

MEDICAL EDUCATION

Postgraduate training in Europe for the next decade

Organising Committee for the Workshop on Postgraduate Paediatric Training in Europe—Padua 1989

The 1990s will be a time of great change in Europe. Already there are considerable political, economic, and social alterations occurring, not only within the countries of the European Community but throughout western Europe and in those beyond. There is no doubt that the continent will grow closer together in the next decade and there will be greatly increased mobility in all professions, especially medicine. Opportunities for exchange between academic institutions will become increasingly common, and indeed will be expected not only during undergraduate education but also during the period of specialist training after graduation. Already within the European Community the Erasmus project facilitates such exchanges at all levels within the universities of member countries; it is, however, important that such initiatives are available to all nations of the continent if possible.

As Europe grows closer together the needs and aspirations of child health care should become more unified if the best of preventive and curative medicine is to be made available to all. The children of Europe represent 'a nation within a continent' and increasingly there is emerging the concept of the 'Eurochild'. All children deserve the best care and treatment that the most developed medical services can provide, spread as evenly as possible throughout all countries. A recent conference sponsored by the department of paediatrics in the University of Padua discussed these issues in detail.

This meeting was attended by paediatricians interested in postgraduate training and teaching from 17 countries of western Europe, and also by colleagues from the Children's Hospital of Philadelphia in the United States. Before the meeting each country's delegates completed a questionnaire outlining the total number of paediatricians nationally, and the number of those entering training each year; specific details of the training programmes were also requested. The delivery of health care was reviewed, including the provision of all types of paediatric services especially paediatric surgery, adolescent medicine, psychiatry, and genetic counselling.

The results of this survey indicated that there are 80 million children under the age of 16 in western Europe. Their needs are therefore substantial, and provision should be made for these in future planning for health education and health care. As part of the fulfilment of these it is vital that paediatricians, general practitioners, and community physicians are trained to common accepted standards throughout Europe as far as possible. To plan this training effec-

tively it is important that there is a clear understanding of the present and future health care needs of this part of the population. Continuing epidemiological studies are therefore vital. Particular areas requiring study include accidents, the psychosocial consequences of rapid urbanisation, and the increasing survival of children with serious congenital abnormalities and complex diseases such as malignancy and cystic fibrosis.

Other central issues in these discussions are who should be defined as a 'paediatrician' and who should deliver primary health care. The age group to which this type of health care is given is also important and this has been set out by the European Society for Specialists in Paediatrics as 'the care of the child throughout the period of growth and development'. Primary health care is delivered by a number of professionals, but particularly by paediatricians and general practitioners. In several European countries there are many primary care paediatricians and in others there are none, so the ratio of 'paediatricians per child' in each country will obviously be influenced by local practice. In some countries—for example, France—a large proportion of primary health care is also provided by private paediatricians, who must nevertheless have appropriate training and specialty recognition before being able to practice independently.

Communication between different health care providers for children is also an important element. In all countries surveyed it was agreed that communications could be improved. Almost all delegates reported their findings to colleagues concerned in the care of the child by letter and telephone, and commonly by a shared care baby book as well. In only two countries, The Netherlands and Finland, is information sent directly to general practitioners by computer systems.

The requirements for entering postgraduate training in paediatrics vary from one country to another, and this also affects the numbers entering each year. In most countries with a state run health service there is central control of the numbers training in all specialties, including paediatrics. This structure tends to be more common in northern Europe than in the south.

The time spent in training and the methods used varies considerably from one country to another. The minimum time is four years in France, Austria, Greece, and Denmark and up to eight years in the United Kingdom. In some countries (such as France) attendance at formal lectures is required for up to 250 hours during the training period. In Denmark and Sweden

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trainees spend four to seven days each year receiving formal lectures as a national group, and in The Netherlands 40 hours a year are spent attending lectures. In Finland postgraduates will shortly be awarded a degree in paediatrics on completion of their training. In most countries there is a recommended list of subjects that should be taught, but only a few (such as Spain) have formally written programmes that are available to all candidates.

