THE EDUCATIONAL BACKGROUND FOR THE PROFESSION OF MEDICINE*

BY

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The rapid advance of medical knowledge in recent years which has made such great contributions to the prevention of disease and the relief of human suffering has, at the same time, had two inevitable and rather unfortunate consequences. On the one hand, it has resulted in an increasing degree of specialization in medical practice. On the other, it has enormously increased the requirements of medical education. The former is undermining the position of the general practitioner in the country. The latter has resulted in technical education in the universities and schools, and the general education of many medical students is now an altogether inadequate background for their future position in the community. Let me therefore give you a brief account of medical practice in order that we may see the attributes of character which the profession of medicine demands and that you may form some opinion of the educational requirements of future medical practitioners. Then, being myself uneducated in the classics, I must leave it largely to you to decide for yourselves whether these requirements can or cannot be met by a classical education.

Empiricism in Medical Practice

The general public usually have a misconception of the real nature of medical practice. Medicine deals with human life, and they forget that life of every kind from the scientific point of view still remains completely unexplained and utterly mysterious. We have advanced a long way recently, particularly in the prevention of epidemic disease, in our knowledge of dietetics, in our surgical technique, in the use of drugs, but most, if not all, of our knowledge, in view of our complete ignorance of the nature of life, is still really empirical. The doctor cannot limit his work to forces under his control. He is compelled to use physical and chemical agents in the treatment of diseases of a body which as yet we understand but little and in disorders of the human mind which so far we comprehend still less. We really know very little about medicine. The general practitioner, however, struggling with one insoluble problem after another, is faced with practical situations and is expected to produce results. Most patients demand miracles. Nature may work the miracle, or science succeed when Nature fails, but he is confronted repeatedly with slowly progressive conditions of unknown origin for which there is no certain treatment. These patients demand cures, and again and again he finds himself in an almost impossible position.

In addition the general practitioner has to contend with the defects of human character and the peculiarities of the human mind; with patients in whom fear upsets the working of the body and with people who use ill-health to escape the responsibilities of life. Many of his patients are children, and children constitute a problem in themselves. He lives in the society which constitutes his practice, and is compelled to compete with his fellow practitioners to earn his living. The practitioner must keep up to date with a rapidly advancing subject. He is, or should be, guide, philosopher, and friend to all sorts and conditions of men, and among rich and poor he must be prepared for all degrees of intelligence, every variety of religious belief, any moral standard. When young he has to deal with older men, and must imagine for himself what it is like to be old. When getting on in years himself, if he would be successful with his younger patients, he must recollect the point of view of youth. Lastly, he has to deal with incurable and dying people. He must know how to handle death: when to cease to "strive officiously to keep alive." What a life! I am not saying that general practice is always well done, but in this country we are still fortunate in the high standard of general practice, far the most difficult and in a way much the most important branch of the profession. Anything which

undermines the position of the general practitioner will be a disservice to the whole community.

Attributes of the Doctor

What, then, are the attributes of character required for the profession of medicine? First, common sense, wisdom, and sound judgment, which are always so much required on the borderline of scientific knowledge. Then an equal interest in science and the humanities; a capability for sympathy with the misfortunes of man, imagination so as to visualize the processes going on inside the body, and human understanding to perceive the thoughts passing through the mind; lack of prejudice; intellectual honesty and a capacity for critical judgment in relation to alleged discoveries and new methods; a sense of values and a philosophical attitude towards life and death; the personal character to command respect and maintain discipline; an interest in the organization of society, a reasonable degree of manual dexterity, and a capacity for accurate observation.

This is demanding a great deal; and how, then, do we select for the medical profession? In the first instance on the school certificate! After this, general education for the boy who wishes to take up medicine usually ceases altogether, or is only continued in a half-hearted kind of way, because, unfortunately, an examination in chemistry, physics, and biology now remains the only requirement for the next rung of the ladder of medical education! Not only is general education therefore neglected, but this has created the unfortunate impression that a schoolboy aptitude for these subjects is the main indication of the qualities required for the profession. Of course we want some boys with these tastes, but too many with tastes exclusively of this type wish to become doctors. The universities endeavour to exercise a judicious selection on grounds of personality, character, and educational background. But the main problem is how to encourage more of those boys and girls with wider interests to take up medicine, and, after they have started, how to see that for all medical students their professional training does not crowd all other education out of the curriculum.

