsibilities. Opportunities for the student to move more readily from one discipline to another could be easily provided by an administrative adjustment, but the disincentives to study in depth can have only deleterious long-term consequences for British medicine. In this respect we are already lagging behind North America and some European countries.

Depth of study

Every student should have the opportunity to discover whether he has the intellectual curiosity and the singlemindedness to face the exciting but demanding regimen of research. This can best be achieved by a period of study in depth of a problem of his own choosing. Most will soon discover that their talents lie elsewhere; many will write a short paper, which should at least give them a proper appreciation of the rarity of new ideas; but a few will be fired with enthusiasm and will make their contribution to the advance of medicine. Study in depth requires the guidance of an experienced investigator, a milieu of research, and the availability of the "material" and the hardware for its investigation. These can hardly be supplied in a context of postgraduate education dispersed among the multitude of district hospitals, and by our insistence on breadth of training we are in danger of neglecting the stimulus that research provides.

All postgraduates are now effectively potential specialists and every medical specialty needs centres of research. The professorial units of the general teaching hospitals can provide this element of postgraduate work in some disciplines, the institutes of the British Postgraduate Medical Federation in others, the regional and supraregional centres (for example, for cardiac surgery, plastic surgery, cancer, paraplegia) and the Medical Research Council clinical units in a few. None would have the clinical material or the specialist skills to provide all that is necessary in all branches. These centres of advanced medicine should be seen as partners in providing the in-depth element of specialist training. Their diversity should be welcomed and any attempt to curtail or rationalise them should be strongly resisted. There are already too few for the task.

Academic and vocational

My argument so far might suggest that the words "academic" and "vocational" would be best omitted altogether from the delineation of postgraduate education. Unfortunately, they have menacing financial implications that cannot be ignored. In 1973 the DHSS and the University Grants Committee reached an agreement by which the funding of postgraduate medicine was divided between the two bodies.¹ The UGC assumed responsibility for university participation in PhD and MSc courses (the "academic" element) though few medical graduates are concerned with them. Other courses organised by the university at the request or with the approval of the regional postgraduate committee or hospital authority (the "vocational" element) were to be regarded as self-financing—that is, fees paid on behalf of UK students by hospital authorities had to be sufficient to cover the marginal costs. Refresher courses for GPs were to be financed directly by the DHSS under Section 63.

This concordat leaves out of account the provision of in-depth studies by medical graduates, which as we have seen must complement the broad-based training programmes and without which advanced medicine must falter. We must press our paymasters to look again at this problem. The postgraduate work of the academic units of teaching hospitals is protected to some extent by the funding of their undergraduate work but units in purely postgraduate and specialist schools are exposed:

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professional training and would have to be taken into account by the manpower advisory panels. The conferment of title of honorary senior registrar should fall within manpower guidelines.

The research fellow working in a university department or with an NHS consultant for whom the title of honorary registrar would be appropriate presented a more difficult problem. There were already too many registrars in general surgery, medicine, and obstetrics and gynaecology. It was at that stage, however, that one to two years research training was best undertaken. The numbers would have to be limited and kept under scrutiny if they were to be given contracts as honorary registrars. If they were not given honorary registrar contracts, the numbers would not be known, but they would be competing for senior registrar posts.

Dr Nabarro had made the following suggestions:

Clinical professors and those employing research fellows should have a clear understanding of the implications of those appointments in terms of career prospects.

University lecturers should only be given honorary contracts as senior registrars if their posts had been approved by the appropriate higher training committee and fell within manpower guidelines for senior registrars.

Research fellows should only be able to receive contracts as honorary registrars within a quota that would be fixed for each region. It would vary between specialties and would have to be decided on the advice of the manpower advisory panel.

Temporary overseas visitors should be excluded from these provisions.

The JCC approved the chairman's paper with minor modifications.

Private practice

In December the Central Committee for Hospital Medical Services had approved the principles set out by the Secretary of State for private practice in NHS hospitals (15 December 1979, p 1603). The JCC has now also endorsed the principles (see below) and commended them to the profession.

