The Contribution of the General Practitioner to Undergraduate Medical Education

A Statement by the working party appointed by the second European Conference on the Teaching of General Practice
(Leeuwenhorst Netherlands 1974) May 1977

Summary
This statement is about the education of all future doctors.
It discusses:

1. The place of the general practitioner in medical care.
2. The meaning of basic medical education.
3. The reasons why a contribution from general practice is needed in the basic education of all doctors.
4. The nature of the contribution, in outline and in detail. This is presented as a range of content from which any medical school can choose.
5. The way in which this contribution differs from the content of specific postgraduate preparation for general practice.

There are seven reasons why undergraduate (basic) medical education must include a contribution from general practice:

1. Medical students need to see the way in which most people receive medical care for most of the time when they are in contact with medical services.
2. They need to see medicine in its most integrated form.
3. They need to see medicine centered as much or more on the person as on the "case" or on the use of highly technical means.
4. Students who will become general practitioners (the largest group) need an introduction to this branch which will be developed later in their specific training. Those who will enter other branches need experience of general practice, to which they may act as consultants.
5. Medical students need a chance to see general practice as one of many possible career choices.
6. General practitioners can provide the medical school with a new and very large resource for teaching and research.
7. General practice needs the stimulation which belongs to the teaching of medical students as much as does any other branch.

Introduction
This working party wrote a short statement in 1975 about The General Practitioner in Europe, containing a description of his work and broad educational aims for his training.
The present report by the same working party examines undergraduate education for all doctors and the general practitioner's contribution to it. It therefore stands alongside the 1975 statement, part of which appears as Appendix 2, attached to the present document.
The place of the general practitioner in medical care is fundamental. It has become clearer as specialisation and technology have increased and become more complex. His function and that of the specialist are complementary. Patients need a doctor with a broad range of understanding who is familiar to them; who can decide, together with the patient if medical care is needed; who is able to recognise and
define their problems, and to deal with most himself: who will consult with a specialist as and when he considers this necessary, and will continue to be available until there is no further need, whether or not a specialist is also involved; who will be there again if a new need arises.

Certain recent trends have reinforced the generalist's role in medicine. The cure of acute diseases (especially of infective diseases) has become not only more successful, but takes place more often outside hospital. The problems of caring for patients with chronic diseases have received more emphasis. They too largely receive their treatment outside hospital, often lead a relatively normal family and working life, and require continuity in long term care. The importance of emotional and social problems is better recognised, alike by doctors and patients. The preventive and educational aspects of medical care are seen to need increasing priority in relation to the curative aspects. The disadvantages of specialised have become more obvious - fragmentation, complexity, cost, and risk to the patient.

In our previous statement we described the job of a general practitioner; Appendix 2 therefore describes the doctor whose contribution to undergraduate education we now discuss. Some of his characteristics are shared with other doctors, some are his alone.

Undergraduate medical education in European countries
This does not at present have the same aim in all countries. The main differences are between those countries which are producing a "basic doctor" during this period and those which are producing a doctor who is supposed to be competent to practice as a general practitioner soon after he has qualified. A "basic doctor" is one who at qualification has received a general medical education, but is not yet trained to undertake full responsibility in any particular branch of the profession. He will require further specific training, therefore, for every branch, including general practice.

The working party hopes and expects that all medical schools will aim to produce a ((basic doctor)) and that, after this is done, the specific training of a general practitioner will follow and that this will be obligatory. The general practitioner himself will be crucial as a trainer throughout this later stage.

Why the general practitioner's contribution is needed
Whichever of these two purposes is pursued by a medical school, the contribution of general practitioners also to undergraduate education should always be required, for the following reasons:

1. Medical students need to see and understand the way in which most of the population receive medical care for most of the time they are in contact with medical services. Training confined to hospital patients provides a selected experience, which does not properly represent the wide range of problems presented to medical services. The World Health Organisation (1) has recommended that at each university every medical student should have the chance to see the general practice of medicine, not only theoretically, but practically too, irrespective of his future career. He will gain understanding of problems which are of major importance in themselves and which are not merely variants or minor sub-divisions of the problems raised in hospital practice.

2. They need to see medicine in its most integrated form. This is best demonstrated in the setting of general practice, which is not just an aggregate of all the other specialties of medicine; it can reinforce their teaching and put them into an overall perspective.

