

The paediatric training required by the general practitioner

**A REPORT BY A JOINT WORKING PARTY OF
THE BRITISH PAEDIATRIC ASSOCIATION AND
THE ROYAL COLLEGE OF GENERAL PRACTITIONERS**

Aims

The working party was given the following remit by the Councils of the Association and the College: 'To examine the content and methods of the paediatric training required by the general practitioner and to make recommendations'.

SUMMARY. This report has been written because special programmes of training for general practice are being developed in many parts of the country and there are questions about the paediatric component of training which need to be discussed nationally.

An important part of this report is devoted to listing educational objectives which should be attained in paediatrics by the general practitioner at the end of his training.

Recommendations

(1) All vocational training schemes for general practice should include formal training in paediatrics.

(2) Training in paediatrics should normally take place in four learning situations i.e. in junior hospital posts, in the community health services, in teaching practices, and on day or half-day release courses.

(3) a. Junior hospital training posts should last not less than four months. In most training schemes six months will prove to be the minimum, for practical reasons.

b. They should usually be in acute non-specialised paediatric units and should include experience in neo-natal paediatrics.

c. The support of the British Paediatric Association is sought in encouraging paediatricians to allow six monthly changes in the occupancy of most of their senior house officer posts (S.H.O. posts), rather than a longer period, as the majority of their senior house physicians will become general practitioners.

d. Even so, there will be a shortage of paediatric S.H.O. posts for training purposes in some localities. The help of the Central Manpower Committee is sought in encouraging regional authorities to create a small number of additional posts where service need makes this justifiable.

e. While in hospital, trainees should have experience of general paediatric surgery and those surgical sub-specialties which are particularly relevant to general practice, i.e. orthopaedics and E.N.T.

(4) There should be discussions within local training schemes between the paediatrician, the scheme organiser, and the general-practitioner teachers about the objectives of training and their distribution between the four learning situations.

(5) Developmental paediatrics and the early detection of handicap are essential subjects for general practitioners. Since they must be taught partly in teaching practices, these could with advantage run special sessions for screening well-babies and toddlers. Alternatively, a local arrangement will need to be made with a child health clinic.

(6) It is important to teach about the impact of children's needs on practice organisation—especially the need for easy contact, quick appointments, and satisfactory emergency cover.

(7) Emotional disturbance in children needs to be considered at all stages of training. The subject lends itself to group discussion about particular patients and their problems.

Paediatricians, child psychiatrists, and general practitioners can contribute valuably to such discussions.

Child psychiatrists, who are too few in number, can spread their influence by teaching general practitioners to take increasing responsibility in this field. Selected child guidance clinics might contribute as learning situations on a day-release basis. More academic departments of child psychiatry are needed to produce such teachers.

Introduction

The main reason for this report being required and written at this time is the development of special programmes of training for general practice after registration ('vocational' or 'professional' training). These have appeared in all parts of the United Kingdom and hitherto they have depended to a large extent on local initiative. Local organisers were at first free to devise their own training patterns, but during the last ten years there has been a growing consensus of opinion about aims, content, and teaching methods. But there are still some issues about which opinions vary.

In relation to paediatric training—apart from uncertainties about the pattern of paediatric care in the community—there are such questions as:

- (1) What does the future general practitioner need to know and be able to do at the end of his special training?
- (2) What should he have learned as an undergraduate and what as a vocational trainee or mature doctor?
- (3) Is a junior paediatric hospital post a desirable learning experience for him? If so, how long should it last?
- (4) Assuming that it is, what should be learned in hospital and what in the teaching practice?
- (5) Does he need to learn developmental paediatrics? If so, who should teach it and where?
- (6) Should he learn what is needed for work in the school health service?
- (7) Are there enough junior hospital posts for the needs of both future paediatricians and future general practitioners?
- (8) The M.R.C.P., M.R.C.G.P., D.C.H., and the D.(Obst).R.C.O.G. examinations all include paediatrics in varying degrees. What, if any, is the place of each?

Although the special training of the general practitioner after registration is the main reason for this report, and its main focus, the working party realised very early in its discussion that it must consider undergraduate education in paediatrics. It decided also to take continuing education into account. Thus it follows the general contemporary trend of thinking of medical education as a continuous process from school to retirement.

The general practitioner's role in paediatrics

It seems to us essential, before discussing training, to say something about the general practitioner's role in the care of children, whether well or sick. We need to reveal any assumptions we have made about this, and point to topics of uncertainty, if they have a bearing on his training.

