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ADEQUATE MEDICAL SERVICE OF THE FUTURE*

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CINCINNATI

In the strikingly evolutionary programs of the twentieth century, no group of individuals is about to have its old-time relationships more radically changed than the group of physicians. Many factors, social and economic, will be responsible. Some of these most evolutionary changes will promptly and voluntarily come from within the profession; others will be forced on the profession. It is evident that we have for all time passed beyond the stage of the absolutely individual and personal relationship of family physician and patient, to one in which the community steps in to safeguard itself against any abuse of this circumscribed relationship, and demands collective action in matters of health for the benefit of all.

SOCIAL AND ECONOMIC PROBLEMS

The concentration of population in cities has developed problems beyond the control of the private physician. In the trail of density of population have come the tenement, sweat-shop, bad housing and living conditions, tuberculosis, alcoholism, venereal disease, poverty, delinquency and crime. The development of industry with its occupational hazards has created another series of health impairments which the family physician may have the knowledge to alleviate, but the prevention of which is entirely beyond his control. The establishment of the public health department was a partial answer to these new social requirements.

The coming of industrial concentration presented other social disorders. We have witnessed the development of class feeling and the estrangement between labor and capital. Strikes and lockouts were only a consequence. The valued relationship of master and man passed out. They no longer had real personality for each other, no longer worked side by side, they lived further apart, thus making the difference in their scale of living more evident. The gulf between poverty and riches was widened. Unemployment, seasonal employment, the physically unfit, the unemployable, the industrial hobo, the labor turnover, all loomed up as medical and social problems of such huge size as to spell defeat of their solution.

Society is realizing that the problems of industry are largely its problems; that the major portion of the community is engaged in industry and that when

badly administered, it is therefore a menace to the peace, health and happiness of the whole community. When properly administered, it is of inestimable value socially and economically. Whatever industry does, because of its size, is impressive.

Has the medical profession kept pace with society in its realization for the necessity of community thinking, community action? Has the profession recognized that its work is fundamental to the solution of every social problem thus far presented? Are we thinking in terms of the mass, and adjusting our work to the new social needs? Have we fully realized our obligations, our opportunities? Do we actually sense the full meaning of the fact that every social disorder has a medical aspect? Do we really appreciate that most social misfortunes are founded in the neglect of the laws that make for a healthy mental and physical state, and that it is our bounden duty to apply ourselves to these tasks? Do we understand that these social disorders call for a new medical order? To the extent that we do understand, we shall be either producers of social reform or merely its by-products. Ours is the choice.

It was with these thoughts in mind that your officers deviated from the usual style of program for the Section on Preventive Medicine and Public Health, and have endeavored to encourage an extended discussion of the social and economic status of the practice of medicine. In thus drawing your attention away from the discussion of detail of administration, away from the refinements of the application of scientific and hygienic measures, I hope to visualize a broad concept of the potentiality of the socially minded physician in private practice, in public health practice, and especially in industrial practice. I am trusting that the discussion may point the way toward a more adequate practice of medicine, the medicine of tomorrow.

Ours is no effort by legislation to thrust revolutionary methods on the members of our profession. It is rather to set out in bold relief some of the rational and evolutionary processes that are taking place, and may yet take place, within the profession; to measure, if possible, their relative social values, and to deduce from this study the direction in which medicine must go to meet the new social order, to produce adequate medical service. I shall confine this discussion to the consideration of three of these well defined tendencies:

1. Higher standards of private practice by refinement in diagnosis and treatment through group practice.
2. Higher standards of public health practice (emphasizing school dispensaries).
3. The development of industrial medicine — the new specialty.

* Chairman's address, read before the Section on Preventive Medicine and Public Health at the Sixty-Eighth Annual Session of the American Medical Association, New York, June, 1917.

Scientific attainment will come through the emphasis of the first. The application of this science to the ultimate social good will proceed largely through the latter two. All three together, through years of patient effort, will make for that final goal, adequate medical service.

