EXTRACTS FROM THE WORLD MEDICAL JOURNAL

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The November 1964 issue devoted most of its space to medical education in different regions of the world especially in the developing countries. Medical educationists from these parts were asked for their opinions on the need to modify the traditional medical curriculum to bring it in line with the needs of their society in the light of its economic capacity and social structure.

The problem in a developing country is how to get the maximum number of people trained as soon as possible in the optimum manner so that their subsequent work can produce maximum benefit to the population per man-hour of medical work. In an area where physicians are all too rare, those responsible for improving medical services, and this inevitably means the government of the country, are faced with the age-old question of quality versus quantity. Politically, the obvious thing is to go for quantity and produce the maximum number of people able to give basic medical care; but medicine in that area will not advance much unless attention is given to quality as well, in the sense that the level of training must not be allowed to fall too low and the period of training must not be curtailed too much.

All these are problems which are going to come up for discussion at the Third World Conference on Medical Education in New Delhi in 1966.

NIGERIA

The country of Nigeria, with a population of nearly 40 million and 1,200 doctors, has two medical schools. The older is in the University of Ibadan, established in 1948 and closely associated with the University of London until 1963, to the extent that graduates actually took the London University examinations, whose subject matter was probably not always suited to African conditions. The full medical course became available only in 1958. The second school is on the coast at Lagos, established in April 1962 and started in October 1962.

The curriculum at Ibadan has been the traditional British one. The end of the link-up has already led to a much-needed extension in paediatric teaching (infant mortality in Nigeria is appalling as everywhere in developing countries) and teaching of preventive medicine. The hospital is not short of clinical material, for even the city of Ibadan with a population of half a million has only ten general practitioners. Only a fraction of the seriously ill children are admitted, the rest having to go away and try their luck the next day—if they are still alive.

The University of Lagos Medical School has been described in detail by its Dean, Dr. Orishjolomi Thomas, who has listed the three disadvantages for the African of study abroad as: (1) Absence from the home environment at the most impressionable time of his life; (2) absence from the physical background in which he will practise; (3) and inability to give service to his community during this period.

The fact that there are only 1,200 doctors for nearly 40 million people implies that there is a most urgent need to increase personnel rapidly. Graduates must be well acquainted with sanitation, public health and social medicine. Midwifery in their society is going to be mainly domiciliary. Lagos aims to teach through a comprehensive approach, using the same people to teach all the health team—doctors, nurses, technicians. The aim is to produce the all-round general practitioner, described as the general-duty medical officer. Features of the curriculum are the early introduction of clinical teaching and the continued teaching of basic science right through to the final year. Postgraduate instruction will be given to a team so far as possible, i.e., a physician, surgeon, anaesthetist, pathologist and radiologist will be trained to work together as a group. About 15% of graduates will be selected for further training, and these will

divide into 5% going to do teaching and research, and 10% going to be specialists in general hospitals. It is felt that over-specialization cannot be afforded as yet.

INDONESIA

For ten years or more the University of California School of Medicine, San Francisco, has been associated with the University of Indonesia in a programme of assistance to the latter country. The situation was described by F. S. Smyth in 1963 and also the difficulties the project had encountered through red tape and bureaucracy. Smyth remarks that although there is 1 doctor per 1,000 population in the USA and only 1 per 75,000 in Indonesia, it has been impossible to fill all the 160 or so faculty vacancies in Indonesian medical schools with US graduates. The author emphasizes the need for careful development and slow maturation of medical teaching programmes in a developing country, and feels that there must be long-term participation by foreign universities, which by and large have not accepted their role in this field.

When Indonesia became independent an atmosphere of liberal idealism permitted the admission to university studies of almost anyone who wanted to study, and the result was of course disastrous—a course built up on lectures to huge classes and a graduation rate of 20 out of 600 - 800 admissions. Now candidates are screened and selected, and it is possible to give them more time in the laboratory and the ward. The great burst of new schools—there are 8 established —means problems in finding faculty members and equipment for them. The government now permits retention in the school of up to 30% of graduates each year to deal with the needs of expansion. The spread of literacy and education in the Indonesian population is said to be quite impressive. Graduates not kept in the faculty serve for at least two years in health services, mostly in rural areas.

Some fundamental needs in Indonesia are a sound biostatistical service to assess morbidity and mortality rates and their changes, more postmortems, more research in general, and above all more money to expand services.

THE SOVIET UNION

The position of the doctor in the Soviet Union is summarized in an article in 1964 by Dr. Mueller-Dietz of the Berlin Free University, who points out that the Soviet government first nationalized the medical profession to ensure the best use of a very small medical labour force in keeping the workers healthy. There are 400,000 doctors in the USSR of whom 75% are women, since men find better-paid posts in science and technology more attractive than the poorly paid medical services. It is interesting to note that senior posts are mostly held by men, in spite of the alleged equality of the sexes. Only 5% of posts right at the top are staffed by women. The ratio of doctors to population is 18 to 10,000 (higher than the USA) but there is a bigger wastage in administration, and the teaching and research fields take up a surprisingly large proportion. It is paradoxical to find that there is an acute shortage of medical personnel, not only in rural areas but also in urban polyclinics. Some new hospitals and polyclinics are being opened and cannot be staffed.