3. The process of medical education seems to make students more sensitive to the case than to the person, starting as it does in most schools from a first experience of man as a dead body for anatomical dissection (2-6). It too often leads them to regard knowledge as an end in itself rather than as something to be used, so that the patient will be expected to conform to certain concepts and rules through neglect of the realities which are there to be seen and heard. Contemporary medical education also seems to encourage them to use elaborate technical means rather than to rely in the first place on basic clinical methods. As this document will show, general practice
offers a fundamental contribution which counters each of these trends. Its use as a teaching setting is now an effective reality in several European countries.

4. Since general practitioners form the largest single group in the profession in most European countries, and in view of what has been said above about their role, it is likely that more students will continue to enter this branch than any other. For them a preparatory step is needed which will lead naturally to special training after qualification (it is neither desirable nor possible to provide a full training for general practice in the undergraduate curriculum). Students who are going to become surgeons, psychiatrists, pathologists, for example, will have no other chance to see medicine as it is practiced outside hospital, general practice in particular. This matters, since they will act as consultants to general practitioners in their life-long roles and need to understand the specific possibilities of general practitioner care.

There are still some countries where specialists are directly accessible to patients, as well as sent to them by referral from general practitioners. Direct experience of general practice during the undergraduate period will demonstrate the advantages of the specialist referring the patient to a general practitioner if he or she is to get the full benefit of medical care.

5. Medical students should have a chance to see general practice as one of many career choices. Since students tend to idealise and model themselves on their teachers, it is essential that the model of the good general practitioner should be before them, alongside that of any specialist, and that this model should be seen to be equally acceptable in the medical school. The fact that general practitioners present a model with wide variations will emphasise that what matters is not only what a doctor knows, but what he is.

6. The participation of general practitioners in undergraduate teaching provides the medical school with a new resource, both for teaching and for research. It widens the horizons of the school by involving it more intimately with the community which it serves and keeping it in closer contact with the ever changing needs of the population for medical care. The curriculum can thus be shaped more appropriately.

7. General practice needs the stimulation which belongs to the teaching of undergraduates, just as much as the other branches of the profession need this.

The nature of the general practitioner's contribution

We describe here the general practitioner's contribution so as to show what it can offer within either of the main types of undergraduate course. Every item has already been used in some European medical school; it is unlikely that any is already using all. It will be clear, we hope, that this can be a large contribution, not only suitable for inclusion at a particular stage, but capable also of being interspersed and interwoven with the course as a whole. Used in this way, it can play an integrating role which emphasises the wholeness of medicine by drawing many special themes together; it ought to influence the overall design of the training for all doctors. It should find its place, like the contribution of other special branches, in any process of assessment or examination of the student.

The contribution stems from the setting in which the general practitioner works, the range of problems he faces, the knowledge, skills and attitudes which he brings to their solution, and from what he does and is as a person. It represents a growing body of knowledge, based on research done in general practice; some has been done by general practitioners alone, some has been interdisciplinary work using the very large resource of patients seen in this setting (7-8).

It is necessary here only to stress (1) the wide range and variety of information, problems and solutions with which he has to deal and his constant duty to make syntheses in his thinking and actions. (2) that there are differences in the emphasis laid on particular parts of the clinical process, even though the range of methods is largely shared with specialists. The emphasis generally falls on those which are simple and economical, compared with those used in a hospital setting. (3) that in work with patients, he will complement, re-adapt and broaden what the clinical specialist teaches in hospital. He will reinforce the psycho-social aspects of clinical medicine, adding to what can otherwise be a relatively abstract and
limited picture, and seeking to achieve a proper balance between physical, psychological and social factors in diagnosis, prognosis and treatment. Similarly he will provide a balanced experience of serious disease, mild disease and states of health.

The contribution, which should start as early as possible in the course, can be made both inside a doctor's own practice and within the medical school. Combined teaching can be carried out in either situation; the exchange of ideas which results is of great benefit not only to the student, but also to the teachers involved. Collectively general practice can offer a vast field where people and diseases can be studied.

There is much evidence in favour of one-to-one teaching. Within the practice this is easily provided; it fits the setting of the consultation and is preferred by patients to the presence of a group. General practitioners, even those interested in teaching, are numerous in most European countries, so that one-to-one teaching is more readily provided than anywhere else in the medical school. Group learning is also needed, however, if the student is to develop his professional personality, modify attitudes which may impede or impair his work as a doctor and deal successfully with the anxieties inevitably raised by his encounter with many forms of suffering. Group learning can also assist medical schools in countries where there is a shortage of teachers for one-to-one teaching. Lectures have a limited place.

