## THE MISSION OF LOCAL SANATORIA IN THE CRU-SADE AGAINST TUBERCULOSIS

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The progress of a country may be measured on the basis of education, kind of government, state of science, accumulation and distribution of wealth, etc. . . . but, after all, real civilization means establishment of conditions, under which every individual unit of a nation has a chance to attain proper physical, mental and moral development.

The health of a nation is the index of the country's advance. If a disease, that is preventable, claims every year 100,000 victims in the United States, we will have to confess that our progress is at a *standstill*, until this frightful mortality is gradually wiped out.

There are signs of awakening all over the country, and it will not be surprising, that while not the first to *start* the crusade against tuberculosis, the United States may be the first to *solve* this great problem in the most effectual way.

Tuberculosis, the disease of poverty, overcrowding, unsanitary workshop, insufficient wages, long hours of work, etc., should not exist in a country so vast in extent and so rich in resources.

The every-day work of organizations represented at this Conference may consist of extending assistance to classes temporarily dependent or permanently disabled; but the *broader* aim is, of course, a higher standard of Jewish citizenship in the United States.

In raising the banner for a sturdier manhood and womanhood, we are face to face with a number of diseases, which everywhere, here and all over the world, impede the progress of humanity.

Among these, as a colossus, towering above all other harvesters of human life, stands the grim reaper of death, the most widespread disease of all, the "White Plague."

We know that outdoor life and pure air, combined with regular habits and nutritious diet, are the only preventives of tuberculosis known. The same kind of life offers the only hope of cure or improvement to an individual already infected with tubercular germs. This principle of fresh air, day and night, lies at the foundation of all sanatoria or open air camps for consumptives.

That tuberculosis is a *curable* affection, was known 25 centuries ago. Hippocrates, the medical genius of the ancient Greek civilization, advocated strongly the idea of curability of this disease, if treated at an early stage.

Centuries later, about the time of Christ, the same view was expounded by Cornelius Celsus, the most celebrated Roman physician and, in the latter part of the second century, Claudius Galen, the learned student of Hippocratic teachings, was in accord with the same idea.

Most of the ancient authors considered a suitable climate and a proper mode of life important elements in the treatment of this disease.

Through centuries of observation came accumulation of evidence pointing to the infectious nature and communicability of tuberculosis.

The 19th century, noted for the greatest advance in all channels of human thought, furnished Villemin, whose famous communication to the Academy of Medicine in Paris, on Dec. 5th, 1865, fully demonstrated that tuberculosis is transmissible.

Since then a most exhaustive study of the disease was carried on by the best minds in the medical profession, leading gradually to the famous discovery in 1882 of the tubercle bacillus, as the cause of the disease, by Dr. Robert Koch.

The first glimpse of the modern sanatorium treatment of tuberculosis can be seen in the attempt made in 1839 by Dr. George Bodington, an English country practitioner.

Fully convinced that fresh air day and night and a nutritious diet are the most important factors in the treatment of a consumptive, Dr. Bodington fitted up a special house for the admission of this class of patients. In his time, as well as, to some extent, at present, the tuberculous patient considered any draught of fresh air antagonistic to his chances of recovery. As these ideas were supported by the medical profession at large, the institution started by Br. Bodington became the subject of rid-

icule, was eventually closed and later transformed into an insane asylum.

Twenty years passed and the first sanatorium in the world was founded by Dr. Hermann Brehmer, of Görbersdorf, Germany. To him rightfully belongs the title of father of the sanatorium idea. The principles of Brehmer's treatment of tuberculosis were the following:

First—A life spent in the open air; second, an abundant diet; third, constant medical supervision; fourth, methodical hill climbing, as an exercise.

With the exception of his ideas of exercise, which are considerably modified in modern institutions, Dr. Brehmer's chief principles of treatment are at present in vogue in every sanatorium for tuberculous patients. His own sanatorium at Görbersdorf is now the largest private institution of its kind, having accommodation for 300 patients.

