



STUDY GROUP ON THE PLANNING OF
SCHOOLS OF MEDICINE

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NOEXED

OBJECTIVES OF THE MEDICAL SCHOOL AND FUNCTIONS TO BE PERFORMED

by

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The Objective

The primary objective of a medical school is to produce an undifferentiated doctor with a certain body of organized knowledge, certain skills and habits of scholarship and, hopefully, attitudes that will foster responsible doctor-citizenship. His vocational skills will be rudimentary, but his knowledge of the basic medical sciences, of social medicine and the principles of clinical medicine will provide a framework for future professional training.

Secondary objectives are formulated in relation to supportive functions which may or may not be available in the country. Often they are, but may not be of adequate standard nor are staff in sufficient numbers, and institutions such as a university hospital, a teaching health district, a laboratory technicians training school, a nurses training school, and facilities for postgraduate training in medical specialities, may have to be created. These institutions evolve their own objectives, which become the secondary objectives of the medical school, but their contribution to the standards of undergraduate medical education must remain their priority function.

Requisites

Once a decision has been made to establish a medical school certain requisites become apparent: staff, buildings, equipment, and money. The most difficult of these to fulfil is the provision of staff. There are three ways of obtaining staff:-

- (i) To cannibalize existing medical schools within the country to seed the new school. This offers scope for the development of individual talents, but there is a limit beyond which the existing schools are dangerously weakened by their losses.

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- (ii) To borrow from other countries. A new school may have recourse to no other way, but where this is not the case, the gain resulting from the appointment of senior experienced staff must be balanced against the not inconsiderable risk of acquiring unbeknown rejects from other schools.
- (iii) To select and train promising young graduates. There is a critical period during the development of young persons when this is best done. Selected too early, their immaturity and lack of general experience become disadvantages; selected too late, undesirable patterns of thought and practice are difficult to influence. This is the best way, notwithstanding inevitable disappointment and non-fulfilment of promise. Its success depends on individual programmes of training at other institutions, selected because of the assurance of key staff to help personally in the supervision and training. While professional and research skills may be thus acquired and scholarship skills strengthened, the teaching and managerial skills required of the modern day university teacher tend to be neglected, and special programmes must be devised for these.

Time is a factor of importance. The time taken for obtaining of money and the site, the planning and erection of buildings, the obtaining and assembly of equipment in working condition, and the purchase of materials can be minimized by effective administration. The training of staff, however, and their growth and development to maturation is a process that can be speeded up but only to a certain degree, if damage is not to occur. Therefore staff-training programmes must be instituted as soon as a decision is made to have a new medical school.

When a new school is to be commissioned in a developing country, the employment and inservice training of staff at lower levels is a major effort. Recruits are often of low educational level and must be taught what to do and how to do it; how to behave; even personal hygiene and grooming. An important category of staff is the group who are capable of assembling and maintaining equipment purchased from abroad; special arrangements for their training must be made early.

The Functions of the Medical School

The main function of a medical school is the training of medical students, but this function cannot be performed satisfactorily unless a large number of auxiliary functions are present.

The selection of students entering a medical school should be a function of the medical school, in accordance with the needs of the country. It may happen, however, that political considerations override academic qualifications and the medical school intake includes students with inadequate general education, deficiencies of knowledge in the natural sciences, and lacking competency in the skills of reading, writing, thinking and speaking in the languages of instruction, of available medical literature and of communication with patients. It then becomes a function of the medical school to remedy these deficiencies by additional courses, for example in a pre-medical year or by the provision of the facility of a language laboratory.

Forming the essential core of the medical school are the academic departments each with its own specific objectives and functions, but contributing to the following general functions:-

- (i) the collection and transmission of a body of knowledge;
- (ii) the transmission, by instruction and example, of skills in learning and thinking, in seeking sources of information, in problem solving, in clinical practice, in communication;
- (iii) through their research, the fostering of the spirit of inquiry and scientific thought and endeavour;
- (iv) through their service, a model of how care for patients should be provided;
- (v) the transmission by example of the qualities of enthusiasm, honesty, diligence, responsibility and empathy.

Consideration must be given to how the needs of the academic departments can be met.

- (i) Staff must be obtained, trained and retained. Several problems arise:
 - (a) How can staff be attracted to the medical school in competition with the attraction of lucrative private practice in underdoctored communities, or better prospects in more developed countries?
 - (b) How can the deficits of staff with interests and talents in some but not all of the above functions be remedied?
 - (c) How can the selection of staff be made so as to maximize quality?
 - (d) How can it be ensured that staff apportion a fair amount of time to the teaching function and not skimp on it for the more personally-rewarding activities of research or the pressing priorities of service?
 - (e) How can staff be interested in improving their teaching and managerial skills?
 - (f) How can staff cope with the large class size of the modern medical school?
- (ii) Auxiliary staff must be obtained or taken in raw and trained. If training facilities are not available or are inadequate in the country, it may become necessary for the medical school to provide the training for laboratory technologists, nurses, radiographers, statistical assistants, ward attendants and a large number of other categories of staff either on a fulltime basis or as inservice training.

- (iii) Equipment and materials must be purchased locally and/or imported from abroad. The subsidiary functions of procurement becomes very important. It may, for example, be better not to buy the best equipment available but to choose equipment for which good local servicing is available. The building of an animal house to provide animals may be the only way to obtain an adequate supply of animals needed for teaching and research. Maintenance of equipment far away from their country of manufacture is often a big problem and a function that may have to be met by the medical school.

One of the major functions of a medical school is the service function of providing models in good medical care. The creation of a university hospital often becomes necessary. A university hospital should provide ranges of medical care on several dimensions: from preventive through diagnostic, curative to rehabilitative; inpatient and outpatient care; primary medical care to referral level care; supervised care by medical students to the highest level of consultant care. Two important difficulties may arise: staff tend to complain of the more rigorous standards required of them compared with those pertaining in the rest of the country, and unnecessary investigations are carried out merely because they are available. It may become necessary to provide a second hospital planned to function at and to provide medical care models at the level of the district hospital, the first line hospital available to the majority of the rural and small town population.

If a large part of the population receive first line medical care at health centres, then a university health centre should be developed, not only to provide good medical and health care but to serve important research functions in the delivery of medical care services.

The training of students should not be confined to university facilities. Where government and private institutions provide medical care of a specialized nature, e.g. hospitals for patients with leprosy, or tuberculosis or mental diseases, and private practitioners provide the medical care of general practice, students should be exposed to these. Teaching should be carried into patients' homes, rural villages and rural districts, so that students gain a better idea of the social and cultural backgrounds against which they will have to work.

Research is an essential function of a medical school if it is to remain viable. The real problem is the severe competition for time between the training, service and research function, and not whether research should be basic or applied. While most of the research will be of a descriptive or applied type, if a rare person is available with talents and interest in basic research, he should be given the time, money and facilities to do it.