In this discussion we make no claim to be the only people who can teach all the topics which we enumerate. Many will be shared with other teachers. There are, however, some which lend themselves particularly well to being taught by general practitioners or can only be taught by them and, like other teachers, they therefore need adequate academic resources.

In the field of any science, whether, for instance, physiology, epidemiology, or psychology, it is our function to help and complement and to contribute a point of view from our discipline. We are concerned above all with the application of the science, as are all other clinical teachers. In clinical medicine the extent to which we overlap with other teachers will depend above all on the degree to which their teaching is specialised; the more this is so, the smaller the overlap. The contribution, described in detail in Appendix I, is laid out first as a list, from which a particular medical school can select what it needs, and then as a continuous text.

The whole can be summed up as being about health, diseases, clinical methods and medical services, but, more importantly, about patients, doctors and the student's reaction to what he sees. If the aim could be summarised in one sentence it would be to increase the concern of all students for the care of the patient alongside the cure of disease. It is likely to influence the student's knowledge and skills, but his attitudes most of all. It will help to put the use of technology into a right perspective. We repeat that it is a very broad and general contribution, though it also has features which mark it as a special experience. It is important for all future doctors.

References

7. Royal College of General Practitioners: Present State and Future Needs of General Practice. (3rd Ed.). Reports from General Practice 16 (1973)
Appendix 1

THE GENERAL PRACTITIONER’S CONTRIBUTION IN DETAIL

THE START OF THE UNDERGRADUATE COURSE
General practice demonstrated as one of the ultimate objectives.

BIOLOGICAL SCIENCES
Their application and relevance to patients.

BEHAVIOURAL SCIENCES
Their application and relevance to patients.

EPIDEMIOLOGY
Evidence from general practice concerning the distribution of diseases, their causation, and the planning of medical services.

CLINICAL MEDICINE
Disease and health
Particular aspects of all diseases, including some not seen in hospital.
Multiple diseases in one person. The need for a doctor who can integrate.
Illness without disease.
Undifferentiated symptoms.
Multiple causation of disease and illness.
Health.

People
The effect of disease on the normal pattern of life, including working capacity.
The effect of disease on other family members.
Family, social and economic factors as causes of disease and illness.
Balanced assessment and management of physical, psychological and social components. The relation between mind, body and the environment.

The doctor and his responses
The need for a doctor with very broad coverage who can recognise his own limitations.
The general practice consultation as a learning experience (emphasis on particular aspects of the clinical process and relationship).
Care and cure.
Self-care.
Medical intervention, what is possible, necessary, unnecessary, economic.
Continuity of responsibility.
Teamwork.

TO ELABORATE THE ABOVE HEADINGS.

THE START OF THE UNDERGRADUATE
The general practitioner can contribute to providing a realistic demonstration of what medicine is about, so that the student can carry this picture through the difficult early years, when he is concerned above all with basic sciences and may lose sight of his ultimate objectives. He can also contribute to the introduction of ways of thinking about medicine. In both respects this must be a general view which will be developed further by the medical school in the process of turning students into physicians.
BIOLOGICAL SCIENCES (including anatomy, physiology, bio-chemistry)
The general practitioner's contribution is to demonstrate the application of a science and to influence the concepts of relevance in the minds of teachers, as other clinicians do. It can help to show how a particular science can be important in general practice, by demonstrating its application to patients. In some countries, pre-clinical teachers are not doctors; this makes for a loss in the student's sense of direction. In some medical schools, when seen from the viewpoint of general practice, these subjects may be given too much weight in comparison with others.

BEHAVIOURAL SCIENCES (including psychology, sociology, social anthropology)
Again general practice provides a good setting in which ideas can be illustrated by the experience of patients. The general practitioner's contribution often seems all the more meaningful to medical students because it demonstrates living examples and because he usually talks about them in a language which they understand. The student's observation of how patients communicate with doctors and doctors communicate with patients is a most useful experience. These sciences are concerned with individuals, small groups and populations, each of which is accessible to the general practitioner. They are not all taught in every medical school in Europe. If they are taught, it is not usually doctors who teach and the teaching may be limited to theory.