In contrast to the stated need for years of evolutionary growth, the adequate medical service is being heralded as possible of accomplishment over night, by the mere process of legislative action, changing the method of compensating the physician through a central collecting agency. Some of us are ready to affirm that there is an actual shortage of adequate medical service both quantitatively and qualitatively, and that, therefore, no kind of legislation can make it purchasable by all or for all; that the chief social need is for the development of some organized plan of reform within the profession that will eventually produce and make procurable adequate medical service.

We are deeply indebted to the proponents of social insurance for setting forth the direct relationship between poverty and disease, for emphasizing the economic advantage to society of grappling vigorously with the problem of disease, and for pointing out the shortcomings and the inadequacy of present medical service. The argumentation has crystallized recognition of the immense contribution that scientific preventive medicine should make to the nation's better health. But, in their unfortunate haste to legislate, and in their intolerance of further discussion, they have not taken time to write into their instrument the fundamentals that attack disease and thereby prevent poverty.

It is not my purpose to decry compulsory sickness insurance, but to present a partial program for the socialization of medicine which will be worth while for itself, but which incidentally must finally become the foundation of any rational health insurance plan against which will be found but few opponents.

As the proposed health insurance bill revolutionizes the relationships of the physician, we are by that act immediately threatened with a new future for the practice of medicine. Is it not timely, therefore, that the medical profession should decide what that future shall be?

The subject of adequate medical service is of vital interest to the wage earner, the political economist, the physician, the employer and the public. Ours is an effort through group practice or a symposium discussion to diagnose our social miseries, and then to write a prescription. It is fair to assume that if a program can be devised that will meet the needs of the individual, it can probably be extended advantageously to meet the needs of the community.

What are the individual's social needs?

1. Health, so that he may work effectively and thereby earn a good wage.
2. Employment in an industry free from health and accident hazards.
3. A healthful home accessible to his work.
4. Intelligent medical care in time of illness.
5. Protection to his home and industry.
6. Good schools for his children which safeguard the health.
7. A health department which will protect his family against contagious diseases, and safeguard his food supplies.
8. Healthful recreation for himself and family.

It will be seen at a glance that his success and happiness are predicated on his health and that of his family; that this health is possible only through collective action, and that the family physician appears only when some health agency has failed to prevent disease.

For the reason that most physicians are still individualists and have failed to recognize that health is no longer a personal matter, a discussion of the necessary changes in the practice of medicine is timely.

A conviction has been born out of considerable observation and experience in philanthropic and social work that physicians do not comprehend their direct relation to sociology. The physician should be the leader in community thought in all problems of disease, insanity, crime, delinquency and dependency. To do so, however, he must have a wide angled vision of social disorders.

If disease is so costly, what definite and practical means are now at hand to reduce that loss? How far can we prevent disease? To those who have given only cursory thought to this subject, the annual loss of \$500,000,000 charged to illness seems impressive. But let us consider what the great economic and social wastes are that make for sickness and poverty. Let us see whether these wastes are preventable, and if so, should not society rather give its attention to this worthwhile program which, in accomplishment, will be striking at the roots of the evils which to many appear momentarily to justify the medical and social revolution involved in compulsory sickness insurance?

Tuberculosis, it is said, claims an annual economic loss in this country of nearly \$500,000,000. Bad housing, bad living, alcoholism, venereal disease, and occupational diseases would surely add an equal number of millions. The excessive annual labor turnover, or the quick hiring and firing of help is responsible for another \$500,000,000. Voluntary absence from work due to personal reasons or lack of application causes an annual loss of more than \$500,000,000.

Now these social and economic losses, totaling billions, are all preventable if society is really in earnest about improving its fundamental conditions and those of the medical profession. Remove these drains on the wage earner's health and purse, and he will need none of the proffered aid from the state in the guise of compulsory sickness insurance.

We can form some estimate, for instance, of the cost of alcohol and venereal disease to society, if we take the sum total of the cost of prison administration, maintenance of almshouses, institutions for the insane and feeble-minded, the cost of caring for delinquent and dependent children, the blind, and the cost of the erection of hospitals, and particularly the care of sickness due to the factors of alcohol and venereal disease.

