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WORLD HEALTH ORGANIZATION

TECHNICAL REPORT SERIES

No. 257

**TRAINING OF THE PHYSICIAN
FOR FAMILY PRACTICE**

**Eleventh Report of the Expert Committee
on Professional and Technical Education of
Medical and Auxiliary Personnel**

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WORLD HEALTH ORGANIZATION

GENEVA

1963

EXPERT COMMITTEE ON
PROFESSIONAL AND TECHNICAL EDUCATION OF
MEDICAL AND AUXILIARY PERSONNEL

Geneva, 4-10 December 1962

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TRAINING OF THE PHYSICIAN FOR FAMILY PRACTICE

Eleventh Report of the Expert Committee on Professional and Technical Education of Medical and Auxiliary Personnel

The WHO Expert Committee on Professional and Technical Education of Medical and Auxiliary Personnel met in Geneva from 4 to 10 December 1962. Dr Eric Martin was elected Chairman; Dr O. E. R. Abhayaratne, Vice-Chairman; and Dr M. Prywes, Rapporteur.

Dr P. Dorolle, Deputy Director-General, opened the meeting on behalf of the Director-General, welcoming the members. He explained that this Expert Committee had been convened for the purpose of advising on methods of improving the education and training of the family physician for his functions in the care given to patients in their home environment, where conditions differ from those of the hospital.

1. INTRODUCTION

Among medical students a growing tendency to specialize has been observed in most countries of the world. In some countries 60% or more of recent medical graduates are becoming specialists. This trend is being reflected in the decreasing proportion of physicians who are general practitioners.

Previous WHO meetings and other international conferences have emphasized the educational aspects of this problem.

The WHO Expert Committee on Professional and Technical Education of Medical and Auxiliary Personnel took up various aspects of medical training as early as 1950¹ and studied it again in greater detail in 1952;² the following paragraph is quoted from the latter report (page 5):

“Whatever attitude a community adopts towards medical services, the reason for the very existence of medicine has always been, and will continue to be, the patient. One consequence of the increasing partition of medical science into a number of specialities has been a trend away from the recognition of the patient as a whole.”

¹ *Wld Hlth Org. techn. Rep. Ser.*, 1950, 22.

² *Wld Hlth Org. techn. Rep. Ser.*, 1953, 69.

This same Expert Committee discussed in its seventh and eighth reports, respectively, the preventive aspects in the teaching of pathology¹ and the teaching of the basic medical sciences in the light of modern medicine.² In December 1961 WHO convened a Study Group on Internationally Acceptable Minimum Standards of Medical Education,³ which gave valuable suggestions regarding the curriculum generally. Other groups convened by WHO have also discussed some of the aspects of the medical curriculum which apply to students training to become family physicians—for example: the Study Group on Paediatric Education⁴ which met in 1956; the Conference on Public Health Training of General Practitioners;⁵ the Expert Committee on Mental Health, in its ninth report on “The Undergraduate Teaching of Psychiatry and Mental Health Promotion”,⁶ and its eleventh report on “The Role of Public Health Officers and General Practitioners in Mental Health Care”;⁷ and the Expert Committee on Training of Health Personnel in Health Education of the Public.⁸

WHO has contributed to the First and Second World Conferences on Medical Education which discussed, among other subjects, the questions of preventive and social medicine,⁹ and medicine as a life-long study;¹⁰ their deliberations certainly provide a very useful background to any examination of the problem of the training of the family doctor.

Apart from medical education and training, the following are among the major factors which determine the quality of work done by the family physician:

(a) the existing state of medical knowledge and, in many countries, the presence of indigenous systems of medicine;

(b) the socio-economic conditions of the country or community in which medicine is practised: its geographic, economic, cultural, political, religious and other characteristics and its social institutions, including its medical and social services, the range of these services and the way in which they are administered, and such practical problems as transportation and communication;

¹ *Wld Hlth Org. techn. Rep. Ser.*, 1959, 175.

² *Wld Hlth Org. techn. Rep. Ser.*, 1961, 209.

³ *Wld Hlth Org. techn. Rep. Ser.*, 1962, 239.

⁴ *Wld Hlth Org. techn. Rep. Ser.*, 1957, 119.

⁵ *Wld Hlth Org. techn. Rep. Ser.*, 1957, 140.

⁶ *Wld Hlth Org. techn. Rep. Ser.*, 1961, 208.

⁷ *Wld Hlth Org. techn. Rep. Ser.*, 1962, 235.

⁸ *Wld Hlth Org. techn. Rep. Ser.*, 1958, 156.

⁹ First World Conference on Medical Education (1954) *Proceedings... London, 1953*, London, Oxford University Press.

¹⁰ Second World Conference on Medical Education (1961) *Medicine a life-long study. Proceedings... Chicago, 1959*, New York, World Medical Association.

(c) the educational background of the community and of the individuals who are the doctor's potential patients ;

(d) the nature and extent of the educational resources of the community, with particular reference to the training at the primary, secondary, technical and university levels of personnel, other than physicians, who can themselves contribute to the training of future physicians and/or reinforce or supplement the work of the family physician in paramedical and related fields.

The impact of socio-economic determinants becomes particularly evident as we look at what is, in fact, happening in countries at various stages of development. In the urban areas of certain countries where the trend towards specialization has become most apparent, specialists are serving as family physicians. The need for a point of contact between families and the medical profession is so evident that some specialists provide this service because patients are willing to pay an additional fee for extra time and attention. A similar process of making specialists accessible to patients was also noted in some countries with State-organized medical services.

In countries which are at an earlier stage of development of health services, the problem is even more acute. Physicians are specializing in an urban setting even though the majority of the rural population has little or no medical or health service. Temporary expedients for meeting the mass problem are being developed. It should be kept in mind, however, that the training of the future doctor today means that appropriate emphasis should be placed on the development of qualities which will make him professionally capable 20 years from now at the mid-point of his professional career.

In this report, we recognize that all physicians at the time of licensure should be "safe doctors",¹ in that they can be trusted with the care of patients. The importance is stressed of making it possible for family physicians to obtain post-graduate preparation which will enable them to increase their competence in the particular elements which distinguish this type of practice.

1.1 Definitions

For the purpose of this report, it has been necessary to clarify certain terms as follows :

Physician : A person who has successfully completed a secondary cycle of general education and a prescribed course of training in the college of

¹ Newman, C. (1957) *The evolution of medical education in the nineteenth century*, London, Oxford University Press.

medicine of a university or in an independent medical school approved in the State or country where it is located, and who has obtained authority to practise medicine without scientific supervision in a given area.¹ (Doctor is used synonymously only in the sense that this is endorsed by popular usage.)

General practitioner : A physician who does not limit his practice to certain disease entities, and who offers his patients direct and continuing access to his services.

Specialist : A physician who limits his practice, either partially or wholly, to particular disease entities. Patients come to him either directly or by referral from other physicians. Different degrees of specialization need to be defined, with the range extending from what might be called general specialization, such as internists and paediatricians, to the more highly specialized categories of cardiology, endocrinology, neuro-surgery, etc.

Family physician : In various parts of the world different functional patterns of providing family medical care can be defined. These differentiations appear to be related to the availability of medical manpower rather than to political and national variables or methods of payment.

A large proportion of practising physicians have the essential characteristic of offering to all members of the families they serve direct and continuing access to their services. Patients are seen either in the doctor's office or at the patient's home. These doctors accept responsibility for total care either personally or by arranging for the use of specialized clinical or social resources. They are usually general practitioners, but may also be internists or paediatricians.

In some countries, particularly in urban areas, groups of doctors offer to patients and their families direct access to medical services through comprehensive clinics, polyclinics or health centres. Again responsibility is accepted for patient care, either directly or by referral. These physicians may either be general practitioners or specialists.

In some countries the main emphasis is towards developing a community orientation in the organization of medical care, with the physician being assigned responsibility by an official agency for a defined population, usually through a health centre. The doctor is expected to establish priorities among the many health needs. In order to make the best use of the physician's time it is necessary to have an appropriate balance of community-wide preventive activities and provision for individual patient care. Maximum use of auxiliary personnel under the doctor's supervision is an essential component of such a system of organization.

¹ *Wld Hlth Org. techn. Rep. Ser.*, 1959, 239, 6.

In all these situations mechanisms need to be developed which incorporate the following common features :

- (a) direct access on the patient's part to the source of medical care ;
- (b) a comprehensive approach to the provision of whatever curative or preventive services are needed for family members in the home, office, clinic or hospital ;
- (c) a comprehensive approach to providing continuity of care and surveillance ;
- (d) possibility of the doctor taking the initiative in providing family services, especially as these relate to preventive measures.