EPIDEMIOLOGY
This subject enters into both the pre-clinical and the clinical curricula. It has three main concerns; to describe the distribution and size of disease problems in human populations; to identify factors important in causing disease; to provide data essential for the planning, running and evaluation of medical services. The general practitioner has contributions to make to all three aims, based on the demography of his practice. These are referred to in various connections below. By using knowledge derived from the biological and behavioural sciences and from epidemiology in clinical practice, the general practitioner can integrate them, providing that his contacts at the medical school sharpen his awareness of their relevance.

CLINICAL MEDICINE
Diseases and health
The general practitioner's experience gives him particular knowledge about certain aspects of disease: The epidemiology (how frequently does this disease occur in this population?); the presentation (what are the earliest symptoms and signs?); the natural history (especially of such chronic disorders as coronary heart disease, diabetes mellitus or depression); prevention (whether of causes, of the development and complications of established disease, or disability); rehabilitation (the endeavour to restore the patient to his previous state or better, to reach equilibrium with a disability, and to care for himself); emergencies (real dangers and the influence of anxiety). He will contribute most easily on these aspects of common diseases, including those seldom seen in hospital (such as the acute infectious fevers of childhood). Among these will be disorders which appear to be trivial; to demonstrate how and why some of them hide important psychosocial problems is a crucial item of teaching and learning for students. A substantial proportion of a general practitioner's patients present more than one disease simultaneously. He can show how to disentangle the pattern of each disease from the whole situation presented; how to detect disease unsuspected by the patient (for example, hypertension or depression); how to assess priorities (which disease is most important, urgent, or dangerous? Which will require much time from the doctor? Which can be postponed for consideration?); how diseases and treatments may interact in the same patient. Multiple diseases provide one particularly good context for demonstrating the need for a doctor who can make a synthesis, and integrate, through his capacity to recognise and manage many types of disease in a particular person who is in a particular situation, and whom he already knows.
Consideration of diseases must include realising that a substantial proportion of people who consult doctors are ill, yet cannot be ascribed a disease (just as there are others with an obvious disease who do not feel ill). In a substantial proportion assessment and management must be done at the level of symptoms only. In others undifferentiated complaints reveal problems of personality or life situation which cannot be labelled as disease. In either instance the wrong attribution of a disease label can create illness, and even disease, where it does not exist. All these situations are relatively easy to demonstrate and discuss in general practice.

The early presentation of undifferentiated symptoms in the patient's own way provides a natural entry into these basic topics. How and why does a person seek help from his doctor? They can also lead to the understanding of multiple causes, whether of a disease or of a state of illness in a particular person. They can also lead to a consideration of health (the characteristics of healthy people, the wide range of the normal, the factors upon which good health depends and the opportunities and limitations of health promotion).

People

It is relatively easy in general practice for the student to see the effect of disease on a person's normal pattern of life. Its effects on other members of a patient's family can also be shown and this is especially important in chronic or mental or terminal illness.

The opposite situation is equally important. The setting of general practice also reveals easily the effects of such factors as difficulty in family relationships, or social and economic pressures, upon an individual patient. For instance, a disease in one member of a family may start and end coinciding with a period of obvious family stress. Alternatively, the cue may be not so much a disease as undifferentiated complaints, either physical or psychological in nature. Their balanced assessment and accurate definition according to their physical, psychological and social components are vital everyday activities in a general practice and provide fundamental learning to medical students. The results of incorrect assessment (the diagnosis of organic disease where it does not exist or the failure to recognise life-threatening disease where it is masked by psychosocial problems) can be foreseen and discussed in a living example. So, practical demonstration can lead to discussion with the student of the relation between mind, body and environment, since examples abound to the perceptive doctor.

The doctor and his responses

The student in a general practice can see that it is possible and necessary for one doctor to think and work simultaneously upon physical, psychological and social problems. He can see that doctors vary, and that there is room for differing personalities and approaches; that the doctor's personality, attitudes and behaviour are therefore essential variables in the consultation, which cannot be standardized beyond a certain limit.

He can see the necessity for a doctor to know his own limits, to be capable of realizing, and sometimes saying, that he does not know the answer to a problem and to act sometimes without the benefit of certainty. To witness these things can relieve some of the anxieties which afflict many students; that they must fall into one pattern as professional people, that they must know everything, have an answer to every problem, always do something, in fact become superhuman. They can see that patients have the opposite need, to be met by another human being who regards them as equals and tries to treat them as he would wish to be treated himself.