We assume that all general practitioners will undertake the care of children in their practice and that they will have responsibility, as doctors of first contact and continuing presence, for promotion of health, prevention of diseases, and the diagnosis and treatment of established disease. They will, of course, continue to refer some of their child patients and problems to consultant paediatricians who will usually be based in a hospital. Both will try, wherever possible, to keep and treat sick children at home.

We believe that there are bound to be some general practitioners who have a special interest in children and who will wish to increase their training and experience. We believe this desirable. It might take the form of hospital attachment or more detailed work in developmental assessment or work in the school health service and might particularly suit married women at some stages in their career.

We do not go beyond this and suggest, as some do in this country and many elsewhere, that some general practitioners should confine their practice to children. There are one or two experiments of this kind in this country, but they have not yet demonstrated the advantage of having a different doctor for children at the primary level and thereby losing the concept and reality of the family doctor. Our report is based on the predominant situation—the same general practitioner for adults and children, and ideally the same for all members of the family living in one household.

We believe that knowledge of human development is essential for any doctor dealing with children. We consequently do not think that the general practitioner can practise without some knowledge of developmental paediatrics.

We believe that some general practitioners will be required and will wish to work in the school health service. This is likely to deal in the future with medical conditions limiting a child's ability to take advantage of normal education or requiring special education. (Illnesses and injuries presenting at school are likely to be dealt with through the ordinary practice arrangements.) In so far as this work is different from the paediatric work done by every general practitioner in his own practice setting, they will need special training. This must be provided by paediatricians, child psychiatrists, psychologists, and general practitioners with appropriate training or clinicians at present working in the community service.

We do not feel able now to state the content of the additional training needed by doctors who wish to increase their skills in developmental assessment or to take part in the school health service, but they will obviously require to train in a comprehensive assessment centre.

The present state of vocational training for general practice

Although five years after registration is expected to be the eventual length of in-service training required for general practice, the effort now and in the foreseeable future is concentrated on providing three-year programmes for all future principals.

Approximately 1,200 individual three-year programmes are required to be available by the beginning of 1977, if this training is to be the normal requirement for all principals in 1980 (England, Wales, Scotland, and Northern Ireland). The usual pattern of learning experience is two years in junior hospital posts, one year in training practices and a variable length of time on day-release courses. These proportions may change in the near future.

Until recently it was assumed that all 1,200 programmes would need to be provided as 'packages' i.e. a planned series of rotations in one locality. It is now clear that a proportion of trainees prefer to plan their own rotations within broad guide lines laid down by the Royal College of General Practitioners and approved by the regional Postgraduate Dean. They need guidance in their choice of post. All that is said in this report about the content and standards of training applies as much to them as to the others.

At the time of writing this report there are 450 programmes available annually in three-year planned rotations ('packages') and 199 doctors are choosing their own rotations. (Council for Postgraduate Education England and Wales (1974), personal communication).

Paediatrics is regarded as one of the four most important hospital appointments by most scheme organisers—with adult medicine, psychiatry, and obstetrics and gynaecology (although this last is not regarded as essential training for all entrants). A survey by post at the end of 1973 showed that in the Oxford region 90 per cent and in the North of England (Newcastle) region 85 per cent of individual programmes included a paediatric hospital appointment, but in Scotland the proportion was lower (Royal College of General Practitioners, 1974).

THE TRAINING OF GENERAL PRACTITIONERS—OBJECTIVES

The working party set out, as its first task, to decide what knowledge, skills, and attitudes should belong to the doctor as he finishes his three-year postgraduate training and starts as a principal in a general practice.

We are able to divide the educational aims into the five headings in *The Future General Practitioner—Learning and Teaching* (Royal College of General Practitioners, 1972) generally accepted as suitable in any consideration of the content of training for this branch of the profession. However, for children, it seemed appropriate to make one change in the usual order:

- (1) Human development
- (2) Health and diseases
- (3) Human behaviour
- (4) Society and medicine
- (5) Practice organisation

(1) Human development

At the completion of his training the doctor should be able to demonstrate that:

(a) He has knowledge of the important norms of physical, intellectual, emotional, and social development at different ages.

(b) He can carry out the basic methods of assessment of these modes of development from birth up to, and including, adolescence.

(c) He can recognise common deviations from the normal.

(d) He understands the role of the health visitor in developmental assessment.

(e) He can recognise when there is a need for referral for more elaborate or specialised assessment.

(2) Health and diseases

A. Health

At the completion of his training the doctor should be able:

(a) Through his knowledge of the norms of development, physical, intellectual, emotional and social, to describe what characterises health in children.

(b) To describe the needs of children at different ages and the factors, whether hereditary or environmental, which favour their health and happiness (Appendix).