Alcohol is charged with an increased mortality of from 25 to 75 per cent. in its users. The morbidity must follow about the same curve. Will the proposed model health insurance bill reduce alcoholism or venereal disease by one iota? On the other hand, would not some constructive program looking toward the reduction of these enormous burdens on the community be the most logical way of immediately reducing poverty and thereby furnishing a purchasing power for medical service? Considering the long lasting financial drain of tuberculosis, will the mere payment of two thirds of the wages make the slightest dent in the fearful economic loss from the white plague? This disease can be finally controlled only by

early diagnosis. The early diagnosis and cure of tuberculosis can come only through higher standards of medical practice, medical supervision, physical examinations and reexaminations, through better housing conditions and sanitary measures, and through the reduction of alcoholism and venereal disease on which this plague is so largely engrafted.

SOCIAL IMPROVEMENT THROUGH MEDICAL IMPROVEMENT

What plan for social improvement is worth our time, our discussion, our money? If we, as physicians, would be successful in the improvement of the health and happiness of the nation, we must at the outset reorganize both private health practice and public health practice. Both must be placed on a higher plane of efficiency. Next, we must set up adequate public health machinery by reorganizing the federal, state and municipal health work. This work must be entirely removed from political control, so that scientific attainment and spirit may pervade the whole organization, and then we may have the maximum of coordination and cooperation throughout this machinery for the attainment of 100 per cent. efficiency in working for public health. The proposed health insurance bill affects but 30 per cent. of the population (industrial workers). Any plan for health betterment should include 100 per cent. of the population. Good health pays. It should be demanded of the rich as well as the poor. We can well afford to extend our health department facilities so that we may know about the living and health conditions of all of the people.

How can this best be accomplished and by what agencies?

1. We must provide the private practitioner with the opportunity of higher standards of practice.

2. We must raise the standards of public health practice.

3. We should encourage the extension of industrial medicine.

These three factors will produce better health, lessen disease, and increase the number of working days, as well as working capacity, thereby reducing poverty and at the same time increasing the purchasing power for better standards of living, including the purchasing capacity of adequate medical service.

HIGHER STANDARDS OF PRIVATE PRACTICE THROUGH DIAGNOSTIC CLINICS

What share of the \$500,000,000 loss which is charged to illness is due to unnecessary length of illness on account of lack of diagnosis, faulty diagnosis or faulty therapeutics? Loss from illness can be tremendously reduced through the establishment of diagnostic clinics so that 100 per cent. of the people may enjoy the advantage of the most scientific medical and surgical knowledge obtainable. These diagnostic clinical stations would afford to all physicians in their daily work the same facilities as extension courses and postgraduate work. It is difficult to imagine a better method of raising the standards of medical practice.

The group plan of practice, the furnishing of diagnosis, should be made free, or supplied at a minimum cost, so that 100 per cent. of the profession may keep in daily contact with the progress of scientific medicine by taking their patients to consulting clinics. Today in large cities 20 per cent. of the profession only have access to the scientific equipment of hospitals and pub-

lic diagnostic research laboratories, and the 20 per cent. have these advantages at the cost of the 80 per cent. of the public and the 80 per cent. of the profession. By making diagnostic clinics free, or practically so, we shall enormously stimulate accurate diagnosis, systematic treatment, and preventive health work. These diagnostic clinics should be under the control of the health department. Health departments today make Widal tests, sputum examinations, Wassermann tests, diphtheria cultures, and send their men to confirm diagnoses of contagious diseases. The extension of this work to more complete diagnosis should not be objectionable.

Hospitals should primarily be teaching centers for all the physicians of the community as well as for medical students. Too often public and semipublic hospitals serve the selfish purposes of a fortunate few who, while claiming altruistic motives, deny to the profession at large, and therefore to the public, the educational advantages of hospital and clinical facilities. Specialism is all too rampant, and forbids the general practitioner a place in the sun.

THE SCHOOL DISPENSARY

The tremendous reduction in loss from illness occurring through the operation of industrial dispensaries suggests the extension of this principle to the schools. If full time physicians were placed in charge of all-day dispensaries in schools, making physical examinations of all children, and prescribing for their minor ailments, using the public diagnostic clinics previously referred to for confirmation of diagnoses, a similar reduction would take place in lost time from school as has taken place in lost time from work through the operation of all-day industrial dispensaries. Many universities have already instituted such medical supervision and care of the students. Industrial workers and schoolchildren comprise, perhaps, more than 80 per cent. of our population that would thus be reached by intensive preventive work and treatments in the daily clinics. The school dispensary in reaching out and supervising the child of preschool age, now utterly neglected, will serve a great social purpose.