1.2 Problems of medical and health care as they relate to the need for family physicians

The Committee felt strongly that there is a continuing and significant need for family physicians. There must be some initial point of contact between the general public and the medical profession. To meet adequately the basic problems defined below, each country must make appropriate provision for the efficient distribution and use of medical manpower.

Specific problems which must be considered are the following.

1.2.1 The quantitative-qualitative dilemma

Only a few countries of the world are producing enough physicians to meet their medical needs. The quantitative problem is particularly acute in developing countries where rural areas are largely unserved medically. Medical educators are appropriately hesitant to lower qualitative standards in order to meet quantitative demands and increasingly find themselves in the position of being forced by outside action to accept solutions which they consider undesirable. It is important, therefore, that health authorities, medical educators and the medical profession take leadership in formulating appropriate solutions.

A variety of experiences with temporary means of meeting quantitative demands for medical care are worth noting. These have been transitional phenomena and, as quantitative demand has been partially saturated, a uniform tendency has been for medical education to be upgraded to general world standards. Three distinct temporary expedients can be indicated :

1.2.1.1 Mass production of physicians regardless of quality

This approach is not new. For instance, it was the method used in the United States of America up to the time of the Flexner report in 1910.

At that time the low-quality medical schools were closed and uniform standards of medical education applied. (As an example of the fluctuations in the quantitative-qualitative balance which can be expected in any country, there is now in the United States a quite opposite situation. The old rural practitioners are disappearing. Newly graduated physicians are neither numerically sufficient nor particularly interested in meeting the demands of mass medical care, with the embarrassing result that physicians are immigrating into the United States from countries which cannot afford to lose them.)

1.2.1.2 *The rural medical practitioner (medical assistant)*

Many countries have, for various periods of time, had two levels of medical education. One of these levels is for practice mainly in rural areas. These practitioners are trained chiefly in clinical medicine, with inadequate basic science preparation. In spite of their demonstrated usefulness in meeting temporary needs, it has been the uniform experience that serious complications have arisen as these practitioners have attempted to gain recognition for themselves as being equivalent to fully qualified physicians. Where programmes for training medical assistants are implemented, it may be important in some countries to provide for supplementary education so that the selected best rural practitioners can go back to medical school after a period of service and obtain full medical qualification.

1.2.1.3 *Health auxiliaries*

In countries where the approach is to try to develop community physicians who serve areas with populations ranging from 20 000 to 60 000, there is an effort to develop health auxiliaries who are distributed in health stations around the health centre. Such individuals must be under the continuing supervision of qualified physicians from the health centre. They serve to take care of the large proportion of patients with simple illnesses that can be treated with perhaps a dozen simple drugs. They screen out the more complicated and severe illnesses for the particular attention of the physician. They are so far removed from professional qualification that the problem of their demanding recognition becomes less serious. They may either be a practical public health nurse/midwife or some form of male health assistant with minimum clinical training. If properly organized, the team of the health auxiliary and the health centre physician should together fulfil the role of the family physician.

1.2.2 *Distribution of physicians*

The problem of the quantitative deficiency in the supply of physicians is greatly increased by the further general problem of inappropriate distri-

bution, with concentration in urban areas. The provision of even minimal medical and health care to rural areas is receiving much attention and various mechanisms of developing regional health services based on a linkage between rural health centres and district hospitals are being tried. It is probable that completely new patterns of organization based on doctor-patient ratios very different from the 1 : 1000 ratio which has been widely accepted will evolve out of these innovations. Such arrangements should also provide for the more efficient use of the limited number of specialists who are available.

1.2.3 *Increasing complexity of medical sciences*

One of the major justifications for specialization is the fact that medical knowledge and skills have become much too detailed and complex to be taught or understood by any individual physician. Medical schools need to define what is relevant out of this mass of information for the undergraduate period of education. The rate of progress in medical knowledge is accelerating at such speed that it is particularly important to provide for continuing education. Young medical graduates thinking about independent general practice feel increasingly insecure scientifically. They are aware of their dependence on the whole complex of facilities and consultations provided in a hospital environment.

1.2.4 *Complexity of the community*

Though the family physician may lag behind in his knowledge of scientific advances in medicine, nevertheless a compensating characteristic could be cited in his favour in that he develops greater skill and awareness in handling the less apparent—but equally important—psychological, social and economic problems of his patients and families, and ability to mobilize appropriate community resources. In the past, these skills have been acquired more or less spontaneously. They should now be part of the basic preparation of all physicians, both general practitioners and specialists. Included in this general problem is the need for physicians to be accessible to patients, without being subject to unreasonable demands on their time.

1.2.5 *Isolation of the family doctor*

A major deterrent which keeps doctors from going into general practice, especially in rural areas, is that they lose contact with professional colleagues and facilities. Administrative arrangements for access to laboratories, hospitals and consultations are either the responsibility of the national health services, or can be provided by voluntary groupings of the doctors themselves.

2. SCOPE AND OBJECTIVES OF FAMILY MEDICINE

The objectives of family medicine can be summed up briefly as the provision of comprehensive and integrated medical care for patients in the community. Family medicine can also be regarded as the vehicle through which the knowledge, skills and techniques which are developed in the hospital, laboratory and the teaching institution can be applied to the problems of the diagnosis and treatment of disease, the prevention of disease, and promotion of health in the community. Therefore the first point to be made concerning the scope and objectives of family practice is that besides providing domiciliary care, this is a means whereby certain diagnostic and therapeutic procedures normally belonging to the hospital can be extended to the community on the initiative either of the doctor himself or of the hospital. As medical science advances, therefore, the scope of family medicine undergoes continuing change. Not only does the family doctor deal with situations and problems which need not result in referral to or admission of the patient to hospital, but, in addition, the content of this field of medical practice is itself undergoing continuing change. Thus, in any country, much of what was regarded as being exclusively the concern of the hospital only a few years ago has today been transferred to the field of general practice and can be fairly regarded as the responsibility of today's family doctor. The following is a brief outline of the aspects of medical care which can be regarded as the peculiar responsibility of the family doctor :

(1) The granting of *direct access* of the patient to the doctor and *acceptance of responsibility* for the patient on the part of the doctor.

(2) The provision of *continuity of care*.

(3) Provision of *personal care*, by which is meant care of the individual as a person. This means that, ideally, the patient must never be in doubt as to who, in fact, is his personal doctor, and it is to this personal doctor that he has the right of direct and continuing access, irrespective of the nature of the medical or social problem which in the patient's opinion justifies the initiation of the doctor-patient relationship.

(4) Family medicine clearly must embrace the idea of *family care*, that is to say, not only is the personal doctor required to be knowledgeable about the family circumstances of the patient and to adjust his diagnosis and treatment of the patient according to these circumstances, but he must also accept responsibility for the care of individuals who are related to each other in the biological and social groups which can be characterized by the word "family". The family doctor is therefore occupied with the problem of the management of the patient in the family setting.

(5) The fact that the doctor has direct and continuing access to individuals on a personal and family basis gives him special responsibilities in the field of *disease prevention and health promotion*. Health education, in one form or another, has always been included in the family doctor's activities; it is now broadly accepted as being an important part of his functions. The WHO Expert Committee on Training of Health Personnel in Health Education of the Public has already made recommendations in this connexion (see its report¹). The family practitioner directs health education activities both to the general health and hygiene problems of the family, and to the case under his actual care.

(6) The degree of responsibility which the family doctor can and should accept for decisions relating to diagnosis, to management and to the manipulation of personal relationships and socio-economic factors of the patient's environment will clearly depend not only on his training, but also on the circumstances in which he practises. Of particular importance in this respect are the availability of hospital, specialist and consultant services, and the range of social services, social institutions and paramedical and social workers to whom he has access. In all these situations the family doctor has the duty of deciding what he can do with the resources at his disposal and, perhaps even more important, the responsibility of carrying out these diagnostic or therapeutic activities. But where the patient's diagnosis or treatment involves making use of one or other of these agencies, the family doctor has the peculiar and special responsibility to act as a means of liaison between the patient and these agencies. This can frequently include assuming the role of interpreter of the agency to the patient and of the patient to the agency. Family medicine, therefore, inevitably includes a substantial and frequent display of the *skills of consultation* with the specialist and other medical colleagues and with paramedical and auxiliary workers.

(7) *Research* is a field in which family medicine can make a particular contribution. The scope of this family medicine is such that it brings not merely opportunities, but the positive challenge for at least some family doctors to engage in research. Among the areas that are already being developed in this field in some countries are the following :

(a) Epidemiological studies, for instance, on the availability of population groups which can be used for research. Worthwhile investigations have already been undertaken on the following sorts of question :

(i) the natural history of diseases which are seen in the hospital only in their most extreme stages ;

¹ *Wld Hlth Org. techn. Rep. Ser.*, 1958, 156.

