OUTSIDE EUROPE

New Medical School of the University of Tel Aviv, Israel

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Brit. med. J., 1967, 2, 832-833

In the present phase of intense and universal shortage of doctors the development of a new medical school anywhere in the world is an event of considerable interest and importance. The establishment of a medical school in the University of Tel Aviv, Israel, the second medical school to be founded in that country, provides an interesting study in imagination, improvisation, and innovation which may be of some value to future planners in other countries. As the site for a new medical school the city of Tel Aviv had several features of fundamental importance in the initiation of such a project: the presence of an already established, even if very young, university; a large population, numbering approximately one million in the greater Tel Aviv area, together with an adequate number of hospital beds (approximately 3,000) staffed by experienced clinicians. The medical faculty was established in January 1964, and Professor Andre de Vries, head of the department of medicine in the Beilinson Hospital, was appointed as the first Dean of the Medical School.

The fact that hospital teaching faculties were readily available but preclinical premises and teachers were not yet in existence led the dean to decide to open a clinical school at once. This had the important advantage that it would allow many Israeli students, who had been forced by shortage of places in the one existing medical school in Jerusalem to go abroad to study medicine, to return to their own country after having completed three to four years in medical schools elsewhere. This first phase would thus enable the medical school to become established and yet allow time for adequate pre-clinical facilities to be organized.

Ideally a single university hospital, as seen in the state medical schools of the United States of America, should be created as the medical centre, but Israel, in common with many other countries, would find the building of such a new large hospital centre difficult, or indeed impossible, for financial reasons. Moreover, such a hospital would defeat one of the principal aims of the new medical school, which was to raise the standard in already established institutions by the introduction of undergraduate teaching. It was decided, therefore, to affiliate existing medical institutions, or specific departments of these hospitals, after careful screening of their academic standards. Suitable lecture halls, seminar rooms, student day rooms, library facilities, etc., had to be provided by the affiliated hospitals.

Clinical Teaching

In order to co-ordinate teaching in the somewhat scattered 11 institutions of the clinical school, chairmen were appointed for each major branch of teaching (medicine, surgery, pathology, obstetrics, etc.), and these appointments are to be made in future on a rotating basis, in order to avoid a specific hospital or department "dictating" its ideas to the others.

Clinical teaching began on 1 November 1964 with 30 fourth-year and 23 fifth-year students—that is, first and second clinical years. Forty-four students had returned from other universities and nine had transferred from the preclinical department of the Hebrew University Medical School at

Jerusalem, rather than proceeding abroad for their hospital years. The students from abroad came back from 14 universities in eight countries, principally from Austria, but stretching from Romania to the Argentine. The common language on the wards and among themselves was Hebrew; their textbooks almost exclusively were in English. The first class graduated in January 1967, and these new doctors are now engaged on their compulsory 12-month period of internship, at the end of which they receive the M.D. degree and the Government licence to practise medicine. Although a final examination is held covering all the main clinical subjects, considerable stress in determining whether or not the student is to qualify is laid upon the grades he obtains during his clinical clerkships. The student is tested at the end of each firm, and this includes examination of a patient and presentation of the case.

Preclinical Curriculum

After establishment of the clinical school work then went ahead actively with the planning of a preclinical curriculum. Temporary accommodation is being provided for the teaching of physiology and anatomy until the establishment of preclinical laboratories on the rapidly developing, beautifully designed university campus. The dean's office is in a prefabricated hut on the campus; the administrators are determined that they shall be the last to transfer to elegant surroundings.

In drawing up the preclinical curriculum stress has been laid on two aspects. The first is depth of teaching in basic sciences (mathematics, chemistry, physics, and biology) and the second is the importance of behavioural sciences (psychology, sociology, and cultural anthropology). In addition, a thorough study of the English language, particularly in respect of scientific reading, is emphasized. The curriculum as now established is impressive, and includes electronics, irradiation physics, and the use of computers. The first-year class began in October 1966 with 75 students, and basic science teaching is to be continued in the second and third years, during which time the teaching of anatomy, physiology, and biochemistry will be undertaken. An interesting innovation is that a revision course in anatomy will take place before the surgical clerkships are begun; similarly, before neurology, E.N.T., and ophthalmology the anatomy teachers will give concentrated courses on the applied anatomy of these subjects. This should effectively link preclinical and clinical teaching.

Selection of Students

The quality of doctors produced by a medical school stems first from the standard of teaching provided, but second, and perhaps more important still, from the quality of the student admitted to the school. As yet, all too little is known about the correlation between the means of selection employed and the end-product thus produced. Indeed, one could debate at length on how to measure the "quality" of the medical graduate. The method of selection used at this new university medical school is of some interest. It has been decided that

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no competitive examination should be used the value of which, as an instantaneous performance, is much disputed.