THE IMPORTANCE TO PUBLIC HEALTH OF THE INDUSTRIAL DISPENSARY

If war has proved anything, it is that military success is dependent on industrial efficiency of the country. The health of the industrial units has loomed up as of paramount importance. We are equally concerned with the health of the individuals in these units in peace times, since they form the major portion of the community.

Perhaps the greatest change that has come in medical practice has been the development of the field of industrial hygiene. It is now taking the whole time of thousands of physicians in the medical supervision and care of employees, and it would seem that the beginning has just been made. No doubt this situation has been stimulated by workmen's compensation acts, but it is equally due to the awakening social consciousness on the part of the manufacturer. He has learned that the health of the worker is a definite asset in his business. Medical care in industry is not a charity. It pays good dividends. With the discussion for social insurance, we may look for a still greater extension of this work, and a more general employment of physicians in industry. The caring for occupational diseases, under workmen's compensation com-

missions, which is sure to come, will further stimulate the interest of industry in industrial sanitation and supervision of employees.

In strong contrast to compulsory sickness insurance, the industrial dispensary plan assures constant watchfulness over the health of the industrial worker, and brings to light economic pressure for the elimination of industrial hazards. At the same time, the wage of the worker is raised because such care increases his capacity for work and therefore still further reduces the necessity for charity in one form or another. It adds a new arm to the health department, and makes possible preventive medicine such as we have never yet dreamed of.

It does not take much imagination, therefore, to foresee the time when practically all of the industrial workers will be under daily supervision through industrial dispensaries. For the first time, then, we can begin to collect accurate data on morbidity. The very limited registration reflects the backward state of scientific preventive medicine. Absence from work is an economic question, and industry is going to know the reason why a man is off from work, and from what illness he is suffering. The employer is going to concern himself to the end that the employee's medical attention is of good quality. He will be interested in his food as well as in his housing problems. As to the claimed loss of nine days per year per man, or \$500,000,000 on account of illness, private initiative, through the industrial dispensary, has shown that this loss can be reduced by one-half without charge on any one but the employer, and this money is gladly spent because it is economically sound to do so.

Now the questions arise, What relationship will this new industrial medicine bear to public health work? Should it not have some kind of supervision from the health department so that its work may be best coordinated? And lastly, Would not industry cooperate in making industrial hygiene compulsory?

This type of socialized medicine will be intensively preventive, and entirely democratic; it will discover disease in its incipency; it will prevent loss from illness instead of merely paying, through compulsory sickness insurance, a certain fraction of that loss; it will attack directly such problems as bad housing, venereal diseases, alcoholism and tuberculosis, and thereby make a fundamental contribution to social welfare. In comparison, the proposed sickness insurance bill is merely palliative, and actually tends to cover over and hide the various "social ulcers."

If we were to socialize medicine to the extent suggested, we would improve that time-honored and most desirable relationship between the family physician and patient. This immediate and definite response to social need would avoid the lowering of standards that is likely to come with the introduction of the panelized physician. Unless compulsory sickness insurance can be so devised as to place chief emphasis on prevention of disease rather than the giving of financial relief, it will actually jeopardize present health work by further reducing the present inadequate budgets. Through the socialization of medicine, the raising of the standards of medical practice, along with the extension of preventive work, illness to the industrial worker and to the rest of the public might well be reduced by one half. It would then follow that the distribution of the loss from nonpreventable diseases could more rationally be undertaken by some insurance plan.

It appears that no social progress in matters of health can be made which is not preceded by progress in the practice of medicine. The medical profession, however, will be limited in its progress unless it recognizes the close interrelationship between social work and medical work. These must be coordinately developed.