Already new techniques are being applied to teaching. The previous methods of tape-slide and correspondence courses, though still valuable because they are cheap and easy to produce, are being superseded by video tapes, distant broadcast television (including satellite links), and computer aided learning with interactive video. These methods encourage widespread dissemination of knowledge to a large audience and hold great promise for the future in the teaching of commonly agreed subjects at the highest level.

In all countries paediatricians in training are required to spend an appreciable amount of time in a teaching hospital—generally between 50–80% of the training period. A teaching hospital is defined as a hospital attached to, or affiliated with, a university department of paediatrics. These hospitals have regular programmes of postgraduate subspecialty lectures and teaching ward rounds.

The need to undertake a research project during training is thought to be useful in all countries and, although strongly encouraged in the teaching hospitals, is considered to be mandatory by none. Many paediatricians thus complete their training without the discipline of having undertaken any specific scientific work.

The number of paediatricians/child under the age of 16 varies greatly. The highest ratio is in countries such as Greece (1:1067) and Spain (1:2000) where primary care is delivered by the paediatrician, and the lowest ratio is in Ireland (1:16666) and the United Kingdom (1:12222), where paediatricians function as consultants in the hospital or in the community. The countries with the highest ratios of hospital paediatricians include Finland (1:1818), Switzerland (1:2105), Luxembourg (1:2166), Norway (1:2545), and Belgium (1:2778).

Subspecialties are generally well developed within European paediatrics, as witnessed by the increasing number of societies concentrating on different subjects in the childhood age group. Although many of these fields are recognised by national paediatric associations, relatively few have been given formal government recognition; the most common is neurology.

Evaluation of candidates can be carried out by written examination or by peer review at any time during the training programme and at the end of it. Continuous evaluation by the head of department throughout is also possible, and this happens in Austria. In some countries a written examination is carried out during the early part of the training—for example, the MRCP in the

United Kingdom or the MRCPI in Ireland. A written examination is also carried out halfway through training in The Netherlands. A final written examination is already carried out in Finland, and will shortly be introduced in Sweden. In most countries, however, the final training of each candidate is reviewed by committee either at local or at state level, and a further written examination is not required. The level of expertise is judged by a group of senior paediatricians, but in some countries there is a more formal system such as that in the United Kingdom where the Joint Committee on Higher Medical Training defines more precisely the experience required to be recognised as a specialist in paediatrics. Although this system functions well, such recognition is not as yet a formal requirement for appointment to a senior position.

Although there are clearly widespread differences in the delivery of paediatric care throughout Europe, and in the manner in which postgraduate paediatrics is taught and evaluated, there is much common ground. Though there should always be room for individual variations between different countries according to their own requirements, there is a need for agreed basic standards for what constitutes an adequate level of training throughout the continent. An agreed curriculum should also be established, together with a more standardised system of evaluation both during and at the end of training. Further moves in this direction are being made by a number of bodies both inside and outside the European Community. Adoption of such standards would lead to much greater ease of movement of paediatricians between different countries. This would significantly increase the experience that could be gained by any paediatrician in training and would help to cross fertilise ideas and academic relationships between different institutions.

Minimal acceptable standards that have been proposed include a selection process for specialist training that involves an interview of prospective candidates, at least four years of training in recognised centres with a formal teaching programme, direct clinical responsibility for patients, a contract of employment with an appropriate salary for the work undertaken, and a proper balance between exposure to paediatric care in teaching hospitals, general hospitals, and primary care both in general practice and in the community.

Paediatrics is at the forefront of subspecialty training in Europe and we should therefore take advantage of the opportunities provided by the present wish to increase cooperation by establishing general guidelines for postgraduate training, which may in due course be followed by specialists in other fields. If we maximise this opportunity, paediatric training in the 1990s should be a stimulating and exciting experience for both teachers and trainees alike; this must lead to better care for all children in Europe.