- (ii) the pattern of disease in the community, especially the conditions which seldom reach the hospital but may still be very important ;
 - (iii) possible causative factors or relative importance of the multiple causes which contribute to any disease (this sort of investigation leads directly to the emphasis on prevention which should be a major interest of this field of medicine) ;
 - (iv) the interrelationship of the ecological variables which influence the health of patients and which are observable best on a continuing basis in the home environment.
- (b) The extension of research which has been initiated in a hospital, where combined and collaborative studies between family doctors and their specialist colleagues, for example, could provide valuable new information in the evaluation of therapeutic trials in the problems of after-care and rehabilitation.
- (c) Operational research designed to provide new information which is urgently needed by those responsible for planning and organizing family doctor services.
- (8) Family medicine provides a unique milieu for the *training of medical students and paramedical workers*. Family doctors themselves are beginning to appreciate that specific post-graduate training for family medicine can take place only in the actual setting of family practice. The scope of family medicine, therefore, includes the opportunities not only to contribute to the training of medical students, but also to improve methods of continuing and specialized training for doctors wishing to embrace this field of practice.

3. KNOWLEDGE, EXPERIENCE AND SPECIALIZED SKILLS OF THE FAMILY PHYSICIAN

The Committee was of the opinion that the family doctor must have a sound training in the principles of medical practice, which are basic to all physicians whatever their future field of medical practice. Since the scope of family medicine must indeed undergo continuing change in every country, it is of vital importance that this training be regarded simply as a preparation for continuing training throughout the physician's professional lifetime, but it must contain this element of basic scientific and clinical preparation which will enable the physician to absorb and—where appropriate—apply all subsequent developments and advances in medicine. This concept of the basic training is vital to the physician, who must continue throughout his career to be able to communicate effectively with his more specialized

colleagues in all academic clinical disciplines and in all other fields of practice.

Among the more specific skills, knowledge and disciplines which need emphasis are the following :

- (a) Early diagnosis ;
- (b) Treatment adapted to home conditions ;
- (c) Rehabilitation ;
- (d) Prognosis ;
- (e) Psychological medicine ;
- (f) Public health and preventive medicine ;
- (g) The skills and techniques of consultation ;
- (h) Knowledge concerning organization and administration with particular reference to family practice itself, and the structure and function of all other community-based health and welfare services.

4. ATTITUDES

The effectiveness of the family doctor is essentially determined by his attitudes—to his patients and to the problems with which he is frequently confronted in dealing with the incurable, the difficult, or the uncooperative patient, the socially maladjusted, and to many similar problems for which he has ready to his hand no satisfactory or immediate solution. An appropriate attitude makes it possible for the doctor to work under sometimes unfavourable circumstances ; for example, having to look after too many patients with too little time, too few or inadequate tools and inadequate assistance. The doctor's vocational sense with regard to this field of medicine also influences his attitude to consultant and specialist colleagues. One of the particular hazards of this field of medicine was thought by the Committee to be the physical, professional or academic isolation from which he can frequently suffer. Among the desirable personal attributes of the family doctor are the ability to take and to accept responsibility, to make decisions, and to act in an executive capacity when required, and yet to be able to adopt, on other occasions, a permissive role in the consultations which he has with his patients.

Note. In its deliberations on the functions, knowledge and attitudes of family medicine, the Committee felt that a statement on the scope and objectives of this branch of medicine by a group of doctors presently and actively engaged in family practice was a useful contribution to the discussions, and the Committee therefore accepted with some satisfaction a statement which had recently been issued in the United Kingdom by the Council of the College of General Practitioners which appears as an annex to this report.

While not necessarily agreeing with every item in this statement, the Committee regarded it as a worth-while realistic projection of the scope and function of this field of medicine. Family doctors elsewhere can profitably draw up similar statements in connexion with the situation in their own countries.

5. RELATIONSHIPS BETWEEN THE FAMILY PHYSICIAN AND INSTITUTIONS, SPECIALISTS AND AUXILIARY AND PARAMEDICAL PERSONNEL

Probably the most urgent reason for extending and reinforcing a family doctor service is that such a service is a means of providing not merely *personal care*, but *integrated, comprehensive, medical and social care*. Specialization is essential for the advancement of medicine but it can bring in its train fragmentation of medical care if there is no means of relating one branch of medicine with another. The family doctor can be the means of effecting integration of medical services if he is adequately trained and has adequate opportunities for establishing effective relationships with his medical colleagues and with certain individuals and institutions in the paramedical and non-medical fields. It is appropriate therefore, to consider in particular the family doctor's relationships with hospital and specialist services, with other institutions and with paramedical and auxiliary personnel.

5.1 Institutions

5.1.1 *Medical Institutions*

In a few countries the family physician takes full responsibility for treating his patient when hospitalized. In the majority of countries, however, this responsibility is taken over by the hospital medical staff. Although in these cases the family physician has no direct responsibilities for the treatment of his hospitalized patient, he should have as much direct access to the hospital as possible. By no means should he be treated as a stranger or merely as a visitor in the hospital. His contacts with the head of the service and residents or interns should be "face to face". Such direct contacts are of great benefit to the patient, the family doctor, and the hospital itself.

The family doctor's intimate knowledge of his patient's physical, mental and social circumstances can throw additional light on problems of diagnosis and treatment and thus lead to improved medical care. This personal participation in the hospital phase of the diagnosis and treatment of his patient is a unique form of in-service training as far as the physician is concerned. In addition the benefits are by no means confined to improve-

ment in the quality of medical care given in the hospital. The family doctor's knowledge of the patient's family circumstances and of community resources may lead to a smooth, and earlier, taking-over of responsibility for the continuing care of the patient in his own home. This in turn will lead to a shortening of the period of hospitalization with not unimportant economic gains as far as the community is concerned and to heightened efficiency of the hospital. Indeed, developments along these lines may cause us to recast our ideas concerning not only the duration of hospitalization, but also the nature of the diseases which must of necessity be treated in hospital.

These direct contacts between the family physician and the hospital would have much to contribute not only in diagnosis and treatment, but also in training and research. The hospital staff can learn from the physician more about community resources, environmental conditions, and the intimate interplay of physical, mental, and social factors in health and disease. The family doctor has much to contribute in introducing preventive and social medicine concepts into the hospital doctor's ways of thinking. In some situations this may lead, as a result, to new research projects in the field of epidemiology.

In recent years there has been an increasing preoccupation with the contribution which the hospital has to make to the health of the community. The family doctor will be the natural link between the hospital and the community in this regard.

In some countries the laboratory and X-ray services of the hospital are placed at the routine disposal of the family physician. Such arrangements should be encouraged wherever possible.

It is hardly necessary to state that, besides this direct contact between the family physician and the hospital staff, everything should be done in order to provide the former with free access to records and to supply him with adequate written reports at the time of the patient's discharge. This form of communication, however, should supplement and not replace "face to face" contacts between the family doctor and his hospital colleagues.

As far as the out-patient or follow-up clinics are concerned, the relationship between them and the family physician should be established on the same lines as between the family doctor and the hospital. In some instances the patient is referred to these clinics by the family physician; in others, he is accompanied by his own doctor. Such direct contact between the family physician and the staff of the out-patient and follow-up clinics is to be encouraged.

The relationship between the family physician and district or regional health centres varies according to the staffing of these centres and according to whether or not the centres contain hospital beds. Usually, a doctor heads the centre and is directly responsible for all its functions. Sometimes

there are subcentres or health stations, which are staffed by auxiliaries and are under the supervision of doctors from the main centres.

5.1.2 *Other agencies*

There are a variety of day-to-day problems of family practice for which the physician gets no help from the hospital. Faced with such problems the doctor has in fact to turn his back on the hospital and to look towards the community and the community-based services for the kind of help that he requires. He has, in fact, to be ambivalent. As an example, reference may be made to social security services.

In many countries medical care and social security are interrelated in varying degree and one of the functions of the general practitioner or family doctor is to certify that a patient or his family, because of illness, has become eligible for a variety of social security benefits; for example, sickness or unemployment insurance, children's allowances, maternity benefits, burial grants, etc. Secondly, the doctor may find that the patient's social or economic environment is so adverse that the results of medical therapy will be vitiated without adequate social intervention. Consider, for example, the problems confronting the family doctor who is looking after an old person living alone on an inadequate pension, or supervising the prenatal care of an unmarried mother, or treating illnesses in patients who are at the same time suffering from the effects of gross malnutrition, inadequate housing, family deprivation, etc. The physician, therefore, on behalf of his patients, makes use of a great variety of social services.