Let us now begin within the profession "a clean up and brush up campaign." Let us "put our own house in order." Let us be certain that we have given close attention to the social needs of the community. We may stand erect in the knowledge that we have always given unstintingly of our energy to make the world better for our living. If we are fully awake to our social obligations and opportunities, we need not commit the error of permitting well meaning reformers to mobilize our forces. It is our business to formulate social programs, not ours to accept, unchallenged, programs which place uneconomic burdens on us. Who are better equipped to write a social prescription than the members of the medical profession? Before making any additional sacrifices, we want to be "dead certain" that the other social groups are doing their part, and that the sacrifice is justified. If society at large will do her share in correcting her own evils, the medical profession can be counted on as always to cooperate and to do more than its share.

CONCLUSIONS

1. Private health practice and public health practice must be improved.
2. The knowledge of the prevention of disease, its diagnosis, and cure must be advanced.
3. Higher personal and ethical standards must prevail.
4. This better day will be hastened by a more general adoption of the group practice plan.
5. More men must fit themselves for the distinct specialty of industrial medicine.
6. The supervision of schoolchildren and children of preschool age should be extended through the establishment of school dispensaries.
7. These methods together will constitute an adequate medical service, and be a forward step in the ultimate socialization of medicine.

ABSTRACT OF DISCUSSION

MR. LEE K. FRANKEL, New York: The fundamental error that has been made in the discussion of this subject is due to lack of realization as to what insurance means. Primarily, insurance has no thought of prevention. The advocates of social insurance have said much about the proposed compulsory insurance bill carrying with it prevention of sickness. If we will only realize that, fundamentally, insurance is not prevention, but that it is indemnity for loss, we may get together on a basis for legislation satisfactory to all. Health insurance, basically, is intended to replace wages which individuals lose by illness. This is a comparatively simple matter: it means the preparation of a morbidity table in order to determine the cost. So far as this payment of claims is concerned, insurance involves the medical profession; but it involves it only in so far as the skill of the medical practitioner is required to determine whether the individual who claims benefit is or is not entitled to benefit.

Where the confusion has arisen, not only here, but abroad as well, is in the fact that the medical practitioner has been expected to perform this one primary and important function, but, in addition thereto, to give medical treatment and care.

When you realize that medical men have deliberately

banded themselves together, have gone on so-called strikes, and have refused to give treatment, in absolute opposition to the ethics of the profession, you can realize what social health insurance in Germany has developed. If there is one thing we want to avoid, it is the repetition of that in the United States. The question of medical care, the question of treatment, is a thing apart from the payment of cash benefits. Whether we shall get away from the theory of the individual medical practitioner, with his fee, and have salaried medical practitioners, cannot be determined by the outsider; it must be determined by the profession itself; and until the profession has given careful consideration to this matter, has come to some agreement, we cannot develop any efficient and thorough scheme of sickness insurance in the United States.

DR. JOSEPH GOLDBERGER, Washington, D. C.: In my judgment there is no matter that is likely to be such a powerful incentive for the exercise and practice of preventive medicine as health insurance. As an illustration of the principle involved, I want to cite the parallel phenomenon that we are seeing at the present time in connection with preventive medicine in a field related to health insurance, namely, life insurance.

Now, you all, I think, know the splendid work that the Metropolitan Life Insurance Company, for instance, is doing toward the conservation of health and the prevention of death, simply because it finds that it is a matter of dollars and cents; that it is a matter of economy to prevent death. Now, it seems to me that when we have some system of health insurance, then the prevention of sickness will become a profitable business to the organization insuring against sickness. When it comes to the question of organization and administration, that is a matter about which I have no opinions. The point, however, that I wish to emphasize, and that I think is of fundamental importance, is the one that I have just mentioned: that health insurance makes the conservation of health and the prevention of sickness a matter of dollars and cents, a most potent and driving force.

DR. OTTO P. GREIER, Cincinnati: May I insert a comment on Dr. Goldberger's statement as to the likelihood of economic pressure bringing about preventive work? If he will go to Ohio and study the workmen's compensation law and see the ever-increasing cost per \$100 of insurance in the various industries, and note how relatively indifferent the manufacturer is to that increasing cost, he will take a different view as to the rapidity with which people will respond to preventive work under social insurance because of economic pressure. What actually happened was that industry opposed the workmen's compensation act. Once adopted, the industries accepted the situation and the rate per \$100 of pay roll for each class of industry. When the rate went up 5 cents, 10 cents, 15 cents, 20 cents per \$100, little or no attention was paid to it. Industry had acquired an immunity against any economic reaction. The fact remains that industry is not trying to reduce accident through a desire to reduce the rate. The real reason for industry's interest in reducing accidents is a realization that the man's absence is expensive because of the lowering of production, and because by reducing accidents industry also reduces the expensive labor turnover.

