

General practice and medical education: experience in the Netherlands

THE past 20 years have seen a marked change in the role of medicine in European society and medical education has to be redefined accordingly. As general practice and primary care now feature more prominently in the health care system, it is clear that changes in medical education and the medical curriculum must involve general practitioners. This is particularly true in the Netherlands and the United Kingdom, where general practice has been an integrated part of every medical school for many years.

There exists a long tradition of Anglo-Dutch exchange in the development of general practice, particularly in research and vocational training. A meeting in Southampton in January 1993 of British and Dutch academic staff of departments of general practice emphasized the relevance of international exchange of experience in (academic) undergraduate medical teaching. This paper reviews some of the recent developments in undergraduate medical education in the Netherlands, from the perspective of academic general practice.

Medicine has a scientific basis, and practical experience is vital for medical training. This has long been recognized, and bedside teaching, developed by Boerhaave in Leyden in the Netherlands, was introduced into many European medical schools in the 18th century.¹ Yet, the position regarding such teaching has remained ambivalent up to the present day, and the core of medical education in a majority of the medical schools in Europe is still the processing of theoretical, factual information.

The reasons for altering the medical curriculum involve both health care considerations and changing views on medical education. Important demographic changes are taking place in society, and most European countries foresee the need for fundamental reforms of the health care system to cope with these changes. This will require new medical expertise in addition to existing expertise, with a more prominent role for general practice and other primary care disciplines. In the field of medical education there is a realization that skills and attitudes are vital ingredients of education, and that practical experience in all relevant areas of care is essential.² Well supervised practical experience will produce models for students to emulate, lessen the stress of medical education,³ and retain the commitment and enthusiasm of students.

The introduction of professional training for general practice was the first change in this direction. Vocational training for general practice was introduced in the UK and in the Netherlands in the early 1970s and this training has been of great importance in determining the future position of the discipline in academic teaching. Vocational training produced a group of practitioners/teachers who had themselves gone through the process of practice-based learning; in addition, vocational training has made a fundamental educational contribution to medical teaching, and in this area the work of Pereira Gray in Exeter has been of paramount importance.⁴ In the 'Exeter' model educational principles are applied in one-to-one trainer-trainee teaching; its strength lies in the parallel with the general practitioner-patient relationship. This model offers the appropriate conditions in which to identify the trainee's problems in the practice of medicine. The trainer defines these problems as educational objectives, and applies appropriate educational methods to solving them. The 'Exeter' model has been introduced in the Netherlands,⁵ where one-to-one teaching is also the key of vocational training. It is no

surprise that the experience of organizing vocational training has been helpful in creating one-to-one general practice based teaching facilities for medical students — the UK and the Netherlands have been in the front line of this development.

An important difference between the two countries is that in the Netherlands vocational training schemes have always been organized by the university departments of general practice. This has allowed developments in vocational training to find their way into basic medical teaching more easily. Thus, some years ago one-to-one teaching, the definition of teaching objectives and the training of the trainers were successfully introduced into general practice teaching of medical students⁶ in the form of the general practice 'clerkships'² that are a standard part of the curriculum in every Dutch medical school.

The objective of the medical curriculum is to provide medical students with a basic understanding of illness, health and disease and the factors which influence these; with the knowledge, skills and attitudes necessary in order to apply basic methods to the diagnosis, treatment and scientific study of illness and disease; and with a general understanding of current and future developments in medicine. This is a general objective and medical graduates will then have to complete additional specialist training to prepare them for their future position in the health care system. This general objective can only be achieved through contributions from medical disciplines which have a role in general patient care, and this has promoted the role of general practice in the medical curriculum. General practice's responsibility for 'every' disease, and every person in the community implies a relevant contribution to the realization of general objectives in medical education. The role of superspecialists should be restricted to the illustration of new developments and the provision of information on their specialty, in support of the career choice of future doctors.

The achievements of the general practice clerkships are generally acknowledged to be the educational standard for the other disciplines.² The students' appreciation of general practice teaching is high, and comparable to that in the UK.⁷ This is probably a result of the small scale teaching environment of general practice, and the personal relationship between the general practitioner teacher and the student.

