Postgraduate Medical Education around the World

Internal medicine in Spain

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Problems in medical manpower planning were a major feature of the Spanish health service until recently. In this review recent changes in the medical undergraduate system will be discussed followed by an outline of the career structure for graduates wishing to practise internal medicine.

In Spain, school pupils wishing to study medicine may apply directly to the medical school of their choice. This medical school training system largely dates back to the Napoleonic era and was complicated by the problems of managing high intakes of medical students. In an attempt to combat this, a selective entrance examination for medical schools was introduced in 1973. However, there was a long run-in period well into the 1980s before this examination became strict enough to achieve a reasonable target number of medical graduates for available posts in the health service.

Since the mid-1980s, a stricter, nationally organized, selective entrance examination for medical school has been introduced. This resulted in a gradual reduction in the numbers entering medical school, and the annual number of medical graduates decreased from 11,000 per year to 4,000 per year in the late 1980s.

The current format of the undergraduate medical course is predominantly lecture-based teaching during the first 2 years, followed by increased clinical teaching on the wards and in the outpatient clinics during the last 4 years of a 6 year course.

Students graduate from medical school by passing a final degree examination equivalent to M.B., Ch.B. (Título del Licenciado en Medicina y Cirugía), which includes written papers and examination of clinical skills. This examination is organized separately by each medical school, without supervision by examiners from external institutions.

The undergraduate degree allows successful students to become general practitioners. How-

ever, to enter higher specialist training, candidates must pass a nationally organized, written examination in medicine, surgery, obstetrics and gynaecology, child health and basic medical sciences called MIR. The grade achieved in this examination determines whether a candidate can enter the hospital specialty of his or her choice. Increasingly, medical graduates wishing to enter general practice are also sitting this examination, after completing a 3 year training programme.

Higher specialist training begins with a common trunk which includes practical experience in all specialties before undertaking specific training in a major specialty. For internal medicine this common trunk consists of an initial 2 year period of six monthly rotations in different medical specialties within internal medicine. This is followed by more specific training in the specialty of the candidate's choice, on the wards and, if appropriate, in relevant laboratories.

A major problem of the basic training period is that there is no formal system for providing grants for doctors in training to carry out research projects. These are therefore not undertaken by many young physicians. Furthermore those young physicians who do research tend to elect to perform short-term projects to achieve the higher degree of M.D., rather than the more detailed and prolonged research training required for a Ph.D., in view of the lack of external funding.

A further interesting aspect of the Spanish system is that there is a locally organized exit examination for internal medicine for specialists wishing to obtain a consultant post. This examination is taken at the end of the initial 5 year period in an approved training post. At present these examinations are organized locally, although senior specialist appointments are based on national allocation to regional health authorities (autonomous communities).

However, for physicians in established posts at senior registrar or senior lecturer/consultant level, there is some state and institutional funding for continuing medical education. The major state research funding institution is INSALUD. The major charitable foundations include: (a) *Fundación Juan March* (Juan March Foundation); (b)

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Accepted: 23 November 1992

This work was supported by a grant from the Fondo de Investigaciones Sanitarias (INSALUD) No. 91/5537.

Consejo Superior de Investigaciones Científicas (Higher Council for Scientific Research); and (c) *Ministerio de Educacion y Ciencia* (Ministry for Education and Science). The grants are in general for a maximum of one year and are for support of training in laboratories at other institutions in Spain or abroad. It is very rare for research funding to be extended beyond this period.

It will take a considerable time for the rationalization in the undergraduate training programme and for changes in postgraduate medical education to achieve a balance in the provision of manpower for specialty training and, in particular, specialists in internal medicine. A major advance in the current system would be provision of greater research funding for physicians in training. An important and unresolved question is the possible impact on the health system in Spain of the Single Market in Europe which came into force in January 1993.⁴ The provision in the Single European Act for free movement of trained professionals and recognition of diplomas obtained by other European

Community nationals may cause some difficulties in long-term planning of medical speciality manpower, in view of the overall surplus of trained internal medicine specialists and other doctors in the European Community.

There is some concern about the standards of locally organized exit examinations for internal medicine for specialists. One further possible impact of the European Community may be improvement and standardization of this examination under the supervision of the recently proposed European Board of Internal Medicine. Currently it takes from 2–8 years after completing speciality training for internal medicine before most candidates in Spain obtain consultant posts. It is not clear what effects the above changes may have on this delay in obtaining a senior post.

Acknowledgements

I thank Ms Vivienne Weller for preparing the manuscript, and Dr D. Singer and Mrs Jean Coops for their help.

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