Three criteria have therefore been used: (1) the grade obtained in the matriculation examination in mathematics, physics, chemistry, and biology; (2) psychological tests carried out by a team of psychologists from the department of psychiatry, aimed at eliminating candidates who might have some psychological bar to effective medical training; and (3) three separate interviews, each by a different interviewer, all of whom are selected senior staff members. Each interview lasts about half an hour, and the interviewer tries to estimate intelligence, general information and education of the candidate, his social adjustment, and his general behaviour. The final selection is made on the basis of matriculation standard, 40%; psychological tests, 20%; and interviews, 40%. It is thought that many who have been rejected because of class size would have been excellent students, and it is of considerable interest that the psychological data included a follow-up of the candidates accepted and, when possible, of those who because of rejection are pursuing their medical studies elsewhere. In a few years' time interesting information should therefore become available on this topic.

Role of the New Medical School

A medical school serves society in two ways—it trains students to be physicians and it advances medicine through research. The pressing need in Israel, as in so many other countries, lies in the former, the education of the young physician. It is the role of the medical school to imbue the student with a sense of vocation and with the importance of social problems in medicine. In Tel Aviv this comprises emphasis on behavioural sciences in the first year, a compre-

hensive programme for the teaching of social medicine in the clinical years, and the establishment of a department of family medicine which is to be on equal status with the other major sections, and whose function will be to acquaint the student with this particular area of medicine in the course of his clinical studies. But the behavioural sciences constitute only a part of the answer, since the social and psychological problems of the patient represent only a part of his suffering; naturally enough, he also wishes his physician to cure him of his organic defect. It is therefore obviously important for the trainee doctor to be well acquainted with the most modern methods of treatment.

Because of the rapid rate of expansion of medical knowledge, it is essential that the medical student should be well based in the fundamentals of the science of medicine, hence the stress on the basic science course which I have already detailed. It is hoped that a sound basis in science will help to simplify medicine rather than complicate it and that simple guiding principles will replace mere acquisition of disconnected facts.

The future of this young medical school in Tel Aviv appears encouraging: first, it certainly fills an urgent need in the State of Israel; secondly, there are available a team of dedicated doctors and scientists collected in Israel from all over Europe and representing a wide spectrum of European medical culture; and thirdly, there is intense enthusiasm, obvious to any visitor, for the new school, among both the teachers and their students. The difficulties facing the new school are purely the mechanical ones of providing the physical amenities—laboratories, classrooms, and so on—which financial considerations alone render difficult.

I would like to thank the Faculty of Medicine of the University of Tel Aviv and its Dean, Professor Andre de Vries, whose invitation to act as visiting Professor of Surgery enabled me to take part in the activities of this new medical school.

MEDICAL EDUCATION

Central Committee on Postgraduate Medical Education

By the joint action of the universities with medical schools and the medical colleges in England and Wales and in Scotland, and with the approval and encouragement of the University Grants Committee, the Ministry of Health, and the Scottish Home and Health Department, a Central Committee on Postgraduate Medical Education has been established and constituted, with the following terms of reference:

(1) To be a clearing-house for all information bearing on the organization of postgraduate medical education in Great Britain, including information about developments and progress in the regions, and information about the needs and the facilities of the National Health Service from the Ministry of Health and the Scottish Home and Health Department.

(2) To arrange co-ordination of activity among regional postgraduate medical education committees where this is called for and to be willing to advise the committees as appropriate.

(3) To confer with (a) the Vice-Chancellors' Committee and through it the University Grants Committee, (b) the Colleges, and (c) the Ministry of Health and the Scottish Home and Health Department on matters concerning the organization and financing of postgraduate medical education.

The Committee is under the chairmanship of Sir ROBERT AITKEN, Vice-Chancellor of the University of Birmingham, and the membership is as follows:

From the Universities

Dr. A. TREVOR JONES (University of Wales), Sir JOHN MCMICHAEL (University of London), Professor H. N. ROBSON (University of Sheffield), Professor G. A. SMART (University of Newcastle upon Tyne), Professor A. G. W. WHITFIELD (University of Birmingham), Dr. A. W. WILLIAMS (University of Oxford), and representation of the Scottish Universities.

From the Colleges

Sir MAX ROSENHEIM (President, Royal College of Physicians), Sir HEDLEY ATKINS (President, Royal College of Surgeons), Sir JOHN PEEL (President, Royal College of Obstetricians and Gynaecologists), Dr. J. W. HOWIE (President, College of Pathologists), Dr. P. S. BYRNE (Royal College of General Practitioners), and representation of the Scottish Royal Colleges.

The Committee held a meeting of the members from England and Wales on 24 May, and with what is described in the statement about the Committee as the generous financial support of the Nuffield Provincial Hospitals Trust—which has agreed to set aside £60,000 to support the Committee's activities in the first five years of its operation—decided to set up a secretariat under a full-time medically qualified secretary, to be appointed. A member of the secretariat of the Committee of Vice-Chancellors and Principals will act part-time as joint secretary.

The Committee decided that its first task should be a review of preregistration appointments, including the procedures for recognition of posts and for enabling preregistration doctors to secure suitable posts. It will also be engaged on an early study of the problems of postregistration general training, specialist training, and continuing medical education. Its initial concern will be with the postgraduate medical education of doctors qualified or settled in practice in Great Britain.