(c) To demonstrate that he recognises the value of health education, whether about parenthood in general, or about feeding and physical care of children; and the value of disease education i.e. the prevention of certain diseases, the recognition and home management of common disorders and the use of health and social services.

B. Diseases

He should be able always to recognise and in many instances to treat the following conditions:

(a) Acute conditions threatening life

In the newborn: infections, surgical conditions, some life-threatening congenital abnormalities, hypoglycaemia, and hypothermia.

In infants: acute respiratory disorders, gastrointestinal infections, meningitis.

In older children: asthma, the 'acute abdomen', accidents (including self-poisoning).

In adolescents: suicidal behaviour.

(b) Conditions which, if not recognised early, can lead to disability or premature death.

In the newborn: infections, jaundice, congenital malformations not immediately apparent, renal conditions, metabolic errors. The recognition of prematurity and dysmaturity.

In infants and older children: malignant disease, respiratory infections with complications, epilepsy, abnormal relations in a family, including battering.

(c) Common conditions

In the newborn: minor disorders, e.g. birth marks, feeding problems.

In infants: feeding and sleep problems, respiratory tract infections, parasitic infections, and eczema.

In older children: minor injuries, epilepsy, migraine, behaviour and sleep problems, enuresis and faecal incontinence.

In adolescents: behaviour problems, hypochondriasis, depression.

(d) Handicaps and their supervision

Asthma, congenital handicaps, including heart disease, diabetes, haemophilia, epilepsy, cerebral palsy, mental handicap, social disadvantage.

In relation to all these conditions listed in *B. Diseases* above, he should be able to demonstrate that he has been concerned with some aspects in particular:

1. Early diagnosis.
2. Prevention, where possible.
3. Management at home.
4. Psychological and social aspects, where important.
5. The sick child's individuality.
6. The indications for referral to a consultant or a social agency.
7. Education of parents about common disorders and about the use of health services.
8. Children who are especially vulnerable.

(3) Human behaviour

At the end of his training the doctor should be able to demonstrate his understanding:

(a) Of the ways in which the doctor's behaviour towards a child and/or his parents can influence the success or failure of a consultation and the solution of a problem.

(b) Of the ways in which the behaviour of a child, acutely or chronically ill, can influence the behaviour of the rest of the family.

(c) Of the ways in which the behaviour of the family, particularly the parents, can influence the health, happiness and social behaviour of a child (and the behaviour of a child that of his parents).

(d) Of the ways in which family relationships and attitudes, healthy and unhealthy, towards children may persist from one generation to another.

(e) Of the potential importance of the 'milestones' or 'normal crises' in a child's life (weaning, habit training, separation from mother, starting school, puberty, falling in love and early sexual experience, as causes of persisting difficulty and indicators of family stress.

(4) Medicine and society

At the end of his training the doctor should be able to demonstrate:

(a) That he understands the influence of culture and class on the incidence, presentation, and management of different illnesses.

(b) That he is aware of the prevalence of the different types of children's illnesses in his practice population.

(c) That he is aware of the contribution of epidemiology to understanding of the causes of some disorders of children.

(d) His knowledge of the roles of health visitors, social workers, and other helping agencies in the care of children, whether well or ill.

(e) That he is aware of what is known about the incidence, cause and prevention of socio-medical problems such as smoking, alcoholism, drug addiction, pregnancy in girls still at school, and juvenile crime.

(f) That he understands the medical aspects of adoption.

(5) Practice organisation

At the end of his training the doctor should be able:

(a) To demonstrate his knowledge of the organisation of paediatric services in this country and compare them with contrasting systems in other countries.

(b) To describe how practice organisation must meet the special challenges of sick children—the need for easy contact, quick appointments, and satisfactory emergency cover;

the need for time for dealing with parental anxiety, for communicating with health visitors and social workers, for home visits; the need for suitable accommodation and equipment in the practice building.

- (c) To describe the organisation of a well-baby clinic (screening, records, immunisation).

THE CONTINUUM OF EDUCATION

In listing the objectives, we have stated what we believe that the doctor should be able to do at the end of his training and at the moment when he will take up practice as an independent principal. Nothing has been said about which parts should be learned as an undergraduate, which as a postgraduate, or about which parts should be learned by postgraduates in a paediatric hospital post or in a training practice.

Although the undergraduate period caters for all students whatever their future career and should be an education rather than a training, in practice the line between education and training is impossible to define. There will undoubtedly be an overlap between what is learned as an undergraduate and what is learned in a postgraduate training for general practice.

(1) Undergraduate education

By the time of qualification it can be expected that the student will have learned how history-taking, physical examination, the presentation and varieties of illness, and the general approach to management differ in childhood from what he has learned about adult medicine.

