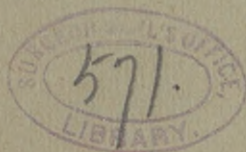


MORTON (D.)

The Future of Medical Colleges
in the Smaller Cities of
the United States.

BY
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ST. JOSEPH, MO.

REPRINTED FROM THE
New York Medical Journal
for July 11, 1896.



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THERE are two marked principles that are governing the medical profession to-day, in dealing with the subject of medical education. They are as follows: First, a diploma should confer no right to practise medicine. Second, every student entering upon the study of medicine should have a thorough preliminary education. What effect will the enforcement of these principles have upon the smaller medical colleges of the Union? This is the question proposed for discussion in this paper.

A backward glance at the beginning of a movement and a little study of its subsequent progress will often enable one to forecast its future with a considerable degree of certainty.

In the early history of America, medical aid was often rendered by men who had never attended a medical college. Graduates from the mother country were

* Read before the Kansas State Medical Society, May 14, 1896, at Topeka, Kansas.



not sufficient to supply the demand. The first school in America, the College of Medicine of Philadelphia, now the Medical Department of the University of Pennsylvania, was not founded until 1765.

From this institution was graduated, in 1768, Dr. John Archer with the degree of Bachelor of Medicine, the first medical degree ever conferred in America. In the same year in New York city was organized the Medical Department of King's College, now the College of Physicians and Surgeons, the Medical Department of Columbia University. It has been estimated by Dr. Noah Davis that at the time of the Declaration of Independence there were in the thirteen colonies three or four thousand practitioners of medicine supplying the three million inhabitants with medical aid. About four hundred only of these practitioners had received the degree of M. D. In 1810 there were five medical colleges in the United States. Students were apprenticed to a regular practitioner for two or four years, the degree of M. D. being conferred after attendance at two subsequent college terms. Some entered practice at the end of one college term, and some at the end of their apprenticeship without having attended college at all. And now medical colleges in America began to multiply with increasing rapidity as the years went on, until their number greatly exceeded the actual demands of the situation.

From 1840 to 1890 there was a perfect craze for establishing medical colleges, and the competition for students became so severe that entrance and graduation requirements were reduced to a minimum.

During the fifty years between 1830 and 1880 medical education in the United States failed to keep pace with the advance made in the same line of work in other

countries. Although a vast quantity of knowledge had been accumulated since the beginning of the century, two years of instruction still remained the length of the medical course, just as it had been in 1810, and this too at a time when European countries were requiring four, five, and six years' study of their medical graduates. This statement should be modified by mentioning the adoption by the Chicago Medical College, in 1868, of a three years' graded course.

The diploma opened the door to practice; and as long as it did this, it remained a commodity to be first manufactured at the lowest possible cost by the manufacturer (the medical college), and then to be purchased in the open market by the consumer (the medical student) at the least outlay in money and time. At the end of our first century of existence Dr. Noah Davis thus describes the American medical educational system as it had grown up under the principle of giving to the diploma a licensing power. (See quotation at end of paper.)

Having now sketched the condition of affairs as they have existed in the past, we are prepared to appreciate the efforts made to correct the abuses which had grown up as a result of this "freest rivalry" among medical colleges.

All laws governing medical practice are based, first, upon the recognition of the diploma as a legal license; and second, upon denying this right to the diploma, and requiring an examination of every applicant at the hands of a civil board of medical examiners.

The first-named law, known as the "Diploma law," gives the right of college supervision to the State Board of Health. This supervision is exercised by establish-

ing a "Schedule of Minimum Requirements," which schedule requires all medical colleges, large or small, to make the course of lectures extend through a specified number of months, to furnish specified laboratory facilities, to furnish a specified amount of dissecting material to each student, etc.

In this way are the medical colleges made amenable to the civil authorities. With the teaching requirements thus laid down every college must comply to secure recognition of its diploma. About the year 1880, for the first time in the history of the country, the Illinois board, under the leadership of Dr. John H. Rauch, began to vigorously use this power. It published a series of reports that have been the basis of all subsequent work having for its object the legal control of medical practice in the United States. I can not enter into a detailed history of the good accomplished by the "Diploma law." Suffice it to say that its effect has been most salutary. In my own State it is this law which is in force, and it is executed by a board of fearless men who are doing a great work in checking the abuses which have so long run riot in our midst. The great flaw in it is the fact that it after all delegates the licensing power to the faculties of the medical colleges. This is not true of a law requiring every applicant for license to stand an examination conducted by a board of medical examiners. Let us not digress, however, but return to the minimum requirements and discuss the effect of the enforcement of some of them upon the smaller medical colleges, and the ability of the medical colleges to comply with others.