The family doctor should maintain close relations with the district health officers, social agencies, rural councils and municipalities. Public health services—particularly personal medical services for specific groups such as expectant mothers, pre-school children and schoolchildren, old people and the physically or emotionally handicapped—often impinge on, or even overlap, the work of the family doctor. The method of operation of these services varies considerably from one country to another, and within a country, urban and rural practice are often substantially quite different. Sometimes the family doctor himself undertakes, on a part-time basis, some of the functions on behalf of the local health authority. Whatever the actual administrative arrangements, the implication is that the family doctor must have considerable knowledge of the aims of the community-based preventive services. In many countries there is a considerable variety of medical-social agencies, as well as variety in the auspices under which they are provided. In some countries practically all social services are an integral part of the social services of the State, while, in others, voluntary, national or local organizations support such activities as the prevention of cruelty to children, family planning, marriage guidance, etc. Whether these services are provided on a voluntary or a statutory basis,

however, there is room to consider the special responsibilities and duties of the family doctor as a citizen in assisting, or collaborating with, agencies with which he is not directly professionally concerned. All these preoccupations are time-consuming. In some circumstances, the family doctor will make good use of his paramedical personnel for maintaining these contacts. In countries in which physicians are assigned community responsibility for health, many of these services come under their direct supervision. There remain other activities and agencies in community development with which the physician must maintain an effective working relationship.

5.2 Specialists

There exists a wide range of arrangements for the family practitioner to use a specialist's services for consultation. On some occasions, the patient may contact the specialist directly; on others, he must be referred by the family physician. The arrangements differ especially in rural and urban areas. In many countries, the internist and paediatrician play an important role as family practitioners and in these countries they are really functioning as "front-line" practitioners rather than as consultants. All in all, the relationship between the family practitioner and the consultant-specialist should be similar to that between the family practitioner and the hospital, in that effective medical care of the patient often calls for a contribution from both. The availability of, and free access to, the consultant is, of course, of the greatest importance to the family doctor.

5.3 Auxiliary and paramedical personnel

Essential to the effective functioning of auxiliary¹ and paramedical personnel is the clear definition of their responsibilities and role and their position in the local medical and health hierarchy. In most of the developed countries such a wide range of personnel are found working together in medical and health institutions and agencies that overlapping of function sometimes occurs. The family physician must be familiar with this range of activities and learn how to help each person to make his best contribution.

In developing countries these same principles apply, although the range of paramedical personnel may be different. There may also be auxiliaries who, under the supervision of the doctor, carry out curative functions which are more extensive than the curative functions which have always been performed by nurses. These individuals should be particularly carefully supervised. The final decision about these relationships should

¹ *Wld Hlth Org. techn. Rep. Ser.*, 1961, 212.

remain with the physician. He has responsibility for creating an atmosphere of team work by balancing the delegation of responsibility with adequate supervision.

Finally, in family practice, the doctor often needs to establish an effective relationship with a variety of other individuals in the community who, while not functioning primarily as social workers, frequently discharge some of these functions in the course of their routine duties—for example, teachers, priests, youth leaders, trade union organizers, shop stewards, etc.

6. TRAINING FOR FAMILY PRACTICE: THE FOUR PHASES

The education of the physician starts in medical school and continues throughout his life. It is possible to identify four phases—namely, undergraduate, graduate (internship), post-graduate and a final phase of continuing in-service training. Each of these phases has its special needs and brings its special challenges to the medical educator. All four phases are interrelated but the emphasis given in any particular phase will vary from country to country and from time to time within a given country.

Although striking differences exist in the medical needs of different countries in respect of doctors and auxiliary personnel, it is suggested that a common pattern for the training of the physician for family practice can be considered for all countries. Details of how this pattern evolves and the emphasis given at any point in time must vary with the social, economic and cultural patterns of the country and its current medical problems as reflected in current morbidity and mortality patterns.

The training of the family doctor should naturally include also the concepts and principles of health education applicable to his work.¹

6.1 Undergraduate education

This is the period which begins when the student enters medical school and ends with his final examination immediately preceding internship or, in those countries which have no compulsory internship, with the granting of the licence to practise. During this time, medical education should be similar for all doctors. Such a period of common training imbues the student with the idea of the indivisibility of medicine, with the need to understand the role of medicine in the different settings of hospital, community, preventive and public health services, and the academic fields of research and advancement of knowledge. He should know, too, something about the health needs and patterns of medical care in countries other than his own.

¹ *Wld Hlth Org. techn. Rep. Ser.*, 1958, 156 (see also page 11).

It should be the collective responsibility of all departments of every medical school to ensure that every student has a basic understanding of the nature of family practice and of its relationships with other branches of medicine; and to provide each student with an opportunity of observing in a practical setting the work of the family doctor, of studying the patient in his home environment and thus of learning something at first hand about the day-to-day challenges facing medicine in open society. There are a great variety of ways in which medical schools can, and do, provide for this kind of instruction. Teaching in these areas is in fact undertaken in many different schools under a variety of auspices. In some schools, for example, a paediatrician, a psychiatrist, or a surgeon with a particular interest in rehabilitation and after-care has experimented with programmes which involve taking the student from the hospital or its out-patient clinics into the community. In other instances the professor of internal medicine has taken the initiative. Well-established departments of preventive and social medicine have undertaken this responsibility. In almost all these instances the teacher's main concern has been not so much with the advancement of his own subject as with a broadening of the students' educational experience. In other words, the emphasis has not been on vocational training for medical practice so much as on exploiting the circumstances of general practice and community medicine as a means of broadening basic education of all students, irrespective of their post-graduate career.

What is required in this undergraduate phase, therefore, is a change of emphasis and a widening of our educational horizons. Every medical school teacher can contribute to the achievement of this goal.

During the preclinical period of the undergraduate curriculum the student should be given courses in sociology, psychology, social anthropology, population genetics, biostatistics etc. This may be the responsibility of a department of preventive and social medicine. Teaching about growth and development, physical environmental factors and epidemiology should be integrated with anatomy, physiology, microbiology and pathology.

In some instances, an apprenticeship with a family practitioner may be an excellent form of training for a senior medical student.

6.1.1 *Settings*

Some of the settings and special teaching techniques by means of which teachers in the clinical disciplines can assist in attaining the above-mentioned objectives are indicated below.

6.1.1.1 *Out-patient teaching departments and policlinics*

Perhaps the quickest and most effective way of bringing about a reorientation in teaching consists in increasing the emphasis on out-patient, as

contrasted with in-patient, teaching. Every clinical teacher who spends a substantial period of time with his students in the out-patient departments is provided with opportunities which might be denied him if he confined his activities to the wards of his hospital. Out-patient departments provide a wider range of clinical material, and more opportunities for teacher and student to examine undifferentiated problems in diagnosis and management. In this situation, too, the social, as contrasted with the clinical, features of the patient's problems are shown in sharper perspective. The out-patient department and polyclinic frequently furnish opportunities to demonstrate the special problems of continuity of care and supervision in chronic disabling conditions, as well as the acute resolving conditions. Students can often be given more responsibility for assisting in the continuing surveillance of such patients than is the case with in-patients. In some medical schools students are not only given delegated and continuing responsibility for patients in this category but are also asked to provide medical care for the other individuals in the households or families of these patients. These exercises enable the student to gain some insight into clinical and social problems associated with continuity of care and provide him with opportunities to study over a *prolonged* period the natural history of disease.

Many out-patient departments have also to deal not only with quality but with quantity. Here the student can be led by his clinical teachers to learn about decision-making in situations where the trivial and the severe, the major and the minor, the organic and emotional illnesses, all appear in rapid succession.

6.1.1.2 *Dispensaries*

Dispensaries are essentially general-purpose hospital out-patient annexes where ambulatory care can be provided to patients who could not otherwise gain direct access to general medical care. Where a dispensary is to be used for the teaching of medical students, however, it is essential that there should be *an adequate ratio of qualified staff* for teaching and for clinical supervision. The main disadvantages of this method are that the patients themselves do not have a personal physician and the student is, in fact, providing a form of medical care on an episodic basis. Real continuity of personal care cannot be maintained.

A further modification of the general dispensary takes the form of a dispensary, or peripheral, clinic dealing with specific disease groups (tuberculosis, venereal diseases, rheumatic diseases), or age or social categories (children's dispensary, factory dispensary). What such a dispensary has to offer is direct access, so that the student can see major and minor manifestations of disease. Where the clientele is almost exclusively ambulatory and often poor, the student is introduced in stark reality to the problems of

providing medical care in the patient's immediate material and physical environment. This environment cannot be controlled, as is the case during hospitalization. The patient has to leave the doctor's consulting-room to return to the same home, work and community situation, and the doctor has to come to terms with the problems that this poses in the management of illness.