It is reasonable to expect the newly qualified and registered doctor to have:

- (a) A general impression of the scope of hospital paediatric practice and the paediatricians' ways of seeing disease and treatment in the context of total growth.
- (b) Mastery of the basic skills of paediatric history-taking and examination.
- (c) A limited experience of practical preventive paediatrics, including immunisation and infant feeding.
- (d) Basic knowledge of growth and development and the assessment thereof.
- (e) Awareness of the principles of paediatric therapeutics as applied to acute illness and handicap.
- (f) Awareness of the nature of the doctor/patient relationship—applied to third-party consultations.

Thus the undergraduate will have a thorough grounding in human development, diseases, and clinical method. He may have had some grounding in human behaviour and about medicine and society from pre-clinical courses on psychology and sociology. He will have learnt almost nothing about practice organisation.

But even in human development and diseases he will need to know more and he will need plenty of opportunity for practising his skill in clinical method. Thus all areas are open for further training after qualification.

Adequate experience of neonatal medicine is important.

The student will gain invaluable experience by spending time in the casualty department.

(2) Early postgraduate training

Since the objectives of training have been set out above, we need:

- (a) To justify their distribution between three learning situations—junior hospital posts, teaching practices, and day-release courses.
- (b) To indicate which objectives are best served by one of these learning situations rather than another.

Although some advocate a training programme which takes place entirely in the setting of the future work, i.e. the practice, we believe that the experience gained in junior hospital posts in paediatrics cannot be omitted without important loss.

These posts offer a concentration of experience of a wide range of disorders, including some

rare ones, of opportunities to practise clinical method and to gain understanding and confidence in recognising the child who is ill and dealing with serious disorders. Hospital posts in a district general hospital may lend themselves better to the future general practitioner's needs than those of a teaching hospital, assuming that the standard of clinical teaching is equally high. Adequate neonatal experience, which is essential, is now difficult to obtain except in hospital. It is an advantage that children with general or orthopaedic surgical conditions are now usually nursed in paediatric wards.

We believe that a four-month resident appointment is the minimum requirement. The post must have a service commitment, include experience in the outpatient department, and allow time for day-release, for tutorials and for reading. In most training schemes six months will prove to be the minimum, for practical reasons.

A full-time hospital appointment creates a difficulty for some married women doctors. This might be resolved, as in the Oxford region, by the creation of one-year posts of shared tenure.

The hospital outpatient department can provide a setting for learning about common disorders, chronic ones and the assessment of development and handicaps. It also offers experience under supervision in counselling parents and in the emotional disorders of children, especially if the department of child psychiatry co-operates. Teaching about common orthopaedic conditions also take place in outpatients.

A day-release course can offer theoretical knowledge whether by lecture or discussion. There are theoretical aspects in all five areas, but particularly in health, human behaviour, medicine and society, and practice organisation.

A great deal of overlap is possible and desirable between what is taught in hospital posts, teaching practices, and courses.

Learning in hospital posts should concentrate most on the skills of clinical method and on knowledge of diseases, particularly the more serious and less common ones which it is nevertheless important for the future general practitioner to see if he is to recognise them later in life. The more serious chronic disorders and handicaps will also be seen through outpatient experience. As much as possible, emotional disturbances of childhood should also be included and demonstrated. As nine out of ten babies are born in hospital, neonatal experience must be obtained there.

Learning in hospital posts should concentrate most on the skills of clinical method and on knowledge of diseases, particularly the more serious and less common ones which it is including the psychological and social assessment of the children presenting them, about home management and the counselling of parents, about the indications for referral and the results thereof, about working in the domiciliary health team, about the assessment and management of multiple problems, about making rapid decisions, about the sick child in the family, the influence of the family on the child's health and the effects of the various social agencies; about practice organisation and the demands made on it by the special needs of children and their parents.

Learning in day-release courses may be maximal about human development, health, human behaviour, society and medicine, and practice organisation.

We believe it to be important that a training scheme organiser, his trainers and the paediatrician involved in the training scheme should discuss together the objectives of training and the distribution of content, as a syllabus, between the three settings.

(3) Continuing education

The general principle of detecting areas of ignorance or uncertainty, either through self-discipline or through inviting the scrutiny of others, then proceeding to the appropriate learning, applies as much to paediatrics as to any other subject.

During the life-long period when continuing education is required, the doctor should be able to satisfy himself that he:

(a) Has kept in mind such acute conditions as intussusception, which occur very rarely, yet threaten life, or lead to irretrievable damage if not diagnosed early.

(b) Is aware of important new advances, particularly in diagnosis, treatment, and prevention.