PRELIMINARY EDUCATION.—The great tendency of the profession to-day is to demand a thorough prelimina-

ry education of every student entering upon the study of medicine and to permit none to matriculate who do not have it. For many years any one who so desired could enter a medical college without regard to preliminary English education. Many matriculates had the merest rudiments of a common school education, and many more were lacking even in this. This statement can be easily substantiated by looking for a few minutes at the prescriptions on file in the drug stores, or by the revelations of one day's mail at the office of any State medical officer like that of the secretary of the board of health. Men who could not enter other callings in life because of their lack of education found the doors of medicine wide open, with no obstacles thrown in the way to those desiring to enter. Engineers, harness makers, hostlers, and men of like station in life desiring to become doctors were readily accommodated by medical colleges. I would not cast a slur upon these occupations, for I believe that work is honorable in all, and laziness is a reproach wherever found. But no one has a right to assume the grave responsibilities of a physician's calling unless he has qualified himself to do so. Granting for argument's sake that there was at one time a warrant for such a custom, it is certainly true that that time has passed, never to return. The advance of science has been too great to be appreciated by one who can barely put himself in communication with the everyday affairs of life as published in the daily papers. What can such a man do with a scientific treatise on physiology or therapeutics, studies involving a presumption of knowledge of physics and chemistry and the ability to think and reason accurately, to properly observe phenomena, and to draw therefrom the proper conclusions? One must

know addition and subtraction before one can solve problems in multiplication and division. On account of the uneducated students who flock to the medical colleges, the latter have, in some instances, established chairs for teaching Latin and elementary chemistry and physics. They thus convert themselves into a sort of medicoliterary college, and I have wondered sometimes why they did not at the same time confer both the degree of M. D. and the degree of A. M. The uneducated student goes to the college in the smaller city or to the low grade one in the large city. There he often finds teachers as ignorant as he. I have known graduates of a medical school to become in a few months professors in their Alma Mater. When a high, uniform standard is established for preliminary education this class will be unable to measure up to it. They will then either give up the study of medicine and take a station in life commensurate with their attainments, or they will set about correcting the defects of their education so that they may, when this is done, enter a medical college.

Students who have received a good literary education seek a good medical college. Knowing what a good literary education is, they will not be content with a poor medical one. So that either way the knife cuts into the medical college of the small city. The uneducated student can not matriculate and the educated one will not. The result is inevitable—lessened attendance and lessened income. In Missouri the State board ruled out about a hundred students in the various colleges of the State because of lack of preliminary education. This was for the session of 1895 and 1896, acting under the ruling of an examination by the county superintendents of public instruction. This method has proved unsatisfactory,

for nearly all of this number have since been reinstated. For the session of 1896 to 1897 matriculates must have diplomas of graduation from a literary or scientific college or high school, or in lieu thereof pass an examination before the State superintendent of public schools.

DISSECTION.—It is with the greatest difficulty that the smaller colleges secure subjects for dissection. If there were not more students than necessary the anatomical law would supply the demand. It was never intended that every city of fifty or sixty thousand people should have two or three medical colleges. But the colleges must have the subjects or the State board won't recognize them. What is the result? The anatomical boards can't supply them, and we see a Topeka Medical College close its doors temporarily; we see a widow suing a St. Joseph Medical College, charging the school with the theft of her husband's body; we see nineteen medical students arrested at Des Moines, Iowa, on the charge of grave-robbing. There is little encouragement to smaller schools if the teaching of the very foundation study of medicine is attended with such hazard.

LENGTH OF TERM.—By establishing a uniform length of term another blow has been struck at the smaller schools. They have heretofore said to the student: "Come to us; a diploma is what you want. We will graduate you in two years. Why go to a school that requires three? Our term is only five months long; why do you want to study six? Our fees are one third those of the larger schools. You can board in our town for three dollars a week; why go elsewhere and pay five?" But when every school in every city must give a course of equal duration one of the great inducements of the smaller medical college is gone.

CLINICS AND HOSPITAL ATTENDANCE.—In a recent article entitled *The Necessities of a Modern Medical College*, Dr. Ingals says: "The advantages that were considered ample until recently can not now be accepted. Every college must therefore be provided with dispensary rooms and hospital accommodations. I am familiar with the fact that fifty years ago a first-class medical college could be conducted with very little clinical material, but it does not seem practicable to give the instruction requisite at the present time with less than four or five thousand outdoor patients annually, and hospital facilities of less than seventy-five or a hundred beds." How many of the smaller colleges can measure up to this minimum requirement? How many cases of obstetrics do their graduates attend before receiving a diploma? Do their graduates have sufficient hospital experience to acquire a knowledge of the grave diseases affecting men? If they have all these things, why in the name of Heaven do their graduates pack their grips and start for a large school in a large city?

And thus I might go on enumerating many other points in which the smaller school works at a great disadvantage, under a uniform standard of requirements; but I will not weary you; I merely mention chemical, bacteriological, histological, and pathological laboratories and the expense of their proper equipment and maintenance, which can not be obtained from the tuition fees.

