AS THE LAYMAN SEES US*

Cultural Education in Medicine, Specialism, and the Distribution of Physicians

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CULTURAL education in medicine, specialism, and the distribution of physicians.

Cold science, effective but not always convincing, has come into nursing and medicine, as sentiment has been squeezed out. It has been remarked that, in the beginning, medicine was all art and no science, while now we are trying to make it all science and no art.

MOST of us who have been practicing medicine for a considerable number of years are sometimes troubled at an apparent change from high regard to something like querulous criticism on the part of the public we serve. There is an impression that the esteem in which the medical profession was once held has suffered in recent years. We find laymen here and there addressing medical men on such subjects as The Layman's Impressions of the Medical Professon; What Is the Matter With the Medical Profession, and like topics.

Conscious of progress and rectitude, we wonder wherein we have fallen from grace. The passing of the old family doctor, revered in story and song, has been the regretful theme of addresses and writings until it almost brings tears to the eyes. Thus do the humanities tug at the heartstrings, and cloud the vision, till progress and scientific achievement are lost to view.

The office picture of the bearded doctor in midnight vigil at the cot of the dying child, hand on chin in troubled thought, doing nothing, but breathing sympathy, had a fine human appeal. Bring the scene up to date, and what would the picture be? White-garbed figures, an impersonal nurse or two, and aspirating needles ready to jab into the infant's spine—efficiency, action, but repelling, a life jerked back from the brink perhaps; but roughly. Cold science, effective but not always convincing, has come into nursing and medicine, as sentiment has been squeezed out. It has been remarked that, in the beginning, medicine was all art and no science, while now we are trying to make it all science and no art.

Those fortunate individuals who have been blessed with cultural influences in their early surroundings, and especially in their educational advantages, still make conspicuous successes by applying their science clothed with human interest and sympathetic concern. Do we wish to encourage this character-forming influence in medical training, or is the whole world becoming so materialistic it is not worth while? Can we be educated and neglect the humanities? It has even been said the quacks get closer to the people than do the physicians; though cultural training, Heaven knows, has nothing to do with this.

One professor of philosophy said: "The satisfaction that many of us laymen get out of going to quacks is, primarily, the comfort of being treated like men instead of like incurious animals. An intelligent layman, in impatience with what he calls the intellectual selfishness of physicians, has recently declared, 'quacks know men, but not medicine; physicians know medicine, but not men.'" Certainly the obligation rests with medical educators to do everything possible to prepare their pupils, to the end that the effect upon the public will enhance the prestige of scientific medicine. The individual graduates owe it to their profession to give careful thought to this phase of their contact with the world.

Dr. John J. Abel says: "There should be in research work a cultural character, an artistic quality, elements that give to painting, music, and poetry their high place in the life of man." A fanciful way of putting it, but it conveys the idea I have in mind.

The people get their misinformation about scientific research in devious ways. Much of it is furnished by the anti-vivisectionists and the other antis. Just now a sensational novelist has furnished a good dose of it in "Arrowsmith." Thousands are reading it and thereby doubtless getting very fixed ideas of the unworthiness of scientists in general. In this novel all the characters who are credited as true scientists are given rather unpleasant personal attributes. Gottlieb has no heart or sympathy, his experimental controls must be carried out relentlessly, whether a number of human beings are sacrificed in the experiments or not. Sondelius has a heart, but he is a sort of roughneck, boisterous, drunken, and obscene. Martin Arrowsmith could have been handled more gently, but scenes of drunkenness and gambling are introduced to mar his good life work. Terry Wickett is cynical and grouchy.

On the other hand, all the characters in the novel, like Tubbs and Holabird, who are given credit for any refinement at all, are made fun of and depicted as nambypamby, pink tea scientists, using their positions for personal social advancement. One gets the impression that the collaborator of Sinclair Lewis, who furnished the medical stage business for the book, must be a misanthrope with an axe to grind because of experiences in the McGurk institutes of the country which have not been to his liking.

Garrison calls attention to the fact that the century which saw the beginning of scientific medicine "was the culmination of an age in which the Greeks reached a degree of civilization and a supremacy in

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philosophy, lyric and dramatic poetry, sculpture and architecture, which has not been equaled by any people who came after them. Never before or since had so many men of genius, the contemporaries of Hippocrates, appeared in the same narrow limits of space and time. Hippocrates gave physicians the highest moral inspiration they have, and he crystallized loose knowledge into systematic science." Thus did a period, during which cultural knowledge reached its acme, bring about the very birth of scientific medicine, and provide it with a code of ethics, than which we have no better today.