(c) Can deal critically with the literature, particularly that provided by drug firms.

The many methods of postgraduate continuing education do not need to be listed. We would like to stress the value of short attachments to consultant paediatricians and particularly the domiciliary consultation where both doctors meet—the more so since neither are always easy to arrange; also the self-administered questionnaire as a simple means of detecting weak areas of knowledge and skill.

Experiments could with value be made whereby consultant paediatricians pay regular visits to practices. Large group practices or health centres would lend themselves most easily to this purpose. The paediatrician would see children as a consultant, with the child's doctor, and might also take part in group teaching sessions.

Examinations

We expect that undergraduates would always be examined in paediatrics as part of their final examination. General practitioners would be expected to examine.

Paediatrics forms part of the M.R.C.G.P. examination which can be taken at the end of the three-year period of training. Trainees are encouraged to have their standards evaluated by this examination.

There is uncertainty at present about the purpose and value of the D.C.H. examination, particularly as intending principals in general practice seem to have the paediatric component of their training covered in the M.R.C.G.P. examination. We believe it would find a useful place for those general practitioners who wish to work part time in child health clinics or the school health service and that preparation for it might take place, in part, after the end of the three-year training period. If vocational or professional training eventually occupies five years, the D.C.H. examination might be taken during the last two.

If the examination is reviewed, it would be an advantage if general practitioners as well as paediatricians were on the examining board.

Adequacy of present opportunities for training

(1) Hospital posts

Between 20 and 40 senior house officer posts are required annually for training paediatricians in England and Wales while about 450 posts are needed twice a year for training future general practitioners (Council for Postgraduate Education in England and Wales (1975) Personal communication), i.e. the same post needs to be occupied by a different trainee every six months. On paper there are enough posts for all needs; but in practice there are not, because the same doctor often occupies the post for a year or even longer, and this is obviously an advantage to the consultant concerned, since he has a more experienced senior house officer to support him. If senior house officer posts are to be correctly used for general professional or vocational training, the help of paediatricians must be sought in ensuring that appointments are for six months. The support of the British Paediatric Association is needed.

A number of these posts are in children's hospitals. Posts in district general hospitals provide as a rule the most suitable training for general practice.

Some posts might combine medical and surgical paediatrics. This might enable the number of S.H.O. posts in a unit to be increased from two to three. The cost of new posts should be set against the present cost of overtime pay and locums.

We do not think that the duration of the senior house officer post should be shortened to help married women doctors, but we support the idea of a post being shared by two women doctors, half-time each, during a year.

(2) Paediatric consultants

Most senior house officers will enter either general practice or some branch other than paediatrics itself. General practice and paediatrics would both gain if paediatricians based their

aims in training on the likely future career requirements of their senior house officers. To achieve this, they should have been exposed to general practice.

In the training for consultant paediatricians it has been agreed by the British Paediatric Association that a six-month elective period in general practice would be appropriate. This would probably involve up to 20 doctors annually. Many general practitioners and paediatricians are beginning to feel that it should be mandatory.

General practice could be given the same weighting in consultant training as paediatrics is given in the training of the general practitioner.

(3) *Teaching practices*

There are at present a greater number of teachers than trainees looking for teachers. Further development needs to be in the direction of greater understanding of what should be taught about children in teaching practices and the best methods of teaching.

Addendum

The members of the working party were:

Dr J. P. Horder, *O.B.E.* (Chairman), Dr J. P. Bound (Hon. Secretary), Professor J. A. Davis, and Drs W. Henderson, L. Hersov, C. G. W. Sykes, and C. Waine. Dr G. Hotcher later replaced Dr Henderson.

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Appendix

The needs of children are well described in a paper written for this working party by Dr Lionel Hersov:

'Throughout a child's development the parents have to meet the infant's, child's, adolescent's needs for affection, praise and acceptance, security, and a sufficient degree of stimulation both cognitive and emotional. In addition, children need freedom for bodily activity, the opportunity for new experiences and increasing responsibility and above all a comfortable loving relationship in which recognition and praise as well as disapproval, when appropriate, are consistently provided'.

Dr Hersov's paper discussed the ways in which parents fulfil or fail to fulfil these needs. It also stresses the effects of children on their parents—how for instance a more active baby can stimulate more demonstrations of affection from its mother so that there is a stronger and earlier attachment.

In general he points to the need to think and teach about the mutual inter-action of two persons—mother and child (or father and child)—rather than concentrating too much on the child and his needs.

REFERENCE

Royal College of General Practitioners (1972). *The Future General Practitioner—Learning and Teaching*, London: British Medical Journal.