A Classical Short Cut

In the first place, the universities must reconsider their present policy and see that their examination systems do not necessitate specialization in science at school and that some opportunity is afforded at the university for medical students to continue their general education. In the second place, the schools must encourage boys with personality, character, and human interests to take up medicine, as well as those with an exclusive interest in the admitted beauty of modern science or an understandable fascination for laboratory technique. The boy who decides to take up medicine, however great his interest in laboratory work may be, must realize from the start that medicine is not merely an affair of science. The humanities do matter. He must be taught that a study of literature can be made a short cut to that understanding of human beings which he will require so much in general practice, and that modern languages will also provide him in adult life with access to the wider field of the medical and general literature of other countries. He must learn to think in terms of scientific progress and social evolution. He must be made interested in the general outline of history, and taught to see how the main streams of human thought have converged to produce our present outlook. His education must not be exclusively classical, but all this is surely quite impossible without some knowledge of Greece and Rome. Moreover, the classics should be able, if properly taught, to provide in a peculiar way that cultural background which the medical student should have for his technical education and which the average doctor requires for his hard professional life.

The Greeks were particularly interested, as the doctor must be interested, in man. They puzzled over the meaning of life, and tried to interpret the tragedies of human existence with which the doctor becomes so familiar. They struggled with the moral law, and in all their inquiries maintained that balance between the study of things and an interest in people which is so important in medical practice. Hippocrates started accurate observation of disease, and Plato foreshadowed the modern attempt at the understanding of the mind. The Greeks, in

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fact, struggled with the same political, moral, medical, and social questions as we face to-day, and the history and thought of Greece epitomize all the problems of the twentieth century. A study of the classics is therefore a short cut to that knowledge of human life which is so essential in a young doctor when starting in medical practice.

History before Syntax

But can this aspect of the classics really be "put across" the adolescent mind at school? I ask for information. Are the classics at present really taught with this intent, or is the object of teaching classics mainly to encourage accuracy and inculcate mental discipline? If so, science and mathematics can do this just as well. Or are the classics taught from the point of view of the structure of language, or merely to provide the technical basis for a real but rather improbable classical education at the university? I doubt, personally, if it is possible to teach the classics at school as a background for medicine in the original dead languages. If a classical education is to provide the background that medicine requires (which I believe it can), and if boys so educated are to be stimulated to take up medicine (which is what we want), then boys must be taught less Greek and more about the Greeks. Translations of the classics must not be despised. Greece and Rome must be brought into relation with the modern world. A study of the past must be made a stimulus and guide both to the handling of the present and to the planning of that post-war world in which medical men will be called upon to play such a particularly important part.

A real appreciation of Greek medicine only comes with experience. But let us never forget that Hippocrates set for all doctors and for all time the ethical standard of medical practice:

"I swear by Apollo, Physician, by Asclepius, and by all the Gods, to hold my teacher in this Art equal to my own parents, to teach his family this Art, if they want to learn it, without a fee: . . . I will use my treatment to help the sick according to my ability and judgment: . . . I will not administer poison or procure abortion: . . . I will keep pure and holy my life and my Art: . . . I will not use the knife, but give place to such as are craftsmen therein: . . . and whatsoever I shall see or hear in the course of my profession I will never divulge, holding such things to be holy secrets."[†]

In education translations of the classics are, in my opinion, of some value!

THE COMPRESSED CURRICULUM

ARRANGEMENTS FOR NEW SESSION AT MEDICAL SCHOOLS

It will be recalled that early last year the Minister of Health, in view of the demand for medical man-power, brought to the notice of the General Medical Council a recommendation from the Medical Personnel (Priority) Committee in favour of some curtailment of medical study. The modification suggested by the Priority Committee was that students who produced evidence of having completed the whole of the curriculum after not less than 30 months of certified clinical studies should be admitted to the qualifying examinations. The General Medical Council was satisfied that under war conditions no objection should be taken to a departure to this extent by licensing bodies and examining boards, but it instituted an inspection of examinations where this proposal had been adopted.