The consultation, whether in the consulting room or the home, forms the central element in a general practitioner's work; it must also be the central learning experience. Most of his skills relate to it; they can be summarized as making a relationship, gathering information, defining and solving problems and managing people in illness. These categories apply to all clinicians; in our setting the emphasis and the most important lessons concern the doctor's previous knowledge of a patient, his capacity to listen, history taking as the dominant method for gathering information (backed up by examination) and the inclusion of an enquiry about how the patient sees his own situation. Explanation and discussion are
especially important as methods of management (to ensure that the patient sees his own situation ~ rightly and has understood what the doctor is saying and doing). Other special lessons from general practice are about the constant need to assess and deal with anxiety; the crucial function of the medical record; and the role of the doctor as a member of a team.

The consultation is the setting in which the doctor reveals his attitudes as well as his knowledge and skills. Attitudes which need to be discussed with students include those towards patients, towards professional colleagues (medical or not) and towards society. They can be seen as facets of the doctor's personality and are to be judged by whether they help or hinder the medical task.

There are certain principles of care and inter-which can best be illustrated in a general

The importance of self care and the patient's responsibility in health and illness.  
The wide range of possible medical interventions. The need to avoid unnecessary interventions, but to grasp every opportunity for effective ones  
"Primum non nocere"  
The need to use, and the possibility of, minimal effective methods.  
The need for continuity of responsibility, whether for individuals, families or a practice population.  
The need to advise the family, as well as the individual, especially in emergencies and terminal care.  
The need to work as a member of a team.

SUMMARY OF APPENDIX 1
This appendix describes the general practitioner's contribution to undergraduate medical education in detail, but not comprehensively. It selects particularly those items which make this contribution different from those of other doctors. In a developing field, it can only be provisional and it inevitably makes assumptions about the educational objectives and programmes of European medical schools to which general practitioners make one contribution among those of many other branches of medicine, but one which is distinguished by its broad and integrative nature. A foundation in the practice of sound clinical medicine remains a central purpose of every medical school. This must be a product of the curriculum as a whole, but clinical medicine is not sound without the values which dominate the thinking in this paper.
Appendix 2

A description of the work of the general practitioner (Quoted from "The General Practitioner in Europe" - a statement by the working party appointed by the second European Conference on the Teaching of General Practice) (Leeuwenhorst Netherlands 1974).

"The general practitioner is a licensed medical graduate who gives personal, primary and continuing care to individuals, families and a practice population, irrespective of age, sex and illness. It is the synthesis of these functions which is unique. He will attend his patients in his consulting room and in their homes and sometimes in a clinic or a hospital. His aim is to make early diagnoses. He will include and integrate physical, psychological and social factors in his considerations about health and illness. This will be expressed in the care of his patients. He will make an initial decision about every problem which is presented to him as a doctor. He will undertake the continuing management of his patients with chronic, recurrent or terminal illnesses. Prolonged contact means that he can use repeated opportunities to gather information at a pace appropriate to each patient ~ and build up a relationship of trust which he can use professionally. He will practice in cooperation with other colleagues, medical and non-medical. He will know how and when to intervene through treatment, prevention and education to promote the health of his patients and their families. He will recognise that he also has a professional responsibility to the community."

The small document from which this quotation comes also lists the educational objectives for the special training of general practitioners after they have qualified as "basic doctors".

At first sight the educational content in the two documents will look similar, but there are fundamental differences of purpose. The present document is for all medical students whatever their future career, the previous one for those who decide on a career in general practice. The content described in the present one is about some fundamentals of medicine which can be learned in a general practice; that in the previous one about how to train specifically for this particular career. The previous document was shorter than the present one, but the volume of content described in it was larger, requiring much more time for learning. It described in a concise manner only the major objectives of vocational training; these were essential minima and each required development in detail. Some of them will not be found in this one. If the content in the present document appears large, it is because it is more tentative and is offered like a menu from which medical schools can choose.
Appendix 3

MEMBERS OF THE WORKING PARTY
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The term used in each country represented in the working party, equivalent to the English term "general practitioner".

- Belgium: Medecin de Famille, Huisarts
- Denmark: Almen Praktiserende Laege
- France: Medecin Generaliste
- G. Dom. Rep.: Facharzt fur Allgemeinmedizin
- Hungary: Altalanos Orvos
- Netherlands: Huisarts
- Norway: Almenpractiker
- Yugoslavia: Lijecnik Opce Medicine

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