Of course there has never been a time in history when medicine and medical men have been quite free from criticism, and their activities even caricatured. Perhaps our hypersensitiveness is bred of our irritation at the apparent lack of applause at the wonderful fruition of the years of *experimental science*. These years are few in number, compared with the centuries of study by *observation,* or as Claude Bernard called it, *passive science.*

In our strenuous efforts to bestow upon a more or less unwilling world the benefits of recent progress, we have interfered with the tranquillity of our smug parasites—those greedy pests that live on the fringe of decent medical society and at its expense. I refer to the myriad frauds which have wilted a little in the sunlight of our propaganda for reform. We cannot entirely destroy them. Each new discovery fertilizes them into rank new growth.

For instance, discovery of a few physiologically active glandular principles has stimulated the business of marketing, through medical channels, most of the messy stuff in the abattoirs, which people could not in any other way be persuaded to eat. These endocrine vendors mix up glands and their principles like Hungarian goulashes, make them into tablets, and men who have spent seven years in medical college are expected to fall for this shotgun endocrinology.

We have killed about half the patent medicine evil and have made enemies doing it. At first the periodical and daily press were none too pleased with the decline in patent medicine advertising; but later they rallied to the cause of honest medicine, and now make valuable allies.

We have valiantly fought the cults and quacks and have been roughed a little. They seem to thrive on opposition, and if we turn away the spot-light they will die out or grow into something useful and be absorbed, as have their long line of predecessors.

At present, there are under discussion two other subjects closely related to each other, as well as to the attitude of public criticism. One is specialism, and the other the failing supply of rural physicians. Both these matters rest upon the functioning of inexorable economic laws, which no sudden action by organized medicine, examining boards, or medical faculties can put aside.

The subject of specialism has been attacked by many writers during the last few years. It is curious to note that all straddled the question. They expressed a general feeling that there was something amiss, but none condemned the general practice of medicine, and none had the hardihood to condemn specialism as such. There was much concern over the relationship between the general practitioner and the specialist, and this was shown in the titles of many papers. There was comment upon the arrogant attitude of many specialists toward the family physician. The fact that such attitude exists at all may show the approach of the saturation point in specialism. If certain specialists find it necessary to argue specialism to their clientele and others in season and out, not sparing unworthy criticism of those who work in wider limits, the inference is they are feeling the pinch of hard times.

The advantages of specialization are stated by L. F. Barker to be: "It increases productivity; facilitates the acquisition of accuracy, speed and skill; provides for a better distribution of tasks; economizes material equipment and mental energy; and accelerates discovery and invention."

Specialism in medicine is only response to the spirit of the times. The public is familiar with it in commerce and industry, and undoubtedly encourages it in medicine. This encouragement meets ready answer in our ranks, where mental and physical capacity are subject to variations the same as they are in a Ford factory.

Ultra-specialism, however, is of questionable value. It prevailed in Egypt four hundred years before Christ, when Herodotus, the historian, says, "Each physician applies himself to one disease only, and not more. All places abound in physicians." And yet in ultra-specialism the individual of average ability and the genius, alike, seem at present to find

fertile soil. The one content to drive one bolt in the human flivver, day in and day out, gains a proficiency and prestige denied him in the broader field; and the other, of great mind, concentrating a lifetime upon one line of endeavor, should be expected in addition to material success, to add something of discovery and invention to the total of medical knowledge. If he does not reach these heights, he wastes his talents in narrow specialism, and his life would have been better spent in the service of broader practice.

To those who are inclined toward general practice the situation need not be wholly discouraging. The field is and always will be open in villages and towns; and in every great city are to be found men with enormous general practices doing the best of work. Their success is based upon that soundest of foundations—service. These men recognize the necessity of specialists. They use them freely when the welfare of a patient depends, first, upon the expert use of some instrument of precision too infrequently used to warrant inclusion in their armamentaria; second, upon the exercise of skill in technique, only to be gained by experience with many patients of a particular type; third, upon laboratory work too time-consuming for them to undertake. They choose their specialists with discrimination, for their ability and for their broad-minded willingness to co-operate, and who dare say the patients' interests are jeopardized by passing through the hands of such a general practitioner?