The general practitioner is particularly over-burdened. He constitutes 25% of the profession but sees 42% of the patients. He is allowed 30 minutes for a house call, which sounds all right until one remembers that he sometimes has no private transport. He works a 6½-hour day, but part of his free time is taken up with compulsory attendance at various meetings, political and otherwise, and participation in 'voluntary' campaigns which the wise doctor always volunteers for. Work norms are laid down; for instance the internist sees 5 - 6 patients an hour, the surgeon 10, the psychiatrist 4 and the dentist 3·2. It must be recalled that in the majority of places everything is written by hand by the doctor, who may have from 7 to 15 reports to fill in every time he sees a patient. This situation of not providing secretarial help or even typewriters has been criticized in the Soviet press for years; it usually means that the internist has little time to take a history and make his examination.

Pay is hardly regal, for it averages the same as that of a male worker of any kind. The young doctor starts at 90 roubles and goes up to 135 a month, with bonuses for rural areas, larger clinics, and regions such as the Polar one. It scarcely seems a medical bonanza, especially now that the authorities are clamping down on moonlighting, or the current practice of taking on more than one job to make ends meet.

It seems likely that the Soviet authorities have run into the same difficulties as everyone else — the much increased popular demand for medical services, for which there are insufficient personnel. They have failed to appreciate that it is wasteful to have their doctors doing jobs better performed by ancillary personnel, and writing reports they should be dictating into a machine.

MEDICAL EDUCATION IN ETHIOPIA

Dr. B. Oscar Barry writes that Ethiopia is fortunate to be forming a medical faculty, in Haile Sellassie I University, at a time when there is a climate of change developing throughout the world in the sphere of medical education.

Ethiopia has an estimated population of 21·6 million people spread over an area of 457,000 square miles. Less than 15% of the people are concentrated in the large towns. It is against a background of major public health problems, linked with problems of logistics and of communications that the Ministry of Public Health has adopted a policy of decentralized, generalized health services. Each province is headed by a Provincial Medical Officer of Health under whose direction would be a few hospitals in the major centres and a large number of health centres in the rural areas. These health centres are staffed by graduates, who have a Bachelor of Public Health degree, and supervise the sanitarians, community nurses and dressers, both in the health centre itself and in subsidiary health stations. The health centres have a double function. They not only treat the clinical conditions presented to them by the patients in the surrounding areas, but also actively seek to improve the standards of living, especially those of sanitation and water supplies, food handling and the supervision of the markets, so that disease may be prevented. The Public Health College course of instruction has been carefully tailored to combine the maximum public health instruction and experience with a certain amount of clinical medicine in order to be able to treat most of the diseases presenting in an outpatient clinic and to institute such public health measures as will prevent as much disease as possible.

Changes from the traditional Western concept of medical education are envisaged in a number of ways, in traditional thinking, in philosophy, in curricula content and in academic atmosphere. The history of modern medicine in Ethiopia, however, is confined to the recent half century in which there have been a number of foreign doctors working in the country. They have been drawn from such a variety of countries that there is hardly a nation which has not at one time or another been represented by a medical man in Ethiopia. The Ethiopian Medical Association, which was formally registered with the Ministry of the Interior on 20 July 1961, is a strong professional body with members from over twenty countries. There are approximately 30 Ethiopian graduate doctors. It is therefore natural that Ethiopia should look for a number of links with different traditional schools rather than a single link with one university. Already the Faculty of Medicine of Edinburgh University has agreed to form a link between the Department of Orthopaedic Surgery in Edinburgh and the Department of Traumatic and Orthopaedic Surgery with Rehabilitation in Ethiopia. Other departmental links are being sought. This type of link means the parent would have a certain responsibility in staffing and in the maintenance of academic standards, but the offspring would be free to develop its own individual philosophy and curriculum under the direction of the Academic Commission of the Faculty of Medicine in Addis Ababa.

Against the background of the public health needs of the country it is natural that the philosophy governing the needs of medical education in Ethiopia should be very different from those in a highly industrial Western country. Not only must there be greater emphasis on the public health measures to combat mass disease, but there must also be inculcated in the students an attitude of research. Considerable research still awaits the medical practitioner both in the capital and

in the provinces as regards the diseases of the country.

While it is imperative to maintain academic standards, drastic changes in traditional medical curriculum will have to be undertaken for the Medical Faculty in Ethiopia. Preventive medicine and parasitology will loom large in the medical and pathological courses. The treatment of trauma and physical and vocational rehabilitation of those suffering from long-neglected conditions owing to tuberculosis, leprosy and poliomyelitis, need to play a much larger part than the traditional part in the surgical education of undergraduates.

The Institute of Medical Studies has been established in order to achieve as close integration as possible in the preclinical period so that instruction, and as far as possible research in anatomy, physiology, pharmacology and biochemistry will be given on a systematic, rather than a departmental, basis. The integration between the preclinical and clinical years will also be of paramount importance. It is essential that the preclinical period should be used as a preparation for the clinical, so that the student coming on to the ward for the first time does not need to spend his time being orientated towards patients and their surface anatomy, but will already be so prepared that the clinician can immediately start his clinical education.

Students anticipating medicine gain admission to the Science course. At the end of this they are admitted to the medical faculty for a third year which is designed as a pre-medical year. Most of this year is spent on further courses in the science faculty, but some courses will be given by the members of the medical faculty and others by the Department of Social Sciences and the Institute of Ethiopian Studies in the arts faculty. This preparation leads on to two years in the Institute of Medical Sciences for preclinical studies and two years in clinical sciences, followed by a two-year period of internship and externship. The students will spend at least the first six months of their internship within the teaching hospital, and will then spend up to one year in externship outside the teaching hospital. The student will be required to undertake a research project while in the provinces, and afterwards to return to the University and relate his final period of education to his countryside experience. The final period within the academic atmosphere of the University itself will enable this research to be carefully documented and assessed, and there will be a further period of supervised practice and instruction before graduation.