From the time of Brehmer the idea of open air treatment, as the only effective method of combating tuberculosis, has steadily advanced, Germany now standing in the foreground with the largest number of institutions, supported by the state, government, insurance companies, etc.

In our own country Dr. E. L. Trudeau, of Saranac Lake, New York, was the first to establish, in 1885, the, now well known, Adirondack Cottage Sanatorium.

At present the United States has accommodations for about 8,000 tuberculous patients, one-third of which are in the state of New York.

The energetic campaign in the United States against tuberculosis, during the last five years, stimulated sanatorium building to a great extent; of one hundred and thirty-five institutions scattered throughout the United States and Canada, almost one-half were built during the last five years.

The country is awake as to the proper methods of dealing with the "white plague" and the next decade will, no doubt, bring greatly increased sanatorium facilities for the proper care of the consumptive individual.

It is of great importance to us to know what is the situation at present in regard to tuberculosis, what are the principles of sanatorium building and to what extent a sanatorium is a factor in the crusade against this disease.

A census in this country of all individuals affected with tuberculosis would be impossible under the present conditions; still, from the total annual mortality of 100,000 persons from this disease, we may roughly estimate that there are from four to five hundred thousand tuberculous individuals in the United States, while total accommodations are only for the treatment of about 8,000.

Thirty thousand consumptives walk the streets of New York, while all the institutions in the entire state could not accommodate even ten per cent. of them.

I do not know what is the consumptive population of Philadelphia; if it is twelve to fifteen thousands, then the entire accommodations of your state are sufficient only for the care of 5% of them.

In our own city of Chicago we have at least 15,000 consumptives, while the entire State has hospital and sanatorium accommodations for only 300, of which 160 beds are in the Dunning Poorhouse. In this connection should be mentioned the proposed Edward Sanatorium at Naperville, near Chicago; this institution is made possible by the generosity of Mrs. Keith Spalding, a director of the Visiting Nurse Association of Chicago, which association conducted last summer a very successful camp for tuberculous poor, at Glencoe, Illinois.

The next few years may bring into existence a large number of sanatoria for curable cases of tuberculosis, as well as hospitals for advanced, but we can never hope for sufficient accommodations for all tuberculous patients, unless the reduction in the prevalence of tuberculosis is brought about through a radical change in conditions that are responsible for this disease; and this means, of course, abolition of crowded districts through spreading out of the population, a sanitary home and workshop, hours of work commensurate with human strength and wages sufficient to supply the needs of an American family. Till we reach that ideal condition of affairs, which certainly ought not to be very distant in our country, sanatoria will continue to take care only of a fraction of tuberculosis cases, and while their

important object will be to effect a cure or improvement in patients under their shelter, their chief mission will remain to teach a proper mode of life to the community in general and the consumptive in particular.

The present conditions in every large city of this country, with its enormous number of tuberculous individuals, point to the necessity of local sanatoria near every city, as educational centers for the spreading of the gospel of life in pure air as the only proper mode of life for every human being.

In its modern sense, a sanatorium is an institution built in such a location and in such a way, that the tuberculous patient can enjoy the benefits of open air life during the entire 24 hours; it means also a suitable nutritious diet and strict medical supervision.

In building sanatoria a number of conditions are to be considered.

#### 1. Climate.

The climate that makes open air life through the entire year more feasible, is conceded to be the best, provided the patient is in a sanatorium, where by the strict regime of the institution he is to avail himself fully of the benefits of open air treatment.

It would be impossible here to discuss the advantages of different climates; it will suffice to say that even if the results are more gratifying in the mountainous regions of Colorado or other states, we certainly can never hope to give even a small percentage of our consumptive population the advantages of their favorable climates. It is certainly useless to send a man without means to Colorado, Arizona or New Mexico, unless admission is secured for him to some institution.

In transporting poor consumptives to other climates, the Jewish charitable organizations all over the country are the only ones, if I am not mistaken, to make provision for their future maintenance.