Let us now consider the effect upon these schools of a law requiring a State examination of every graduate from every school. Will this examination be more difficult than the school examination? Undoubtedly it will. The examinee when at school has opportunities to become acquainted with the hobbies of each teacher. It is

a well-established fact that every teacher has special questions and special subjects that play an important rôle in his examination. These individual preferences are handed down by tradition from one class of students to the succeeding one. Special stress laid upon certain subjects during the winter's course by the teacher are sure pointers of future examination questions. Students and quiz masters are quick to pick up these hints. How common it is toward the end of a session for students, with or without the help of a quiz master, to "bone up" on studies for examination! When the final test is made, many of the questions asked in the trying ordeal are found to be the ones expected and looked for. In fact, one of the strongest inducements held out to students by quiz masters is the knowledge which the latter possess of the individual peculiarities of the teacher's views on medical subjects taught by him, and a list of the questions which have been asked on examinations for many years perhaps. Any one who has looked over such a list has been struck with the striking similarity of the questions asked and with the appearance at certain intervals of well-known ones. The disadvantage under which a student labors who takes the senior year in another college from that in which his first courses were taken is thoroughly well understood, and is only another proof of the truth of the above assertions. In other words, each college has an examination that in character, questions asked, standard required, and other characteristics is *sui generis*. These things are not true of a State examination. The questions are broader in scope, because they are prepared from a study not only of medical college examination papers, but of many State examination papers. Go to the students who must pass a

State as well as a college examination and ask them which they fear the most. They will answer, the State examination, and cite as a basis of their dread the reasons mentioned above, or others of a like character. There is every inducement on the part of a State board to keep the grade of its examinations high, so that incompetent men may be kept out of the State. If it establishes a grade lower than that of its neighboring States the State over which it has jurisdiction at once becomes the dumping ground of those who have failed to obtain a license elsewhere.

There is every inducement for the medical college to make its examinations easy, especially if it be an unendowed institution, dependent upon students' fees for existence. The tendency of one is up, the tendency of the other is down. When a student knows that after his medical college life is ended there is an examination to be passed at which he has no "under holds," at which he must prove the possession of medical knowledge sufficient in amount to entitle him to be trusted with the lives of his fellow beings, and that, too, before a tribunal impartial and impersonal, what will be his course? He will at once see that nothing but the possession of sheer knowledge will be of avail, and he will set about seeking a place where this can be best obtained. Will he find it in the medical college of the small city? I believe not. A diploma carrying with it the licensing power is the stock in trade of these medical colleges. Do away with licensing power and you have done away with the only inducement it has to offer, and students desiring a medical education will go elsewhere. Do away with students and you do away with the food which gives the college life. Inanition and death follow. The diploma law is

gradually being replaced with the State examination law. There are now twenty-two medical examining boards in the United States recognizing no diploma as a license. When all the States shall have fallen into line the smaller medical college as a degree-conferring body will become a thing of the past.

Having to compete with the superior advantages of the larger colleges on the one hand and constantly subjected to the prodding of the State board on the other, deserted by those students who recognize that such a college can not fit them for a State examination, drawing their supply of students from a territory ever diminishing in size because of the encroachments of medical practice laws upon States heretofore having none, so situated that it is absolutely impossible for them to comply with the ever-increasing demands of the profession for a higher education, and having to meet these demands with an ever-diminishing income produced by the lessened number of students, it does look as though the future of the medical college in the smaller city is dark and dreary.

If, then, all these things are true, what will be the future of the medical college in the smaller city? The handwriting is on the wall, and Mene, Mene, Tekel, Upharsin does not require the aid of a prophet for interpretation. At no far distant day a diploma will have one significance and one significance only. It will indicate that the holder has complied with the prescribed course of the institution granting it, and it will be a preliminary to the State license. The medical college of the future will be compelled to regulate its teaching by requirements of the civil licensing power. It will stop trying to do something it can not do. We have reached the high

tide in medical college creation. There will never again be as many medical colleges. They will lessen in number but improve in quality with every succeeding year. Cities that are capable of sustaining one good medical college will see the three or four now existing merged into one institution capable of doing good, thorough, honest work. Others still will cease to be degree-conferring institutions, but will correlate themselves with colleges in larger cities where ample facilities for teaching the senior classes are found. They will find a legitimate sphere of usefulness in teaching the primary branches of medicine and then passing the student on for final instructions and for the degree to a degree-conferring school in a large city.

Colleges so situated as to be unable to comply with the ever-increasing demands of the civil medical authorities will become extinct. When this condition of affairs is brought about we shall see medical colleges receiving endowments. With these endowments will come larger teaching facilities and larger facilities for original research. As a result of the former will come a highly educated profession who will use the discoveries of the latter to lessen the woes and sufferings of the human race.

