The Medical Student

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ONE OF THE privileges a chairman has is to present an address with free license of subject. I promptly sought a subject which would not suffer in comparison with the scientific presentations on the same program. My choice is one not with academic excitement and not precise, but nonetheless of the greatest importance—The Medical Student.

This student possesses great potential for service to others and for personal rewards if his horizon can be wide enough and his vision and education are adequate. I am concerned today with three stages of his training which can be enriched by all of us: When he is a student selecting his future occupation, when he is a student in medical school considering the practice of medicine, and when he has finished his formal training.

First we should encourage appropriate students to join us in our profession, which we know is exciting and rewarding. The future need for more physicians is well recognized; yet only one-third of the college students who choose a "pre-medical" major ever apply to a medical school. Investigation has shown that often there is no active physician participation in the counseling services of many colleges in California. "Pre-med" clubs have been formed in some colleges, but several of these are relatively inactive and without participation of physicians who could stimulate interest and discuss students' questions. Three films entitled "The Making of a Doctor" have been made available by the American Medical Association and are used by pre-med clubs in a few colleges. Without help from clinicians sometimes interpretations have been left only to the senior medical student who is interested in his previous schoolmates.

Practicing physicians should offer to help college students who are considering medicine as their future occupation. Help can also be given to high school and college students by providing conferences and tours of medical centers such as now are offered by the schools of medicine at Stanford and the University of California at Los Angeles. Also at Stanford there is a program called "Day with a Doctor" which enables a student to spend one day a year with a physician in private practice. However, although these stimuli are steps in the right direction, they need expansion, not only within the universities having medical schools, but especially in colleges that do not have easy academic and geographical relationships with a medical school. Clinicians can and should be of greater service to their communities and to eager college students by offering their enthusiastic counsel.

Moreover, the student who is in the midst of his medical school curriculum needs adequate exposure to the private practice of medicine if he is to evaluate this aspect of the profession, even though he may later choose an institutional or purely scientific career. In recognition of this need, 36 of 88 medical schools in the United States have instituted preceptorships, often in the summer. Only four schools offer preceptorships with specialists. In 10 schools, the program is mandatory, while in 26 it is elective. Competing with the elective programs are other summer occupations which, significantly, bring an average summer income of $1,000. Last summer, to meet this competition at the University of Southern California School of Medicine, a charitable fund for medical projects, called Salerni Collegium (with equal help of the Los Angeles County Medical Association) sponsored a program for 11 students. Each student was assigned to a specialist and received a stipend of $100 a week.

Other preceptorships have been provided by the California Academy of General Practice. In this plan, the student does not receive any pay but has the opportunity of living with the physician in the summer. To date this program has involved 364 students, 51 from Stanford, 36 from the University of Southern California, 35

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from the University of California at Los Angeles, 15 from the University of California College of Medicine, four from out-of-state schools, and the remaining 223 from the University of California at Berkeley. Obviously the participation has been inadequate, and even at the University of California, where enthusiasm was high, the plan is now inactive because of the lack of volunteering physicians. But some such program should be actively promoted, for a medical school student should have the benefit of evaluating the private practice of medicine in the community. Thereby he can obtain a broader vision, deepen his experience, have a taste of the thrill of applying scientific data to patient care and know a physician's life. Also from discussions around the luncheon tables, he can gain some insight into the present and potential impacts which socializing and economic factors will have on the future of his profession.

The third stage of the medical student with which I am concerned today is his postgraduate life. It is the one most in need of our attention. In this period, the physician must have scientific stimulation if he is to taste the satisfactions and achievements possible in the rest of his professional life. The transition from student in confined academic training to a physician practicing in a community involves changes in intellectual opportunities, in independent responsibilities, in financial demands and compensations and in status in his community of professional and lay people. Too often this metamorphosis may be associated with an altered outlook toward medicine and a decreasing zest for continuing education. The thirst for clinical experience can be met at the bedside, and the new physician may feel that this fulfills his need. At first the application of stored information of biochemical and pathologic changes facilitates his clinical learning and brings satisfaction. However, the increasing wealth of new information, with medical literature doubling every 10 years, is difficult to survey and to assess; furthermore, economic, domestic and other social factors place increasing demands on a physician's time. He may neglect continual addition of new information to his armentarium. He may begin to reject "ivory tower" data and new practices and even new ideas, placing his reliance on past knowledge and experiences. New information to supplement or alter his knowledge is essential, not only for the good of the patient (who now knows and demands more than in years past) but also for the continued vitality of the physician.

