EDITORIAL

ON TEACHING AND EXAMINATION METHODS IN SCHOOLS OF MEDICINE

During the past decade many conferences on the methods of teaching medicine have been held, and more are being planned. The most recent was the CENTO conference for the Teaching of Preventive Medicine in Medical Schools, held in Shiraz, Iran, in May 1961. Probably the next one will be the Middle Eastern-Mediterranean symposium on pediatric education scheduled for September 2 through September 6, 1961 in Ankara, jointly organized by our Research Institute of Child Health and the Unitarian Service Committee.

It is worthwhile to think for a moment about the long history of medical education. Looking back at the earliest recorded history of medical education, which gradually evolved in our own part of the world, we realize that at the beginning the process was extremely personal. It was, essentially, a system of apprenticeship and preceptorship wherein one candidate would be trained by one senior. Over the centuries, as civilization has evolved, as education has become more formal and as the body of medical knowledge has grown, we may observe continuous change in the systems. From the very early beginnings, when the teacher-student relationship had almost a father-son quality, we may observe a steady tendency away from this with the evolution of our modern university system in which students usually grossly outnumber teachers. Within the framework of our university system, however, we may observe that in modern times the pendulum has swung back and forth, from large classes where one professor addresses many hundred students and in which, in most cases, control of attendance is impossible and frequently not required, to the small class where each student is personally known to his instructor and a seminar type of teaching prevails.

Looking around us today, then, we are struck by the diversity of systems now employed, and we may note, further, that markedly different systems may be employed by different universities in the same country or even different departments within the same school.

If we incline towards the belief that individual, laboratory or bedside teaching has pronounced advantages over the lecture-dem-

onstration system, we must also consider the needs of our countries. Is a reduced student-teacher ratio possible in our countries? In reducing the ratio are we also reducing the annual number of graduates in medicine? On the other hand those who prefer the lecture system, perhaps because of the quantitative advantages it offers, have questions to ask themselves, also. Can we provide, with this system, the experience, both in the laboratory and at the bedside, which many people consider absolutely essential to sound medical education? How can we modify our existing system to obtain the best elements of both?

Moving on momentarily to consider specific methods of education, we are again struck by the diversity of approaches. They range from simple, didactic lectures through demonstrations, ward rounds, seminars, journal clubs, clinical conferences to audio-visual techniques with such refinements as closed-circuit television. The methods to be utilized by a given individual must be a function of his own personality, his own experience, and the resources available to him. Our goal here must be simply to combine these elements in the best possible way for the benefit of our students.

We cannot consider methods of teaching without facing the problem of content. We are all aware that in our time the sheer volume of medical knowledge is staggering. We have long since passed the point when one man's mind could encompass even one major field and today we find it difficult to master a subfield of a subspecialty. Perhaps the greatest single problem confronting medical educators today is the matter of determining how much of this volume should be or must be covered in the four to six years available to us for the medical education of a given student. If we face this problem squarely, several things are evident: we must admit that no one can learn it all and strive for that highly elusive phenomenon known as the "minimum essential;" we must acknowledge that every moment does count and that there is no time for traditional deadwood; and we must, each of us, try earnestly to be objective about our own field of interest and look on it with some appreciation of its relative importance in the overall process of medical education.

In planning the teaching in medical schools, the main objective should be to prepare the student for his future responsibilities. Many of the graduates will be in private practice or attached to a government institution. Others will be in rural medical and health practice. Many of those in rural areas will have to serve as consultants in a variety of different fields which may not be related

directly to medicine. Should we not prepare the medical student for these future responsibilities?

Examinations and grading are but another aspect of methodology and here too, diversity of approach is evident at every hand. Oral examinations in a variety of forms, essay type examinations, and the profusely variable "objective" test constitute the three main groups. Along with variations in methods we find variations in applications. At one extreme there are schools in which there are no examinations at all until one final examination determines who shall pass and who shall fail on this "big day." At the other extreme are courses in which the student is subjected to daily or weekly examinations of one sort or another. Still more variation may be seen in the significance attached to examinations, more especially to success or failure. There are schools in which a student is allowed to go on to the next higher class even though a number of earlier subjects may have been failed. Thus we have systems in which there are students in their last year who still must pass examinations from their first or second year of study.

As we consider this great variety, let us keep in mind the fact that examinations are not an end in themselves. Let us remember that the purpose of examinations is simply to provide both for us as teachers and for the students themselves a reasonably objective estimate of their degrees of mastery in a given subject. It would seem that in planning examinations, as well as in interpreting them, several things should be borne in mind. First of all, the examination process itself, or the fear it engenders in the student, may in fact produce a falsely low evaluation of the student's performance. Secondly, we should remind ourselves and our students that the real purpose of their medical education lies in their ultimate ability to provide the best care possible for patients, not in the grade received at the end of a given course. Finally, let us recognize that when the results of examinations are complete and some of our students have failed or done poorly, the fault may not be entirely theirs. We must always ask ourselves how much of the responsibility lies in the inadequacy of our teaching methods. We must look at the examinations we use as examinations of our teaching ability as well as examinations of our students.

This fall a large number of leaders of pediatric education from the Middle Eastern and east Mediterranean countries will assemble at Hacettepe Children's Hospital in Ankara to review the methods of undergraduate and post graduate pediatric education in their respec-

tive countries. There will also be a number of prominent pediatrics teachers from the United States and western Europe who will take part in this symposium. We shall benefit greatly from the experiences of the teachers coming from our neighbor countries as well as from those coming from the West. The results of this meeting will undoubtedly lead to improvements in the teaching methods in Turkey and perhaps will also be worthwhile for our guests.

İHSAN DOĞRAMACI, M. D.