6.1.1.3 *The teaching health centre*

The teaching health centre, which is functionally a peripheral unit of the hospital, has much to commend it. This is particularly so when the centre offers both curative and preventive services for the population in its neighbourhood. In its most effective form, as far as teaching is concerned, the teaching health centre should be staffed and supervised by the teaching hospital. A community and family health centre conducted under these auspices provides the clinical teachers of a medical school with unique opportunities for demonstrating to students in a practical setting the interdependence of different branches of the profession and the need for a comprehensive and integrated approach to the solution of the day-to-day medical needs of a community. In its ideal form the teaching health centre consists of one or more family practices which provide full-time, integrated and comprehensive medical care for a group of patients on a continuing basis. The practice should be located near the medical school for easy access of students in the clinical phase of their instruction. The family doctors should be well qualified and their clinical performance should be such as can stand up to the close and critical scrutiny of both students and specialist staff of the teaching hospital medical school. In the course of their daily work the family doctors should maintain constant contact and liaison with their clinical colleagues in the teaching hospital and with the medical and social agencies of the community. They should be adequately reinforced with such personnel as, for example, nurses and medical social workers, and should be provided with adequate secretarial assistance ; and they should maintain detailed clinical and social records. Where appropriate, ancillary or laboratory aids to diagnosis should be provided. In deciding on the number of patients for which each doctor should be responsible, allowance should be made for the fact that considerable demands will be made on the doctor's time in respect of teaching. Furthermore, the staff of such a unit should be expected to contribute in varying degree to the advancement of knowledge by prosecuting research and inquiry which is designed to raise the standards of work done by the family doctor.

The method of teaching which can be employed in such a situation embodies essentially the idea and the ideals of an apprenticeship system. Here the student is attached to an experienced family doctor, sits in with him in his consulting-room, and accompanies him on home visits. The student's role to begin with is that of observer, but a skilled and experienced

family doctor can be taught to manoeuvre the student into a doctor-patient relationship so that the family doctor retreats—though definitely remaining in the background as consultant and adviser—and the student under his close personal supervision begins to assume the responsibility for evaluating an undifferentiated problem which is new and freshly presented by the patient. The essentials of this form of teaching are that the student should see an experienced doctor being put on the spot, being confronted by a new and undifferentiated situation, where he does not know what is going to happen when the consulting-room door opens and a fresh consultation begins. Under these circumstances, the student, in observing a series of consultations, quickly grasps the significance of direct and continuing access which the patient enjoys in respect of his family doctor. Major and minor illnesses, organically or psychologically determined, appear in rapid succession. The doctor has to change his role from executive, authoritative, decision-making, to that of allowing the patient to engage in emotional catharsis, and attempting to answer questions: What kind of a person is this patient? Why did he take ill when he did? Why did the illness take the form that it did? The student's early response to this situation often is one of rejection. Patients often come to the doctor with "very trivial" conditions. They sometimes come to the doctor when there is nothing wrong with them. But, if given enough time and encouragement, the student can himself reach the conclusion that there must be something wrong with the patient who comes to the doctor when there is "nothing wrong" with him.

The essentials of this form of teaching are that the medical school owns or certainly controls a family practice or series of practices which can be regarded as a teaching and research laboratory, in which every department of the medical school can or should have a vested interest. By this means, the teachers who are experienced family doctors can themselves be selected and trained, and exposed to an academic atmosphere with a lively appreciation of the interdependence of optimal medical care, teaching and prosecution of research, not only within the practices themselves, but also reinforced by effective collaboration and integration with other academic departments. The routine of the practice must be demonstrably related to the routine work of other clinical departments and with public health and social medicine institutes in the neighbourhood, and the teachers should themselves be actively engaged in family practice with continuing responsibility for the care of their patients. The provision of such facilities, unfortunately, can be very costly since they represent an optimum rather than a practical or economic form of family practice. They can only be justified on the grounds that they constitute a model to be used for teaching and research purposes.

The components of this setting and the methods of teaching appeared to the Committee to be of primary importance and their essentials suitable for application in almost any setting. In the developing countries, however,

the local circumstances, with particular reference to availability of medical manpower and auxiliaries, will obviously necessitate different proportions in the composition of such a teaching and service-giving team. However, so long as these factors are considered in a realistic way, the establishment of such a centre, the actual staffing pattern and its day-to-day function are really matters of local importance only, as far as medical education is concerned.

6.1.1.4 *The patient's home*

Frequent reference has been made to the need for the student to work with patients in families in their home environment. It is educationally worth while for students to be exposed to the wide range of home conditions that exist in any society—and even one visit can open the eyes of a student. Such experiences can also be severely traumatic if the student is not given adequate technical and psychological support. Close supervision is essential. Rash decisions are particularly hazardous. Emotional identification with the whole family or with particular individuals in family disputes can lead to unfortunate repercussions for both the student and his supervisors. Perhaps most to be guarded against is the common danger that medical students may get to feel that many families are absolutely hopeless, that their socio-economic environment precludes any possibility of contribution by a sincere physician. It is always important to stress whatever is optimistic in the home and to build on small successes. No other means of teaching appropriate attitudes is as effective as properly to guide a student through an experience in which he has been shocked or otherwise emotionally involved.

Another very important aspect of the need for teaching in the home is related to the care of the sick individual. Since the effectiveness of medical care depends to a great extent on its correct application in the home conditions of the patient—when he is bed-ridden, but also in other cases—the doctor must be prepared to advise the family on the creation of most appropriate conditions within the realistic possibilities of the family. These conditions should relate to the patient's personal well-being, as well as to the application of the prescribed medical, nursing and other procedures. In appropriate cases, consideration will be given to concern for the well-being of other members of the family and of the neighbours (e.g., communicable diseases, mental disorders, etc.).

6.1.1.5 *In-patient department*

In general, hospital wards give excellent opportunities for teaching family practice. Everything here depends on the clinical teacher. He may easily use the hospitalized patients to focus the students' attention on the interrelation of the patients' diseases and their family conditions. He can use the social and family implication for the illness of the patient as a means

of bringing to the students' attention the importance of these considerations in the total care of the patient. Routine case conferences by the bedside, weekly medical-social ward-rounds, or pre-discharge conferences, in which the clinician and the medical-social worker make a routine joint appraisal of the clinical and social aspects of the patient's problem at a given point in time, can provide excellent material for student teaching. This is particularly so where, in the student's eyes, the conference does not so much take place as a teaching exercise, but is an essential feature of the routine work of the department.

When the patient's own family doctor visits the hospital for the purpose of liaison, or at the specific invitation of the clinical specialist, the unrehearsed consultation between the family doctor and his specialist colleague which can take place under these circumstances can arouse intense interest and be of great value to the medical students in attendance.

6.1.2 *Special teaching methods*

In all the settings referred to above, which are particularly conducive to the reorientation in undergraduate teaching of the student, each medical school will, of course, develop its own patterns and techniques. The following—which are mentioned only as examples—are some of the methods which have been found to be of value.

6.1.2.1 *Special disease studies*

A chronic disease (e.g., rheumatoid arthritis, rheumatic heart disease, multiple sclerosis, epilepsy, or diabetes mellitus) is selected according to the interest of the clinical teacher. A group of students is helped to frame a questionnaire and a series of patients who have been discharged from hospital care (or are attending infrequently as out-patients) are visited by the students in their homes. Other community sources of information are also contacted, e.g., the general practitioner, the health officer, the public health nurse, or the factory doctor. The exercise can be focused on a study of the natural history of the disease, or an assessment of the psycho-social and economic factors in the etiology of the condition. Alternatively, the focus can be placed on the significance of such factors in the total management of the patient.

6.1.2.2 *Social medicine ward-rounds*

In some schools the department of social medicine itself organizes teaching rounds which take a variety of forms: for example, routine case conferences conducted jointly by the clinician and the professor of social medicine, with or without a medical social worker. At those teaching sessions the progress of in-patients is systematically reviewed with special reference to the social factors in the patient's environment. Decisions are reached

regarding the preventive measures which are required to be taken in the future as a result of these findings. In other instances, the student is asked to expand the social history of the clinical case with which he is currently concerned, and in yet other instances the department, in collaboration with its clinical colleagues, takes the initiative in organizing community visits, including study projects similar to those referred to above.

6.1.2.3 *After-care*

The student is assigned to an in-patient who is about to be discharged. The student is required to make himself thoroughly familiar with all the clinical features of the case. He then visits the patient's home, talks to the family and relatives of the patient and makes an assessment of the home situation. Where appropriate, he visits the patient's place of work and, whenever possible, he discusses the whole problem with the patient's family doctor. He then returns to the hospital and presents his findings to the clinician in charge, to the clinician's colleagues, and to his own fellow students. The findings are reviewed and used to focus attention on the problems of after-care. They provide the basis for action which the hospital may take before the patient is discharged to return home.

