

HIGHER EDUCATION FOR PHARMACY AND ITS RELATIONSHIP  
TO HIGHER EDUCATION IN MEDICINE.

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The last quarter of a century has witnessed remarkable strides in the progress of the practice of medicine in America. From a haphazard, comparatively poorly educated, and all too mercenary a profession, inadequate as an instrument for the public good, it has emerged a powerful, well-organized, liberally educated, scientific and humanity-serving body. The laws regulating the practice of medicine in most of our states have been revised and strengthened. Preliminary educational requirements have been raised to a high level, the professional training time lengthened and made far more thorough than the leaders of the past generation ever thought possible or dared to hope for. The open sesame to all of these remarkable achievements is found in four simple words—Higher education for medicine.

Two powerful influences, one operating from within, the other from without, have contributed to make the profession of medicine what it is to-day. With the establishment in 1905 of the Council on Medical Education, the members of the American Medical Association placed their official approval on educational reform. From this time on the profession committed itself on educational matters wholly to the program and action of its council on education. The wisdom of this move on the part of the Association has long been evident. The council has succeeded in overcoming much of the prejudice existing toward higher education; personal and commercial interests have been conquered in many cases; a successful educational campaign has been conducted which has been productive of untold good to the public as well as to the profession itself.

The other powerful influence for educational reform in medicine came from without and through the Carnegie Foundation for the Advancement of Teaching. Fearless and impartial from the start, the foundation first laid bare, through Dr. Flexner's report in 1910, the conditions that actually obtained in the medical schools and colleges of the United States and Canada. President Pritchett in his report for the same year voices the foundation's attitude on medical education in these words: "The medical practitioner of these opening years of the 20th century should be an educated man, his conscience sensitive to the social importance of general physical well-being, his intelligence quick to follow the progress of medical education." Two years later Dr. Flexner's report on Medical Education in Europe appeared. This report and the one previously mentioned, covering the field as they do, have since been the source books for educational advance in this country. The telling blows from within, aided by the drive from without, have spelled professional and educational victory for medicine in glowing letters.

One of the mightiest problems of modern society is that dealing with the prevention, amelioration and cure of sickness and disease. Its successful solution not only holds out health, happiness and long life to the individual but also virility and strength to the race; it promises a lessening of crime and bids fair to reduce the suffering and miseries of poverty. One cannot wonder at the interest leaders

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in social and educational movements are taking in bringing about more healthful conditions in every walk and avenue of life.

It is generally assumed that the solution of this problem—the problem of health and disease—belongs to the medical profession. Surely the many lay influences brought to bear, in recent years, on the question of higher education in medicine have emanated primarily from a desire to create a noble profession capable of such a vast task, rather than from any mere desire to bring about educational reform. We may well assume that the reasons the energies of the Carnegie Foundation, along lines of professional education, were first directed towards medicine rather than law and engineering lay in the fact that the possibilities for public good were here more promising and of greater moment. This once begun and well under way, we find that the Foundation has later taken up educational reform in these professions. But the profession of medicine can not solve this problem alone, although a large part of it will undoubtedly fall to its share. We must glory in every educational advance making it more and more capable, and yet not forget that the smaller, to-day much less thought of, but nevertheless essential profession of pharmacy must come in for its share of proper attention if the task is to be completed successfully.

Medicine and pharmacy are essentially complementary professions. We lose sight of this fact too often, probably because we are prone to judge the whole profession by the behavior of the men who commercialize it most. Much of retail pharmacy is to-day steeped in commercialism. This must be admitted. It is so deeply submerged that the pharmacist's professional status is very low, does not exist, in fact, in many cases. The thoughtful pharmacist knows this himself only too well, but conditions which prevail are such that he cannot pull himself out unaided. The introduction of innumerable side lines such as toilet articles, cigars, soda water, and lunches of one sort or another has inevitably tended to make many forget what their real occupation is, and yet when all is said the retail pharmacist does still perform a professional service to the public. He does help solve the problem of health and disease. But our retail practice should be made professional in a much larger sense, and it may be, if we insist on it strongly enough.

The retail side of pharmacy is but one side of the profession. We see a more scientific side in our large pharmaceutical houses. A great many of the graduates of our schools of pharmacy have found their life work in these institutions and are here doing splendid service. The doctor who carries his own drugs often has little respect or use for the services of the pharmacist. He forgets that a pharmacist has, after all, prepared the articles he himself dispenses. The modern internists, who depend on a few drugs or an essentially drugless therapy, may feel for the moment that the pharmacist does not count for much; the teacher of preventive medicine may argue that drugs are a thing of the past and the pharmacist no longer needed; and yet a deeper analysis of conditions will easily reveal to them that the pharmacist holds his place and is as necessary as ever.

It is true that the materia medica of to-day is much smaller than it was ten years ago but, if so, it is because the pharmacist by making preparations from the largest possible sources has enabled the physician by trial to find out which are best. There will always be a materia medica; preventive medicine will have one.