It has been said, "Patients who independently seek the aid of specialists often make a mistake, and the tendency is to be deprecated." With certain modifications this is true. A clientele, all his own, is a tempting asset to many specialists, but this does not alter the basic fact that a broad survey by a general diagnostician is, in most cases, of paramount value to the patient. The ability to make this survey should be the aim of the general man. Perhaps it will mean, especially in cities, his evolution into what we call an internist. The internist now is really a sort of advanced general practitioner. He is the diagnostician and distributor for the other specialties, like the family doctor, but he enjoys the prestige of specialism, and is most useful in his broad field. However, there are signs of disintegration here, for we see his work undergoing subdivision of the ultra-variety, to make room for the electrocardiographer, the gastrologist, the allergist, and, very lately, the periodic medical examiner. The latter is a new and perhaps logical development in the attempt to keep some place open for the wise individual who wants to know which specialist he needs, if any. Seriously, we do not know how far specialism is going, but we do know that in the reasonable subdivision of labor, energy is conserved. If it goes too far, integration will begin, and proceed until the economics of the situation are satisfied.

The same melting pot of economic laws figures in the problem of the distribution of physicians. This is the most actively discussed subject in medical economics today. The failing supply of physicians has caused great complaint from the residents of many rural districts, and there have been demands for drastic relief measures. One of these was a bill introduced in the Tennessee Legislature two years ago. It was entitled "The Abolishment of the Preliminary Board of Medical Examiners." This legislation was devised with the view of curtailing the length of time and expense required to get a medical license to practice; and its author believed its passage would cause more physicians to locate in the remote country districts. The bill passed both Houses, but failed to receive the Governor's signature. The same position is taken by Dr. Pusey, who believes that shortening the time spent in medical college would attract to medicine a type of individual who would be satisfied to take up the burden of country practice. If this were so, we ought to see the cultists avoiding the cities and flocking to the villages and cross-roads; but while short in knowledge, they are often long in business wisdom. The other side of the thesis is exhaustively treated by Mayers and Harrison in a report of The General Education Board in 1924.

There never has been great attraction in the hardships of country practice, and even twenty-five years ago many young graduates only took it up because of the crowded condition of the profession in the cities, and because of the common belief that a living could be gotten more quickly in the village communities. After a financial footing had been gained, and experience acquired, many left for the cities. After the war the movement was accelerated. Many medical officers recruited from the country never returned, as they had conceived new ambitions through experience in well-equipped hospitals, and through special training in army schools. Many of these entered the specialties of medicine, and have kept pace with their metropolitan confreres.

At the same time there has been a general movement, outside the profession, toward the centers of population. The farmer cannot keep his sons and daughters at home, and has trouble getting labor. Over 50 per cent of the country's total population is in towns of 2500 or more. From 1910 to 1920 the rural population increased only 3 per cent, while the urban population increased 26 per cent. This indicates where the work is, and there the physician will go. One author says: "The reasons why the country doctor will not stay in the country are these: the inadequate fees, the bad roads, the hard work, the lack of hospital accommodations, insufficient educational opportunities, but above all, the lack of loyalty on the part of his patients."

When trained statisticians and economists study the subject, the reason for the exodus of rural physicians becomes manifest. The following passages from Raymond Pearls' article are expressive: "It is apparent that generally the exodus in recent years of physicians from the rural locations has had associated with it a definite and marked decline in the per capital real value of farm property. In short, it is seen again that the behavior of the physician in the conduct of his affairs betokens a considerable degree of good economic sense. The physicians behave in the conduct of life about as any group of sensible people would be expected to. They do business where business is good and avoid places where it is bad."

"After a young medical man gets out in the

world and by hard experience learns economic wisdom, his behavior thereafter, relative to location, will not be different according to whether his education was expensive or cheap."

One of the conclusions of the General Education Board report is: "There is no validity in the view that the proportion of recent graduates settling in the rural locations is lower than the rural population has a right to expect." The Massachusetts Legislature ordered a report on rural health and medical service, and the Department of Public Health made a report in January of this year. Some of its findings are: "Unless the movement of the general population from the country to the city is checked, the economic factors will increase rather than decrease the inability of certain locations to support a physician. Less than 6000 of the population of Massachusetts is more than six miles from a physician. The physician's charge for a distant call, compared with garage charges for making the same trip, shows that the difference is less than the usual fee for the physician's house visit in his own village. This places no higher valuation on the time the physician spends on the road than if he were a taxi driver."