6.1.2.4 *Family doctor consultations*

The value of the consultation between the specialist and the visiting family physician at the hospital bedside has already been referred to. In some situations the hospital-based clinical teacher is available to the family doctor for consultation at the health centre or sometimes in the patient's own home. Particularly when this consultation is dealing with a specific problem of diagnosis, prognosis or management, the clinical teacher could, with advantage, take one or more of his students with him on such a visit.

6.1.2.5 *Studies in medical care*

In schools which assist students, under supervision, to carry out simple research projects, opportunities are sometimes provided for a student or a group of students to take part in operational studies in medical care. For example, one group visited and made a clinical and social appraisal of all the women whose names had for more than three months been on the waiting-list for admission to the gynaecological wards of the teaching hospital. In another instance, a student was assigned to a general practice in order to study the clinical features of a group of patients whose only common characteristic was that they made an excessively high demand on the doctor's services.

6.1.2.6 *Student attachment to a family physician*

There is a great variety of forms of student attachment, or preceptorship schemes. In some schools the student pays a series of visits to local

family physicians while continuing with his routine studies in the medical school. These visits can be few or many. Each visit lasts about half a day. In other schools the student is assigned full-time to a practitioner for periods varying from one to eight weeks. Here the student lives with, or near, the family physician and follows him around on a 24-hour basis, observing everything that he does. The degree to which the student is involved in the actual examination and treatment of patients varies considerably. In some medical schools the initiative is left entirely with the student. In others the student has been encouraged to take part in these expeditions by his clinical teacher and in some instances the teacher has selected the family doctor to whom the student is to be assigned. There are many administrative, professional and technical problems associated with the majority of these projects. It is not always easy to select family doctors having the clinical calibre and technical competence sometimes demanded by a medical school. It is difficult to produce a co-ordinated scheme for a substantial number of students involving a large number of family doctors who are in independent practice and who vary considerably in their professional, academic and clinical performance. It is difficult to arrive at a universally accepted policy with regard to both what should be taught and the method of teaching. There is no doubt, however, that these and similar schemes merit close scrutiny and evaluation and that medical schools would do well not to reject them because of their difficulties but rather to subject them to closer study so that some of the problems raised can be solved. For this purpose it is desirable to produce from among the ranks of general practitioners and family doctors a few who can make a special contribution in this field by providing them with advanced training in the techniques and skills of teaching.

An ingredient which will probably improve the teaching relationship in preceptorship is direct supervision by the medical school faculty. A promising example of such a programme has recently been introduced at Lexington, Ky., USA. Faculty members with joint teaching appointments in the Departments of Community Medicine and Internal Medicine visit each of the clinical clerks once a week during their field experience.

In summary, therefore, training for family practice during the undergraduate phase calls for change in emphasis and orientation in the curriculum which is common to all medical students, rather than the addition of detailed and specific subject matter.

6.2 Graduate training or internship

This is the phase of widening clinical experience and the acquisition through practice of basic clinical skills and judgement. For most graduates this simply consists of the internship year or an extension of the hospital

internship. It was the feeling of the Committee that medical schools should take more responsibility for this period of training.

This period, if it is relatively short, need not be specially orientated towards family medicine, although economic and other considerations may oblige the young graduate right at the beginning of this phase to select his first hospital post with a future career in general practice already in mind. In some countries this is not necessary since the internship experience is already prescribed to a common pattern for all graduates irrespective of their future work. For example, in Norway all medical graduates must spend six months in the medical services and six months in the surgical division of an approved hospital, as well as undergo six months of attachment to a district medical officer.

The major clinical disciplines which have most to offer in the way of relevant clinical experience to the aspirant to family practice are internal medicine, casualty surgery, paediatrics, obstetrics and gynaecology, and psychological medicine. In many countries these are the most popular house-officer posts chosen by the graduate preparing himself for family practice. The amount of time given to these subjects, however, will vary because of at least two factors: (a) the emphasis which has already been given to practical training during the undergraduate phase; and (b) the particular system of organization of general practice services in the community concerned. For example, where there is a wide administrative gulf in the organization of obstetric and paediatric services, as distinct from other general medical services in the community, the young graduate might tend to neglect one or other or both of these subjects. The Committee recommended, however, that the future family doctor gain substantial experience in both of these subjects, since—although he may not practise them to any extent—their content and the experience which they offer have a high relevance to the other tasks which he will be required to perform as a family doctor.

Rotating internships, which give a limited experience in a large number of other specialties such as ophthalmology, otorhinolaryngology and dermatology, are of particular value to the family doctor in training. At this phase the young graduate should be guided in his choice of experience with particular reference to the patterns of illness of the country with which he will be concerned. For example, in some situations considerably more emphasis will be required on the management of infectious disease, and the doctor who is to work as an independent agent in the community may need to acquire additional experience and skills in the use of laboratory techniques and other aids to diagnosis. Similarly, since the graduate phase provides an opportunity for making good some of the deficiencies of the undergraduate curriculum, graduates from schools which place little emphasis on the preventive and social aspects of medical practice can reinforce their experience during their graduate hospital work by visiting

and studying the work of preventive and public health clinics in the hinterland of their hospital, by choosing peripheral non-teaching hospitals rather than the central specialized teaching hospital, and by making contact with the family physicians using these hospitals or referring patients to them. Of particular interest in this connexion is the programme in India where two to three months of the required rotating internship are to be spent in a rural health centre, preferably the teaching health centre of the medical school.

6.3 Post-graduate training

Post-graduate training specifically designed for the entrant to family practice represents a phase which has probably been given least attention in most countries until now. It was the Committee's strong feeling that much more attention should be given and more action taken in order to provide the family physician with a wide range of post-graduate facilities. Here brief reference is made to three aspects of the subject : (a) training in family practice itself ; (b) the contribution of the hospital ; and (c) the contribution of the medical school and other institutions.

6.3.1 *Traineeships*

Potentially among the most important methods of ensuring that the young graduate receives adequate and supervised instruction in the important early formative post-graduate years is the traineeship programme. As developed in the United Kingdom, the traineeship has most of the advantages, and few of the disadvantages, of the old apprenticeship system. In other words the trainee learns by doing : he is given clinical responsibility and, in a sense, his real teacher is the patient ; at the same time, he is protected from exploitation as a form of cheap labour, and by careful selection and continuing review of the trainer and the circumstances of his practice, the trainee is guaranteed an opportunity of observing optimum practice under reasonable conditions. The selection of the trainer is of vital importance, with regard both to his personal, professional and academic qualities (including his ability to teach), and to the circumstances of his practice. In ideal circumstances the trainee would be provided with targets and standards to emulate when later on he is in independent practice. At the same time, he is given an opportunity to discover more about himself and his deficiencies and needs—which, in fact, is the ideal way to begin any form of training. It is important that the trainee should discover his technical and professional deficiencies and learn something about his own emotional and psychological reactions to certain kinds of patients and certain kinds of problems. Thus will he be led, on a rational basis, to plan his own further study and training in the immediate future. For

example, some trainees at the end of one year in general practice have a much more lively sense of the need to return to hospital in order to obtain further training in certain clinical areas in which their experience has already shown them to be deficient. Ideally, then, the traineeship scheme should provide for some continuing association with a teaching hospital or its clinics during the traineeship period.

The strength and the weakness of the traineeship scheme lie in the fact that the trainee is committed for a substantial period to one doctor in one practice. Experienced and efficient though the trainer may be, it is of considerable advantage to the young post-graduate to be exposed to and to learn something from more than one teacher. Since the circumstances of family practice vary considerably from one practice to another, even when identical administrative systems prevail, the trainee should be given the opportunity of seeing a number of different practices. Where there is a variety of different arrangements for family practice, partnership practice, policlinic practice, practice confined to the provision of curative services, and group or partnership practice conducted in association with the public health and preventive medicine services, the trainee should be given an opportunity of studying the advantages and disadvantages of these different kinds of arrangement.

6.3.2 *The hospital*

The hospital, in its in-patient and out-patient departments, has a major role to play in carrying on where the medical school left off. It must enable the trainee, and indeed the established family doctor, to return for varying periods from the community in order to add to their knowledge and advance their skills on the basis of their undergraduate education and post-graduate experience of the practice of medicine in the field. One can go further and state that while hospitals and medical schools have clearly a great deal to offer in advanced professional and technical training of the family doctor, in the planning of their post-graduate programmes they would do well to consult the customers—i.e., the post-graduate students—so that they in turn can be given an opportunity of expressing their special and individual needs for further instruction based on their actual experience of family medicine.

6.3.3 *Medical schools and related institutions*

In an earlier part of this report it was suggested that, as a natural consequence of the developments of specialization and of the factors which exercise a selective action on the nature of the clinical problems which are referred to hospital, many of the technical problems confronting the family doctor have little reference to the routine work of the modern hospital. A review of the changing patterns of family practice, as seen in

many different countries, indicates that the greatest future development is likely to be of concern to the academic disciplines of public health, social medicine, psychiatry, sociology, and the behavioural sciences, including anthropology. It is in search of a solution for problems arising in these disciplines that the family doctor will have to turn to the medical schools (as distinct from hospitals as such) and their related faculties of social science.