(i) The provision of accommodation and service for private patients should not significantly prejudice non-paying patients.

(ii) Subject to clinical considerations, earlier private consultation should not lead to earlier

Unauthorised junior posts

HJSC wants to use BMJs "black box"

In October the Hospital Junior Staff Committee had resolved "That hospital junior staff posts established without the prior approval of the Central Manpower Committee be placed in the Important Notice of the *British Medical Journal*."

At its meeting on 15 January the chairman, Mr J N Johnson, explained that attention would have to be drawn to employing authorities not to individual posts if the recommendation was adopted. Dr M Rees reported that the Trent Regional Medical Advisory Committee had decided that posts would be established but financial restraints would limit the appointments. In the West Midlands, Dr P O'Connor told the committee, 40 consultants and 20 registrars were to be appointed; these had not been approved by

the CMC so the problem was spreading.

Sympathising with Trent, Dr Brian Lewis said that it was the excess posts in London which were not being given up which should go into the black box. Trent had been waiting long enough but the chairman of the Joint Consultants Committee, who was aware of the problem, wanted to try to stop the region going outside the rules and to persuade the London teaching hospitals to adopt a more rational attitude.

The CMC's job was consultative and advisory, Dr T McFarlane said, and it was hampered because the donor regions had refused to identify the posts which were available to be given up. The committee decided that the Council should be asked to reconsider the recommendation.

NHS admission or to earlier access to NHS diagnostic procedures.

(iii) Common waiting lists should be used for urgent and seriously ill patients as at present and for highly specialised diagnosis and treatment. The same criteria should be used for categorising paying and non-paying patients.

(iv) After admission, access by all patients to diagnostic and treatment facilities should be governed by clinical considerations. This principle does not exclude earlier access by private patients to facilities especially arranged for them if these are provided without prejudice to NHS patients and without extra expense to the NHS.

(v) Standards of clinical care and service provided by the hospital should be the same for all patients. This principle does not affect the provision on separate payment of extra amenities or the practice of the day-to-day care of private patients usually being undertaken by the consultant engaged by them.

(vi) Single rooms should not be held vacant for potential private use longer than the usual time between NHS patient admissions.

Multi-regional services

The chairman recalled that at the interim JCC meeting in November he had raised the

subject of multi-regional services and had expressed the JCC's anxiety over recent cuts which were affecting the future of some units providing these services. The JCC and the DHSS had agreed at that meeting to recognise the costs of certain clinical services of national medical importance in the resource allocation process; the definitions of what constituted multi-regional services for that purpose; the administrative mechanisms to identify which established multi-regional services and the units providing those services should be protected; that established services should receive protection only when the units providing the service were of the agreed number or less; that the object should be to implement those new funding arrangements for established services on a pilot basis in 1980-1 (four services involving 16 units had been identified—namely, paediatric haemodialysis, care of spinal injuries, services for the management of choriocarcinoma, and the National Poisons Unit); and to have further discussions about the identification and review of units developing clinical services.

The JCC agreed to incorporate these conclusions into the Planning and Priorities Working Party.

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they have survived so far but, if the terms of the concordat are rigorously imposed at a time when overall resources are diminished, they will be seriously threatened. Professorial units teaching advanced medicine and undertaking research are at least as academic as those teaching undergraduates and as such they should properly be a UGC responsibility. If they are not, why did the university set them up in the first place? Most of them are able to recruit a substantial proportion of their funds from soft money but if the basic grant is cut off they may well be forced to close, with the loss to the Health Service and university of an asset that has taken many years to build.

Our system of postgraduate medical education has grown up in a haphazard fashion and there is much room for improvement.

But with all the confusion of nomenclature its constituent parts are complementary rather than competitive. The doctors as well as the administrators should understand this and both should resist the financial squeeze which threatens a vital part of the structure.

Reference

- ¹ Department of Health and Social Security, *Financial Responsibilities for Postgraduate Medical and Dental Education*, HM (73)2. London: HMSO, 1973.

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