I do not need to dwell upon the great record of the National Jewish Hospital for Consumptives in Denver, with which you are fully familiar. This institution, national in scope, was the first to start the procession for eradication of tuberculosis among the Jews of this country; it has done and is doing grand work and

we should do everything in our power to make it the greatest monument to the generosity of the American Jew. In its superior appointments, splendid facilities for treating first stage cases, humane spirit, etc., it is the best example of a first class sanatorium and as such it certainly deserves a much more liberal support all over the country.

Granting all the advantages of more favorable climates, the fact remains that the vast majority of consumptive cases, particularly among the poor, have to be taken care of near their homes.

Statistics of sanatoria in home climates, like Loomis, Adirondack, in New York, Rutland and Sharon in Massachusetts, etc., show that, under open air treatment, arrest of disease can be accomplished in 75 to 80% of first stage cases.

In institutions where all stages are admitted, open air treatment at home results in a cure of 25% and great improvement. viz., considerable prolongation of life in 50% more.

In our dealing with poor consumptives of large cities we must have local sanatoria.

Even if the state supplies one, it is not sufficient; every city of any proportion should have a local sanatorium, the expense of which would be much less than the financial loss sustained through the rapid decline and premature death of the majority of the tuberculous poor and the expense of supporting widows and orphans.

#### 2. Suitable Site for Sanatorium.

The plans for the King Edward VII. Sanatorium in England call for "an elevated and sloping site with a sunny exposure, well sheltered from cold winds, a dry and permeable soil, together with an abundant supply of water." An elevation of at least 1,000 feet is considered by some absolutely essential to insure sufficient purity and dryness of the atmosphere, which are of considerable importance in the treatment of tuberculosis and still the results are excellent in institutions built at much lower altitudes.

Comparing the results obtained at Sharon Sanatorium, 250 feet above the sea level, and Massachusetts State Sanatorium, 1.100 feet, Dr. Bowditch, who is at the head of both institutions.

finds that the results, if anything, were somewhat better at Sharon.

If the experience so far obtained is in favor of high altitude, at least 1,000 feet, as a proper location for a sanatorium, it must be admitted, that the question of altitude is not as important as a porous soil, good drainage, shelter from harsh winds, sunny exposure, good water supply, properly constructed building, nutritious diet, etc.

Build your sanatoria and camps at as high a level as can be obtained near your home city, provided other conditions are fulfilled.

Results at an altitude of a few hundred feet will be just as good as at 1,000 feet. It would impede greatly the creation of proper facilities for the care of the consumptive poor, if any set rule is laid down in regard to the altitude.

Expedience as well as other considerations should determine the location of the institution.

As to nearness to the city, a distance of thirty to forty miles will insure air that is not contaminated; again a shorter distance, dictated by circumstances, may give just as good results.

### 3. Character of Buildings.

The majority of European sanatoria consist of a central administration building with wings on either side for the housing of patients.

Large verandas surrounding the entire front are utilized for the open air treatment. The building may be two or three stories high.

Another plan is a group of small cottages around a central administration building as exemplified in a number of sanatoria in this country, for instance, the Loomis and Adirondack Sanatoria in New York.

Advantages of this plan consist of easier classification of patients, more homelike surroundings, greater amount of fresh air, etc.

The disadvantage lies in increased expense, necessitated by a more difficult supervision, extra heating, and so on.

Cost of construction, as given in the Prize Essay on the erection

of a sanatorium for the treatment of tuberculosis in England by Dr. Arthur Latham, is as follows:

In many sanatoria built for the poor the cost is from \$1,250 to \$1,500 a bed. The expenses are much greater in institutions which contain single-bedded rooms, reaching as high as \$3,000 to \$5,000 a bed.

The tendency of the modern sanatorium construction is toward greater simplicity and smaller expense.

What we need is *more accommodation* for tuberculous patients. Fine exterior of buildings is of no importance; it does not promote an iota the chances of a consumptive.

A local sanatorium, consisting of a plain administration building with all the necessary provisions and a number of frame shacks as the lean-to's of the Loomis Sanatorium, is conceded to produce just as good results as more imposing buildings, the ornamentations of which frequently impede the entrance of light and air.

It is estimated that an up-to-date sanatorium, devoid of all unnecessary ornamentation, can be built at the expense of \$400 per patient.