Evidence that there has been thinking along these lines is gleaned from developments which are occurring in, for example, Israel and Yugoslavia. In Israel a four-year training programme in general practice for medical graduates has recently been announced. This is, in fact, a residency programme for family medicine which commences after one year of rotating internship, the latter being compulsory for all graduates. The four-year programme consists of:

- 2 years in full-time traineeship in general practice (of which one year must be spent in a health centre where both curative and preventive medicine are practised);
- 1 year of hospital practice;
- 1 final year of full-time study for which the Department of Preventive and Social Medicine of the Medical School in Jerusalem will be mainly responsible.

It is relevant to record that this department itself is involved in the provision of a medical care service. It provides a family doctor service for a special sector of the city. The department, too, has an active research programme, which includes epidemiological exercises jointly undertaken by members of the department and their clinical colleagues in the medical school—for example, in paediatrics, rheumatology and surgery. The medical-social workers of the teaching hospital are under the academic and administrative supervision of the Department of Preventive and Social Medicine.

Two years ago in Zagreb a three-year post-graduate programme for general practitioners was launched.¹ This has many features in common with the Israeli programme, but one important difference is that it combines not graduate with post-graduate but post-graduate with in-service training of the general practitioner. The students in this course are all established in, and actually practising, family medicine. During the three years, 25 months are devoted to seminar work which runs parallel (three hours, three times a week) with the routine practice work of the doctors taking the course. The course also allows for five months' full-time study (mostly public health subjects) planned and carried out by the "Andrija Stampar"

¹ "Andrija Stampar" School of Public Health (1962) *Annual report 1961/1962*, Zagreb, University of Zagreb Medical Faculty.

School of Public Health. It should be noted that this school has a responsibility for training not only graduates (for example, M.P.H. courses), but also undergraduates, in preventive medicine and public health. The School has effective interdepartmental relationships for both teaching and research with the medical school itself and with social science departments of the University of Zagreb.

While these courses were designed to meet specific post-graduate needs of the family doctor, not the least important of their by-products will be the creation of a pool of specially trained post-graduates who, having themselves had a substantial experience of family practice, can in due course be recruited to the staff of academic departments, with a view to engaging in teaching and research in the field of family medicine.

6.4 Continuing in-service training

It is a truism to state that we live in an era of rapidly advancing medical knowledge and techniques which can in a short space of time revolutionize the doctor's work both in diagnosis and therapy. For the specialist these advances are at least confined to one field but the speed with which far-reaching changes from a great variety of fields become translated into family practice has accelerated considerably in recent years. In the field of therapeutics alone, for example, as much as 50% of the drugs prescribed today in family practice did not exist little more than a decade ago. Yet it is only comparatively recently that there has been any wide acceptance of the need for the family doctor to remain *in statu pupillari* throughout his professional lifetime.

6.4.1 Routine contacts with the hospital

For many of his needs in respect of continuing in-service training the family doctor must maintain close links with the hospital. Probably the ideal form of such training is that which occurs in the course of consultation where family doctor and specialist meet to discuss a specific problem. But the hospital has a general responsibility to contribute to the continuing training of the family doctor. In ideal circumstances the hospital should be so organized that visiting local family doctors are made welcome to come and discuss their cases, to use the hospital laboratories and libraries, and to discuss with their consultant and specialist colleagues problems and common clinical or research interests.

6.4.2 The medical school

The medical school also has a responsibility and an opportunity to contribute to the continuing training of family doctors in its hinterland.

Here a plea might be made for widening the horizons and the content of formal and informal instruction provided for local family physicians. Too often such training is narrowly concerned with technical procedures in diagnosis and therapy and recent advances in purely applied (clinical) fields. Medicine as a whole is advancing so rapidly that more attention might, with profit, be paid to providing in addition courses of instruction and refresher courses dealing with recent advances in preclinical and para-clinical subjects. In many countries, up to 50% of doctors in active family practice left their medical schools before the advent of antibiotics or even of sulfonamides. Such doctors may well have mastered the techniques and the minutiae of the use of antibiotics in a practical situation, but their basic thinking about the nature of pathology, for example, is still as taught to them in medical schools in the prechemotherapeutic era. Similarly, on the subject of pharmacology, there is some truth in the generalization that a little over 25 years ago at least half of the drugs in common use in general practice were comparatively inert, or at least pharmacologically harmless. This contrasts sharply with the dilemma of the modern family doctor who is daily confronted with a bewildering range of new products which are certainly not inert. A restatement of modern pharmacology could be helpful to the senior doctor established some years in general practice in assisting him to deal with this kind of problem. In some countries (Denmark, Israel, Peru and others) teaching squads are sent to one or to a group of general practitioners. These squads may be composed of a clinical consultant, a basic-science teacher and a public health worker. They discuss specific problems with the physician by using his own cases for teaching purposes.

6.4.3 *Refresher courses*

Formal refresher courses, usually based on a hospital, constitute a valuable source of post-graduate and continuing in-service training for the family physician. These vary enormously in range, content and emphasis, and from country to country. In some countries, for example in the United Kingdom, a regular fixed period of training of the post-graduate refresher-course type, free of charge, is written into the conditions of service as part of the contract of the general practitioner in the British National Health Service. Similar arrangements are made in other countries, where the provision of general practice care is not made directly by the government itself. In Israel, for example, the Kupat Holim, an agency which in fact employs the family doctor, makes financial provision and administrative arrangements so that he can participate in regular post-graduate training. In the United States of America, Western Germany and other countries the inducement offered is that physicians can deduct from their income tax expenses connected with post-graduate courses.

Post-graduate courses arranged by the hospital can vary in form from occasional lectures, half-day courses or week-end residential courses, to full-time courses of two to three weeks or more, especially designed for family doctors. A popular form of post-graduate training which fits in with the family doctor's working routine consists of a meeting for a few hours on a fixed day once a week, for example, for three months. During this period a series of unrelated subjects and problems can be presented ; or, alternatively, a subject can be dealt with systematically over a period of three to four months.

The actual arrangements for these courses also vary considerably from country to country, and within a country according to the needs of individual doctors. For example, in the Chapel Hill area of North Carolina, regular post-graduate case conference presentations take place at weekly intervals. These are broadcast by radio and sometimes by television from the University centre over an area with a radius of 100 miles. General practitioners assemble in one or other of as many as 14 different isolated hospitals over a lunchtime period of two hours to hear the broadcast and discuss the problems presented. Each hospital is linked by radio-telephone with the centre from which the programme emanates, so that this virtually amounts to a conference on a particular theme with a group of specialists presenting a problem and a group of as many as 400 general practitioners all taking part—although geographically isolated. An attractive feature is that the general practitioners can attend these weekly sessions with the minimum disruption of their daily routine.

In yet other areas, gramophone records and tape recordings have been used to enable statements or short lectures by experts to be heard and reheard by isolated doctors in rural areas. In some instances, this method can be extended by circulating the tape ; each doctor can add his question or commentary to the tape, and thus the whole group enjoys some of the advantages of a clinical meeting or conference.

6.4.4 *Seminars*

The seminar technique should perhaps be singled out as one of the methods which can be specially adapted to meet the needs of the established physician. A notable example of the way in which this technique has been adapted to the continuing training of family doctors over a period, and in a specific field, is to be found at the Tavistock Institute, London. It is of considerable advantage to focus on a single subject over a period and thus enable a physician to study the subject in systematic and co-ordinated fashion from the literature and standard texts. Perhaps its greatest advantage is that in this particular form of training the students (i.e., the family doctors) bring to the seminar their own case material. It is the common, but frequently complex and difficult, problems of routine family practice which

provide the basis for discussion. This is also true of the final form of in-service training—namely, the case conference.