Of the 22 licensing bodies in the United Kingdom 19 have adopted the recommendation of the Priority Committee; the other three had taken anticipatory action which had the same effect of accelerating admission of students to the qualifying examinations.

The Schools in London

The various medical schools seem to have adjusted themselves without any formidable difficulty to the new requirement whereby 36 or 32 months of study are compressed into 30. The Dean of the London Hospital Medical College states that the shortening of the Conjoint curriculum by three months has had no appreciable effect on the organization of the

teaching, and the Dean of St. Bartholomew's says that it has proved quite possible to fit the courses hitherto taken into a period of 30 months. From St. Thomas's Hospital comes the remark: "While we necessarily accept the ruling [condensing the clinical curriculum into 30 months] we look forward to the time when this unfortunate cut will be again readjusted." The Dean of St. George's Hospital Medical School states that there has been little or no shortening of the various courses, but that as students take only very short holidays nowadays they find it possible to meet the requirements of the examining bodies in a shorter time than in the pre-war era. At University College Hospital the course has been compressed in one or two respects so that students may—and for the most part do—enter for the finals after completing 30 months of clinical study. The London (Royal Free Hospital) School of Medicine for Women has found that the reduction to 30 months necessitates a certain amount of dovetailing of clinical work, but no changes have been made in the details of the course. That seems to be the position, more or less, in all the London schools. The Dean of one of them writes: "My college is just as it was, without any alarming or extensive reconstruction, and is doing very well, thank you."

Provincial Schools

At Manchester clinical teaching is to begin only in April and October of each year, when an introductory six-months course will be given. The curriculum here has been revised in order to leave the sixth year free from university classes, to enable students to concentrate on hospital work, and to give them a chance to hold resident appointments with a view to accelerating qualification and accustoming them to a certain amount of responsibility. Systematic teaching in pathology is to begin immediately after the examination in anatomy and physiology. The teaching of pharmacology is to include anaesthetics and therapeutics, and the course is to run concurrently for five terms with that of pathology and bacteriology, examination in all three subjects—that is, pharmacology, pathology, and bacteriology—to be taken at the same time.

Durham students, at the medical school at Newcastle-upon-Tyne, are being allowed to sit for their final examinations six months before the normal date. Certain courses and examinations are therefore being expedited; otherwise there is no special alteration in the curriculum as a whole. At Birmingham the curriculum has been shortened by six months, thereby giving students the option of taking their final examinations in December instead of the following June.

Until the present session no curtailment of the curriculum had been made at Sheffield, as it was felt that the standard of medical education should be maintained if possible, and that in a small school the number of students qualifying each year is so insignificant that the speeding up of the date of qualification would not assist the national effort to any material extent. But now, to conform with the practice generally adopted by the medical schools, a revised time-table for fifth- and sixth-year students has been drawn up under which the students due to qualify in March, 1944, will do so in December, 1943. Next year those who would have qualified in the ordinary way in March, 1945, will do so six months earlier. The first gain of three months has been made possible by telescoping the lectures of the last half-year of the usual course and by depriving the students of the final three-months revision period. The eventual gain of six months is brought about by the introduction of a summer vacation term for fifth-year students, beginning only a few weeks after the completion of their fourth-year course, and by curtailing the final medical and surgical clinical appointments and the final revision period.

Leeds, in complying with the request to reduce the clinical period to 30 months, made the reduction applicable to the group of students who are due to complete their final examination in March next, thus allowing successful candidates to take their degrees this September. The Dean states that it has not been easy to compress the last 18 months of the curriculum into 12, but the compression has been spread as evenly as possible over the whole of the clinical period, and thus the strain on the student has been lessened. But he mentions also the heavy strain on the teaching staffs caused by the exigencies

[†] Loeb's Classical Library. *Hippocrates*, Vol. I, p. 299. Translated by W. H. S. Jones. William Heinemann, 1923.