Reflection of the past brings realization that originally medical education was incidental to medical care. The relationship reversed somewhat in the 19th century, but there still was a great separation between knowledge known and knowledge taught. Fifty years ago, consequent to the Flexner report, the gap began to narrow. Now a widening of the rift has begun to develop again, this time not between what is known and what is taught in medical school, but between that acquired during formal training and that actually used for the effective art of healing in the community.

Potential teachers are being produced. There are 6,800 students enrolled in graduate and postgraduate programs, and 46 per cent of them are seeking advanced degrees in the basic medical sciences. This force is needed for research and for teaching positions. Of the budgeted positions in the 88 medical schools, 15,514 are filled and 955 unfilled. It is to be hoped the need will be met not only for teachers of medical school students, but also for physicians in practice.

Of the 13,381 interns and 40,451 residents in training, about one-third are in medical school facilities and have good educational programs. The medical education of those who are in the hospitals without medical school affiliation sometimes is inadequate. The opportunities particularly in these hospitals are not adequately used even though clinical material is usually abundant and teachers are generally present in the environs. Certainly the student fresh from the teaching institution and just entering practice could be of service to his older colleagues and at the same time could maintain habits for his own never-ending professional scholarship. In such settings, older men must encourage their new rivals.

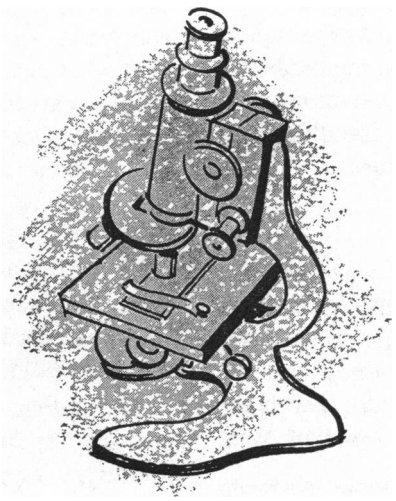
Many teaching clinics should be developed for the good of all physicians and for the benefit of the patient community. Participation in a clinic should be not only for the ones with full staff privileges in the hospital holding the clinic but also for physicians not on the staff. A plan to offer this opportunity is now being organized at the Los Angeles County General Hospital by the University of Southern California School of Medicine. Outside physicians will be encouraged to

attend outpatient clinics held every morning with all appropriate specialists attending to provide teaching based on actual patient problems as well as to facilitate prompt treatment. I hope many more hospitals will develop such plans for the dissemination of knowledge.

Surveys have shown that physicians in practice obtain most of their information from publications, including (and woefully sometimes too much) from the literature of pharmaceutical companies. The last National Council on Medical Education stated that a "university without walls" must be developed for the use and coordination of all methods of continuous medical education. The development of closed television programs is an addition that has great potential. In California, under the administration of Dr. Brayton at the Office of Continuing Education in Medicine and Health Sciences of the University of California Extension, Los Angeles, 70 hospitals are participating in a weekly one-hour program with five institutional producers: University of California at Los Angeles, University of Southern California, Loma Linda University, University of California College of Medicine and City of Hope Medical Center. There will be more such programs in the future, perhaps some in the evenings. Suggested as a possibility is a service through which a surgeon could, by dialing a number, be shown on a closed television circuit a film of an operative technique he is about to use.

Surveys also have shown that the second and much less often used means of education is postgraduate courses. The number of such courses is increasing, and 1,641 were provided last year (1965) in California by medical schools and some teaching hospitals. It is particularly encouraging to know that the teaching hospital participation in courses of this kind has increased in the last five years from 9 per cent to 21 per cent.

The third means of postgraduate education is through informal contact among physicians, a valuable factor well appreciated every day by all of us.

Participation in meetings is a further means of keeping informed. Presentations of topics, panel discussions and monthly reviews of hospital material can be most helpful. Also the meetings held by national, state and local associations and by special societies add greatly to the medical students' development and stimulation.

We in this Surgical Section of the Annual Session of the California Medical Association could assure the continued excellence of the programs such as the one just presented; and with combined effort we could cause a manifold increase in the number of physicians who would benefit through attendance. I hope the members of our section will promote a much greater service to medicine through education of the student in college and in medical school, and of the physician in later professional life.