6.4.5 Case conferences

As general practitioners tend more and more to work in partnership, in group practice, or in health centres, so the possibilities are enhanced for regular professional exchanges. In favourable circumstances these meetings can assume the character of a case conference at which the general practitioners continue their own in-service training by discussing clinical or social problems from their own practices which are still unsolved. This arrangement is particularly attractive to the younger doctor who might otherwise hesitate to enter family practice, and particularly single-handed practice, with its hazards of professional isolation and difficulty in sharing responsibility with, or securing the support of, a more senior colleague. The case conference achieves even more significance and value when it is extended to include not only the family doctor, but also his paramedical colleagues and associates, for example, the public health nurse, or district nurse, who often bring a different viewpoint and a helpful contribution to a problem. The team may thus, for example, find it more helpful and meaningful to review a total family situation rather than the specific problem, medical or social, of the individual patient. In an Edinburgh scheme^{1, 2} the contribution of the trained medical social worker was found to be of particular value at these routine case conferences which, apart from constituting a regular (for example, daily) exchange of information, provided a kind of intelligence report, or situation report, for a team of individuals all concerned in greater or lesser degree with the comprehensive medical and social care of a group of families. The case conference technique can, in fact, be deliberately used as a vehicle for in-service training. The trained medical social worker is apt to bring a slightly different point of view from that of the nurse or of his medical colleague, when discussing, for example, the uncooperative patient, the difficult patient, the unlovely person, the incurable, the chronic high user of services, or the hypochondriacal person. Although in these situations a thorough medical appraisal and a thorough search for an organic cause of the illness are essential, often the clue to the patient's behaviour, or even to the doctor's attitude to his patient and to the problem, is to be found by examining the dynamics of the situation and the nature of the personal relationships which the patient has with his doctor, with his family, with his employer, with the community. From time to time this case conference of people working regularly together can be reinforced by inviting experts and specialists to

¹ Scott, R. (1956) *J. med. Educ.*, **31**, 621.

² Scott, R., Anderson, J. A. D. & Cartwright, A. (1960) *Brit. med. J.*, **2**, 466.

help with a specific problem. Thus, the specialist called from the hospital in domiciliary consultation can, with profit, discuss the problem not only with the individual doctor concerned but with the team, to the great advantage of all concerned, not least of the patient. Where doctors have established regular routine case conferences of this type, these can also be reinforced by regular visits from a particular specialist, for example, a psychiatrist or social medicine expert, so that there can be a continuing review not merely of individual cases, but of common, recurring, and sometimes quite complex medical and social problems.

7. RECOMMENDATIONS

In every country in the world there appears to be a dearth of family physicians ; this applies to all countries irrespective of their stage of development. The Committee recognized that there are many factors other than considerations of education and training which—in the final analysis—determine the quality of family medical care. In confining itself to the education and training facets of the problem, the Committee made the following recommendations which, if implemented, would result in a raising of the standard of family medicine everywhere. In singling out these recommendations, the Committee wished to point out, however, that many other measures had also been discussed and may be found in the appropriate sections of this report.

1. Every medical school should provide opportunities for its undergraduates to receive some of their training in the setting of family practice. This experience should be common to all students and not confined to those who are likely to become family doctors. The methods adopted by a medical school in providing teaching in this extramural setting will clearly require to be adapted to the local resources and circumstances.

2. In order to raise the standards of family medicine, all graduates who choose family practice as their future work should undergo a period of post-graduate study and preparation specially designed to meet their needs in this field of medicine. Details must of necessity be left to the countries concerned. A substantial amount of this training should be given in the actual setting of general practice, although hospital experience, public health and preventive medicine and the psychological aspects of medicine should all be represented in this phase of training.

3. Whatever the basis of his undergraduate and post-graduate training, the family doctor ought to be a "perpetual student" throughout his professional life. Every effort should be made to remove such obstacles as may render it difficult for the family doctor to participate fully in continuing training, whatever his financial compensation, the organizational frame-

work of health and welfare services, or other circumstances in which he works.

4. More research should be undertaken in this field of medicine. Morbidity studies in different countries can be of great help to those who have to decide on the priorities of emphasis in undergraduate and post-graduate teaching programmes. There is urgent need for research into the different forms which family practice can assume, not only in various countries, but also in different situations (for example, urban and rural) in the same country. Research should also encompass evaluation of different methods of training, both undergraduate and post-graduate, which are being developed in many countries and in widely differing circumstances.

5. The need for family physicians to participate in the teaching of students has been emphasized. Thus it is necessary to train family doctors in teaching methods in order to render their instruction more effective. One of the means of assisting developing countries is by assignment of teaching staff. In such programmes it is important to bear in mind the advisability of including some physicians who not only have practical experience in family practice but also are acquainted with appropriate teaching methods.

6. At all stages in the training of the family doctor increasing attention should be paid to the development of the skill of working with auxiliary and paramedical personnel. This is particularly urgent in rapidly developing countries where, in attempting to meet all the needs of the community which he serves, the doctor faces the problem of how to strike a balance between preventive and community action on the one hand, and the offering of personal curative services on the other. Well-organized co-operation with properly trained paramedical and auxiliary personnel would multiply the effectiveness of the physician's work.

Annex**THE CONTENT OF GENERAL PRACTICE¹**

A general practitioner should have particular knowledge of the problems which arise in the course of a family doctor's work and of the personal service he can give to his patients, related to the environment and circumstances in which people spend their lives and are seen by their doctor, and to the effects of illness on patients themselves, on their families, and on the community. He should be expert in the recognition and management of the commoner diseases, and be in close touch with contemporary medical and social thought in so far as these impinge on general practice.

He should be well trained in :

Clinical Aspects of General Practice*Prevention of illness*

Epidemiology of the common infectious and contagious diseases, with special emphasis on the general practitioner's part in their prevention and in restricting the spread of epidemics.

Immunology in general practice.

The general practitioner's role in health education and supervision (individual and in groups), and in simple hygiene.

Routine medical examination of infants and children (with details of normal physical and psychological development) and of adults, including the aged.

Accident prevention, especially in children and old people.

Diagnosis

The detection and recognition of early organic and emotional deviations from the normal.

The diagnosis of established illness, with particular reference to the differential diagnosis of those symptoms and signs which are often encountered in general practice.

The recognition of how much a practitioner can achieve by careful history-taking and clinical examination of the patient, with simple patho-

¹ This statement, issued in the United Kingdom by the Council of the College of General Practitioners, is reproduced by kind permission of that body. It was originally published in : *Brit. med. J.*, 1962, 2, 1392.

logical techniques which he can carry out himself, and by the use of other diagnostic aids and screening methods which are commonly at his disposal elsewhere.

The diagnosis of pregnancy and of its abnormalities.

Normal values for pathological tests, and evaluation of the investigations which may be carried out or requested by general practitioners.

Normal and the common abnormal radiographic and electrocardiographic findings.

Prognosis

The importance of prognosis to the patient, his family, and to his occupation.

The assessment of a patient's working capacity.

Treatment

The management of all minor ailments, organic and emotional.

Suitable domiciliary treatment of the more serious illnesses of body and mind.

Relief of discomfort and pain, and all other symptoms.

The care of the chronic sick (both young and old), and of the elderly.

The management of emergencies and accidents in general practice; first aid.

Minor surgery and other therapeutic techniques used in general practice.

Obstetrics in general practice, with antenatal and post-natal care.

Dietetics, including infant feeding.

Rehabilitation and resettlement, including the aftercare of patients of all ages following illness or accidents, whether or not they have been treated in hospital.

The relationship and adjustment of long-term treatment to family and working needs, with special reference to the handicapped.

Terminal care, and the care of the dying.

Social Aspects of General Practice

The many supporting services which family doctors can use in dealing with the problems of patients of all ages, under different family and social circumstances.

The relationship of general practitioners with local health authorities. The co-ordination of patients' needs with these and other health and welfare services (both statutory and voluntary), including the contribution that district nurses, health visitors, midwives, home helps, social workers, mental health officers, and others can make to the well-being of patients.

The part that general practitioners can play in the school health service and in occupational health.

The contribution to general medical care made by the Ministry of Health (or Department of Health for Scotland), the Home Office, the Ministry of Pensions and National Insurance, the Ministry of Labour, the Probation Service, the National Assistance Board, other Government departments, and other organizations.

The family doctor's part as interpreter between his patients and consultants and specialists, hospitals, and medico-social workers.

Organization of General Practice

The different patterns of practice—single-handed practice, partnership, group practice, health centres, clinics, diagnostic and treatment units. Surgery premises and equipment. Prescribing and dispensing in general practice. Record-keeping. Certification and notification. Ancillary help. Appointments systems. Deputizing arrangements and rota systems.

A general understanding of the structure of the National Health Service and of those Acts of Parliament (N.H.S. Acts and Mental Health Acts) which directly affect general practice.

Ethical and Medico-legal Aspects of General Practice

The relationship of general practitioners with their patients, patients' relatives and friends, and with employers.

The ethical relations of family doctors with their general practitioner colleagues and with hospitals, specialists, and consultants.

Their relationships with and obligations to the police, coroners, lawyers, and to the press.

The medico-legal management by general practitioners of accidents, poisoning, sudden death, and death from doubtful causes.

The statutory duties of general practitioners with regard to certification and notification, and to the Dangerous Drugs Act and Regulations.

The Continuing Education of General Practitioners

The different methods by which general practitioners can maintain their continuing education.

Research in General Practice

Awareness and appreciation of the many opportunities for, and the value of, observational and other research in general practice.

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