Detecting Adulteration in Tea.—A new method of detecting adulteration in tea has been described by L. Rehfoos in the *Bulletin* of the Botanical Society of Geneva (Switzerland). It involves an examination of the stomata, which are quite different in *Thea sinensis* from those of the leaves used for adulteration. In *Thea* the guard-cells of the stomata possess, on their inner surface, a very strongly marked layer of cutin, which is prolonged into a beak or hook, and which is distinct from the beak which closes the ostiole. Mr. Rehfoos finds these features, with minor variations, in all of numerous kinds of tea examined, and they appear even in the sepals of the tea plant. The only leaf used for adulteration that bears much resemblance to *Thea sinensis* is the leaf of *Camellia* (also a species of *Thea*), but a transverse section of the latter shows that the hooks of the stomata are very slightly developed.—*Scientific American*.

A CRITIQUE OF BANTI'S DISEASE*

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INTRODUCTION

The disease described by Banti has received fair attention from writers on clinical medicine, but curiously, very little from pathologic anatomists, and rarely from both. As a consequence, the literature on Banti's disease affords a most disjointed impression, and leaves little material on which to base an estimate of the validity of Banti's disease as a nosologic entity. Indeed, in order to form a clear idea as to what Banti's disease is, it is necessary to turn to the articles written by Banti himself. Then we find that one of two things has happened. Either the observer has not taken sufficient pains to find out Banti's own specifications, or he has frankly committed himself to Banti's views, without the slightest, or only faint-hearted, attempts at criticism. Practically the only criticism of Banti's views has come from pathologists and, significantly enough, the general tone of it is one of guarded skepticism. We therefore meet with the strange phenomenon of a disease being almost wholeheartedly accepted by clinicians, and only negatively, so to speak, by pathologists. As an attempt at reconciliation of these two views various modifications of Banti's conceptions have been proposed, which have resulted only in making "confusion worse confounded," so that nobody, not even Banti himself, as I shall show, knows definitely what Banti's disease connotes.

It seems necessary, therefore, to resurvey our ground and subject the vast data that have been gathered to a comprehensive critique, in the light of both clinical medicine and pathologic anatomy.

REPORT OF CASES

This study was instigated by the report of the following two cases:

CASE 1 (Beth Israel Hospital Pathologic Report 4467).—*History.*—M. W., a man, aged 60, married, admitted July 25, 1913, for one year had complained of general weakness, which slowly increased. For the last half year, he noticed a yellow tint of the skin. He had gone to bed five weeks previously with swelling of the ankles and feet. At times he had slight vertigo. There were urinary, respiratory or digestive symptoms.

Physical Examination.—The patient was emaciated and had edema of the ankles and the eyes. There was evidence of profound anemia, and the skin had a yellow tinge. There were signs of a chronic tuberculosis of both lungs. The left heart was dilated, with a rough systolic murmur in the pulmonic region. The liver was palpable 3 inches below the costal margin. The spleen extended from the seventh intercostal space to the level of the umbilicus; its edge was irregular; it was soft in the upper and hard in the lower portion. The abdomen contained fluid. The blood count on admission revealed 2,850,000 erythrocytes. These were progressively reduced until two days before death, when they were 1,200,000. The leukocytes were 7,000 on admission, and varied around this number throughout the patient's illness. The hemoglobin was 35 per cent. at the outset; a day or two before death it was 10 to 14 per cent. There was evidence of anisocytosis and poikilocytosis, and occasional microblasts were present. The temperature varied between 98 and 100 F. The pulse was not rapid. A test meal revealed blood in

* From the Pathological Laboratory of the Beth Israel Hospital.

* Read before the Section on Pathology and Physiology at the Sixty-Eighth Annual Session of the American Medical Association, New York, June, 1917.