I trust that this paper will leave upon your minds the abiding conviction that a medical examining law is superior to every other form of enactment having for its object the legal control of medical practice. I hope that Kansas in this, as in everything else, will prove herself in the line of progress. I hope that she will place no "mossback" law upon her statute books.

"Under these conditions and tendencies, by the end of the second thirty years of our history the number of medical colleges had increased from five to forty-one; the

number of students attending them, from six hundred and fifty to twenty-five hundred; and the ratio of those graduating each year, from less than one in six to one in three.

“ Here we see a system of medical colleges originating spontaneously to supply the wants of a free and rapidly increasing people, and open to the most unrestricted rivalry, actively developing two apparently opposite results. In one direction the schools properly vie with each other in increasing the number of their professors, in full consonance with the rapid advancement of the medical sciences; they sagaciously seek out and enlist the services, as teachers, of the most learned, eloquent, and industrious men to be found in the profession; they spend time and money freely in filling laboratories, anatomical rooms, and museums with all the means for efficient teaching and illustration. So far their free rivalry has reference only to their office as teaching bodies, institutions for imparting instruction, and is productive of nothing but good to the profession and the people. But the anomaly consists in the fact that, at the same time they were increasing their professors, the same institutions were rapidly shortening their annual courses; cutting off all collateral requirements; failing to grade the branches of medical study as they increased in number and extent, so as to adapt them to the several years of pupilage; and even reducing the final examination to the simple process of asking a few oral questions in the mysterious ‘greenroom.’

“ This most unfortunate tendency of our experiment in permitting the freest rivalry in the establishment of medical schools results directly and necessarily from the fact that the degrees they confer and the diplomas they give have been permitted throughout the whole country, with only a few temporary exceptions, to have all the force and effect of a license to practise medicine. It requires but a moderate familiarity with the motives that govern human actions to see clearly that in a country where there are no entailments of estates, and where the great body of young men who seek the professions

are without pecuniary fortunes, and largely dependent on their own industry for the means of education as well as reputation and fortune in after life, the question, 'Where can I get the degree of doctor, which is equivalent to a license to practise and a full admission into the ranks of the medical profession, in the shortest time, and consequently with the least expenditure of time and money?' exerts a very great if not controlling influence in determining where the student shall attend his college instruction. Not that medical students are a whit less conscientious in their desire to fully qualify themselves for the responsible duties of our profession than those who seek any other calling in life; but present necessity, or even convenience, easily controls when there comes with it the flattering thought that, at another time, after having earned a little money by practice, all deficiencies can be supplied by a season of reviewing in a school of the largest facilities.

"Just on this half-unconscious delusion, hundreds are induced to go where the requirements in time and money are least, regardless of all other advantages. The medical college in a country village, remote from all facilities for clinical instruction in hospital or dispensary, and but scantily supplied with subjects for dissection, can issue to its graduates just as large a diploma, couched in just as unintelligible Latin, and having much the same influence with the people as the school in a metropolitan city whose students can have the largest facilities for clinical and practical study. Hence it is not strange that, before the end of the seventh decade of the past century of our existence as a nation, about forty medical colleges had been organized, only sixteen of which were so situated as to afford their students any proper facilities for clinical instruction; and that those sixteen were resorted to by a little more than one third of the whole number of those who attended medical colleges.

"The general acceptance of the college diploma as full admission into the profession, thereby uniting in the hands of the same men the business of teaching and the

power of licensing, has continued to the present day. It is wholly responsible for the fact that, while we have sixty-four medical colleges to-day (1876), one third of them are so located that they can afford their students no advantages for clinical instruction worthy of mention; and all except three or four still attempt to crowd instruction in all the departments of medicine upon the attention of mixed or ungraded classes, in annual college terms of from sixteen to twenty weeks, and exact only two such strictly repetitional courses for graduation.

“This state of things, in regard to our medical schools, is made still worse by the fact that, during the century under consideration, the system of private medical pupilage has undergone a complete change. At the beginning of that period, as we have already seen, the private study under a master was a protracted and serious work, and the resort to the college was simply to review and more fully illustrate that work; but steadily, as medical colleges increased in number, as population became more dense, and as steamboats and railroads increased a thousandfold the facilities for travel, the work of private pupilage relaxed. Indentures of medical students, as pupils, to the more noted practitioners long since ceased, and the relations of student and preceptor have become merely nominal in practice; in nine cases out of ten consisting in little more than the registry of the student's name in the doctor's office, permission to read the books of his library or not, as he chooses, and the giving of a certificate of time of study for the student to take to the medical college where he expects to graduate.”—*Contributions to the History of Medical Education and Medical Institutions in the United States of America, 1776-1876.* Bureau of Education, Washington, D. C.

The New York Medical Journal.

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PUBLISHED BY

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