It may be small, even smaller than it now is, but it will persist. It may not have plasters, pressed herbs, ointments, cataplasms, or the grand variety that now exists but it will include active principles, synthetic products and inorganic chemicals of some sort. These are absolutely essential, and they require a corps of men trained in chemistry, pharmacology and botany to manufacture, prepare and dispense. The pharmacist's field is definite, independent, essential, and can no more be excluded in attempting to solve the problem of health and disease than preventive medicine can hope to do away with surgery or internal medicine. Humanity will ever continue to err and will be in need of repair of some sort. Food, rest and physical manipulation may do much to relieve conditions, but never will the time come when all of the pharmacist's products may be dispensed with.

If the pharmacist's field, then, is definite, essential and indispensable as we believe, the profession of pharmacy must take its place by the side of the profession of medicine and with it march onward to accomplish its task in solving the problem we have been discussing. This necessitates a readjustment, a new emphasis, newer ideals, more rigorous training for our young men. The gap that now exists between the professions must be bridged. We need the telling blows from within and the drive from without that have been so beneficial to medicine to accomplish these results.

The safest guarantee of high quality and character of any profession is best secured through high and rigid preliminary educational requirements. Professional skill, superimposed on a narrow general educational foundation, is unsafe and lacks the perspective necessary for future independent growth. Rarely, if ever, can a meager training be productive of the best. Medicine has proven this to its own satisfaction and has not hesitated in recent years to make drastic changes in its educational policy.

The preliminary educational training time in medicine is at present on an average two to three years longer than in pharmacy. The time of professional study is also two years longer. While there is no argument *a priori* that these periods of study should be equal for physician and pharmacist, nothing but good can possibly come from approximating them, particularly the preliminary requirements. This cannot be done in a day, nor in fact in years, but the beginnings of a definite movement along this line should be made at once. Whether it comes first from within or from without does not matter, but let us hope it will come and come soon.

Coincident with our forward progress in preliminary educational requirements and professional training should and must come a readjustment in our retail practice. If American pharmacy is to take its part in helping to make our country a better and healthier place to live in, and it must do this or die an ignoble death, the American pharmacist must feel that he has a higher duty to perform than the retailing of household remedies, cosmetics and toilet articles. We may have to continue for a long time to sell these things but our chief interests must not center themselves here. We must away from this type of commercialism if only in spirit. One too often hears representative pharmacists belittling the drug side of their business: "It amounts to very little with me," or "I don't get any prescriptions any more; if I didn't sell other things I'd have to go out of business." These phrases are true and we will hear more and more of them as the years go on, unless we set about to readjust ourselves to the times we are living in.

How can we do this? First of all, we must learn to make use of the education we get in our schools of pharmacy. We must fully realize that when the state board examination is passed or the college diploma is handed to us that our real professional work and service is to begin in earnest. From this point we should push forward and develop the opportunities which our training has fitted us for. Surely, the college of pharmacy does not exist for the sole purpose of teaching a pharmacist how to fill a physician's prescription and prepare half a hundred odd now seldom used galenical preparations. None of our reputable schools do only this. They offer a basal education along lines far more valuable to enterprising young men.

It may be that the reason we are not making use of our college training in the way we should is to be found in the fact that our professional horizon is narrowed and shut in by a huge row of prescription blanks. Probably, too, our professional sun is nothing but an illegible scrawl on another prescription blank. We must get a new point of view on the value of prescription filling. This is not the pharmacist's only function, nor should it be his chief concern necessarily. Prescriptions are going out of fashion, or rather modern medicine is limiting the number. This is an inevitable result of medical progress. Prescriptions will continue to be written in the future and will always constitute one important phase of the pharmacist's work, but he can well afford to devote three-fourths of his present prescription case to other uses. Let us take down our large prescription sign and put up a smaller, even neater one. We should frankly give up the idea of prescription filling as an ideal for pharmacy. There is no use clinging to it exclusively, and there is far more important work that is truly professional for us to do.

Modern research has demonstrated the value of laboratory methods in every walk of life. The laboratory is here to stay and their numbers are sure to increase. In medicine, laboratory methods and tests have become indispensable to the simplest diagnosis. In public health and sanitary work of all sorts men with chemical and bacteriological training are in constant demand. The young men that leave our schools of pharmacy have a good general training in chemistry and quite often also in bacteriology. Why should they not make use of this information?

The drug store has always been the local laboratory for physicians' prescriptions. Why may it not in the future function as the local chemical, bacteriological, sanitary and industrial laboratory? This move would serve the times we live in. By becoming chemical, bacteriological and sanitary advisers in our respective communities, we would help solve the problem of health and disease in these places. We could and would still be pharmacists. There is no incompatibility in these two lines of endeavor. Our stores are practically laboratories as they are. The technical education we now receive could be put to its best use in this way. Our training and general education would soon be made as thorough as it now is in medicine and the professions co-equal. Higher education can do for pharmacy what it has done for medicine. We should work towards a realization of equality of training in the two professions. President Pritchett's remark previously quoted may well read, "The pharmacist of the opening years of the 20th century should be an educated man, his conscience sensitive to the social importance of general physical well-being, his intelligence quick to follow the progress of pharmaceutical and medical thought and activity."