Many examples were found of lack of loyalty in supporting the local physician which was not based on his professional shortcomings. The farmer is not behind his city cousin in his belief in specialists, and he often drives thirty miles to the city for more expensive, but no better, advice than he could get at home. His faithful professional neighbor, good enough for the drudgery of night calls and emergencies. only gains his full confidence when he displays intelligence enough to go where the business is going.

It seems to me there is danger in this propaganda for lowering the standards of medical education. The alleged unfortunate plight of the rural dwellers makes good copy, and it is beginning to be exploited in the periodical literature. It is likely to have its effect upon state legislatures, already prone to dangerously weaken requirements for medical licensure.

Though the argument looked plausible at first, I have failed to find any data sponsored by trained investigators which affords proof that high standards of medical education are at all responsible for rural shortage of physicians.

A study of the exact situation in California, made by our own council or by the league, would be of value if the discussion becomes acute or menacing from the legislative standpoint. I believe such a survey would show conditions to be about as they are in Massachusetts.

In conclusion, it would seem that our public is critical, not because it fails to recognize the colossal advance in medical science, but because the upheaval has subtracted something from the sympathetic, personal contact, so satisfying in the past.

Attempts should be made to overcome this by bringing back into the education of the physician some of those subjects which were of old considered necessary in the equipment of the well-educated person, but which have been dropped as impractical in this business age. They have to do with what we call the art of medicine.

The education of the present fits the physician superlatively for his narrow specialty, but it is not education which commands instant and general recognition. He knows his own attainments and he puts a label on them: surgeon, internist, obstetrician, and he is recognized at his own appraisement, and that only. Most of those subtle influences which could bind him to the human interest activities, such as languages, history, art, music, poetry, and religions, are crowded out of the pre-medical years. Much of the great mass of technical detail which has taken their places is undigested, hence not available for the practical field worker, but most valuable to provide the necessary succession of research workers. The needs of these two classes—field worker and research worker—seem divergent, in that the fifty are being forced that the one may emerge in perfection. The fifty must deal with tried and proven methods for the cure of ills, and in addition must be made into attractive mold that public sentiment may be directed, and scientific medicine allure, not repel.

In spite of all, medical progress is unquestioned and unrivaled. As regards our relations with our disreputable camp followers, quacks, cultists, sellers of useless medicine, and the rest, we are warranted in feeling optimistic, and hope to be loved some day for these enemies we are making.

251 Moss Avenue.

Zinc Stearate Dusting Powders for Infants—The second report of the Committee on Accidents from Zinc Stearate Dusting Powders appointed by the Board of Trustees of the American Medical Association has recently been published. Copies of this report, with an appendix showing the opinions of thirty-four representative pediatricians on the therapeutic value of such powders, can be obtained on request. Address, Committee on Zinc Stearate Dusting Powders, American Medical Association, 535 North Dearborn street, Chicago, Illinois, enclosing a self-addressed, stamped envelope. There were reported to the Committee 131 accidents from the inspiration of zinc stearate dusting powders by infants. Twenty-eight of the victims died. The Committee conferred with representatives of certain distributors concerning the dangers incident to the use of such powders on infants. Following a meeting held at the headquarters of the American Medical Association, these distributors agreed to co-operate by adopting self-closing containers for the powders they distribute and agreed that cautionary labels are desirable. Opinions were secured from thirty-four representative pediatricians concerning the therapeutic value of zinc stearate dusting powders. Thirty-one believe that such powders have no advantage over other dusting powders, that they constitute a hazard to infant life, and that their use should be discouraged.

Pathology of the Hypophysis—It is evident from the seven cases reported by J. P. Simonds and W. W. Brandes, Chicago (Journal A. M. A.), that, with advancing age, in many persons the hypophysis undergoes fibrosis, and the body does not receive the normal amount of the secretion of this gland. Fibrosis of the anterior lobe of the hypophysis occurs with moderate frequency in persons past 50. This condition is apparently due to arteriosclerosis of the vessels of the hypophysis. The character of the lesion is such that it must interfere with the function of the glandular portion of this organ. This suggests one of the reasons for the failure of efforts at rejuvenation that are directed to the restoration of only one gland of internal secretion. One case of the series here reported appears to be true chronic hypophysitis. In spite of the negative Wassermann test, other findings in the body suggest the possibility of syphilis as its cause.