A circular issued by the Ottawa Tent Colony in Illinois, a private institution, conducted by Dr. J. W. Petit, places the expense of construction at \$35,000, which includes an excellent two-story administration building, waterworks, first-class bathhouse, tents for patients, etc. The total number of patients at present being sixty, the cost of construction per patient amounts to \$600. This sum will be greatly reduced with the gradual increase in the number of patients.

The average cost of maintenance of a tuberculous individual in a sanatorium conducted in economical way amounts to not less than \$9 to \$10 per week.

The number of tuberculous cases requiring sanatorium treatment is so enormous that it is our duty to provide accommodations at the least possible expense of construction, using any additional money in giving the sufferer the best kind of food and medical supervision.

To quote the ideas of Dr. S. A. Knopf, one of the most enthusi-

astic tuberculosis workers in this country, the mission of sanatoria is very manifold:

- 1. Removal of a tuberculous patient to a sanatorium means the removal of a center of infection, which may claim sooner or later many lives.
- 2. A sanatorium gives the best chance of cure, particularly to the patient in the first stage.
- 3. The consumptive learns to live right and on his discharge is the most earnest propagator of the ideas of right living.
- 4. It trains physicians in the methods of early recognition of tuberculosis and the only rational method of treatment of this disease.
- 5. It teaches the gospel of a closer communion with nature and orderly life, which means a sturdier citizenship, freed from all kinds of disease due to overcrowding, filth and contaminated air.

Under ordinary conditions the regular mode of life of the Jew, his abstinence from alcohol, etc., protect him to a considerable extent against the ravages of tuberculosis. The diabolical persecution by certain European governments, with its attendant lack of opportunity to earn a livelihood, constant anxiety, frequently starvation—have undermined to a great extent his resistance to this disease. Thus, we witness at present a greater prevalence of tuberculosis among the Jewish masses than ever before; this has reference also to the acute type of the disease, "quick consumption," infrequent among Jews under normal conditions, at present claiming numerous victims in every large city. It is our sacred duty to provide better housing conditions and suitable occupations for our immigrant class.

The physical make-up of our brother citizen is one of our greatest concerns. Among all agencies helping to build a healthy citizen, be that a settlement, a city homes association, an agricultural colony, etc., a sanatorium occupies a prominent place. Its influence reaches far beyond the consumptive himself; it stands as an exposition of a right kind of living. The Jewish Charities of every large city have provided bountifully for the treatment of every kind of disease.

Is it not about time to extend a helping hand to the poor consumptive by building local sanatoria in every large city?

# THE CARE OF ADVANCED CASES OF PULMONARY TUBERCULOSIS.

A PLEA FOR SCIENTIFIC, PRACTICAL AND HUMANE METHODS OF ERADICATING THE WHITE PLAGUE.

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The crusade against contagious diseases in general, and against pulmonary tuberculosis in particular assumes with each succeeding year a more definite form. From the survey of the voluminous literature on the subject of tuberculosis, two uncontrovertible facts have been established: First, that tuberculosis is an infectious disease, and, second, that tuberculosis is a curable disease. The solution of the problem must be reached, therefore, through two avenues: First, in so far as it is infectious, how can it be prevented, and, second, in so far as it curable, what are the best methods to be pursued. There are two distinct ways; the one does not include the other.

The crusade against tuberculosis, as I understand its meaning, and purport, does not occupy itself with the cure of the disease, but it copes with the greater and more important problem, that of preventive medicine. It undertook the task of checking the spread of the disease, with a view of eventually exterminating it from the face of the earth.

It took more than twenty-five years to elaborate the method of combating tuberculosis, and yet more than three thousand years ago, the method of combating infectious diseases was laid down in such lucid and clear terms that one is amazed at the stupidity of being obliged to call our ignorance "civilization," sluggish thinking "progress," and the doling of alms "charity."

"Let us bring the book and see," as the Talmudists were wont to say. Open the book of Leviticus, Chapter XIII. Moses handled the crusade against infectious diseases thus: "If a man