The contribution of general practice has been further extended in recent years.⁸ In the Maastricht experiment^{9,10} students have regular contact with general practice from their second year of study onwards. In this way, they are exposed to health problems in patients and families that are related to the theoretical part of their curriculum and the teaching of skills. This experience is additional to the clerkship in general practice.¹¹

Another development is introducing students to skills and attitudes before they are confronted with real patients, thus replacing the mastering of such skills and attitudes by trial and error with patients. This development, which is becoming standard in Dutch medical schools, requires careful supervision by teacher practitioners and is a further aspect of education where general practice is important. At Nijmegen University a comprehensive introductory programme has been developed which includes history taking, physical examination, procedures such as venepuncture and basic laboratory tests, but also more intimate aspects of the doctor-patient relationship.¹² Simulated patients are trained to give feedback to students on the appropriateness of their perfor-

mance.¹³ In Maastricht, a similar programme runs throughout the curriculum.¹⁰ The objective is to provide students with interpersonal skills which will allow them to cope with insecurity and the emotional burden of caring for real patients, attempting to forestall the emotional 'rigor mortis' that seems to result inevitably from traditional medical education.³

A further development in teaching is related to the need to provide more cost effective care, treating as many patients as possible in the community, with the use of expensive hospital facilities restricted to selected cases. Community care, prevention, early detection, selection of high risk patients, long term care and continuity of care must feature more prominently in medical training. At Nijmegen University the general practice clerkship has recently been transformed into a clerkship addressing medical practice outside the hospital.¹⁴ In addition to general practice the clerkship includes social medicine (public health and occupational health) and community geriatrics. It is important that this part of the curriculum is compulsory for all medical students, particularly those who will later choose a career outside primary care. For these students it will be their only experience of functioning as a doctor in primary care, a field of practice of ever increasing importance for all doctors, irrespective of their specialty

These developments provide an exciting challenge for disciplines with a general responsibility in patient care, including general practice. Practical experience is the alpha and omega of successful medical education, but this success depends upon two pre-conditions: medical problems that represent the state of health and disease in the population must be included, and the supervision of teaching needs must be provided by practitioners with sufficient educational skills. By definition, general practice meets the first precondition,^{7,15} and with its expertise development in undergraduate and vocational training, provides a model regarded as a 'standard' by other medical teaching disciplines. This should fill us with pride, but also with resolve to contribute to the important task of improving the teaching of future doctors. As Fraser has stated: 'Many of the current problems of undergraduate education could be solved, or at least substantially reduced, by correcting the current imbalance between hospital based and community based teaching and learning.'¹⁶

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Prescribing topical corticosteroids

IN 1985 the government restricted the prescription of certain drugs to curtail expenditure in the National Health Service. In 1992 it announced that a further 10 categories were to be considered, including every drug which acts on the skin. A whole specialty is therefore under review. In order to illustrate some of the problems the government may face, it is worth examining topical corticosteroids which constitute a considerable proportion of those drugs acting on the skin and which are arguably the most important class of compound in dermatological therapeutics.

There are a large number of topical corticosteroids on the market. If restriction to generic products and substitution of generic for brand named products appear to be attractive options, then the following questions need to be answered: is there any justification for the number of corticosteroids on the market, are gener-

ic topical steroids equivalent to the brand name drugs, and will limitations on the freedom to prescribe be cost effective?

Dermatologists require a range of topical steroids for several reasons. First, there is a need for different strengths or classes of steroids¹ because of the diverse nature of steroid responsive skin disorders and the variation in the thickness of the skin in different parts of the body. Thus, lichen planus only responds to very potent steroids whereas atopic eczema may respond to weaker ones, although this depends on the site involved. Hydrocortisone is effective for eczema on the thin skin of the face, but more powerful steroids are required to penetrate the skin elsewhere including the most potent for the thick skin on the palms and soles. Increase in potency is achieved not by increasing the concentration of hydrocortisone but by modifications to the mole-