The primary function of a sanatorium is the one fundamental and first in the activities of any hospital, namely, care of the sick, and in this instance, the attempt to obtain an arrest and cure of tuberculosis. Whether an arrest of the disease will occur depends on many factors, such as age, sex, race, occupation, and complications, but particularly on the stage of the disease. In spite of the repeated emphasis of the fact that the chances for recovery and a good prognosis in pulmonary tuberculosis depend on the extent and degree of lung involvement at the start of treatment, the number of patients that begin treatment with far advanced disease is tremendously high. At the present time, 75 to 85 per cent of the admissions to the sanatoria and tuberculosis hospitals of this country are in a far advanced stage. Our experience has indicated that treatment of a sanatorium group of patients with 85 per cent showing minimal or moderately advanced lesions (minimal 35—40%, moderately advanced 45—50%), will result at the time of discharge with 85 per cent in a condition graded from improved to arrested and close to 50 per cent in the latter category.

Thus the efficacy of sanatorium treatment depends in a great measure on the early diagnosis and reference of the patients. All health efforts to find, isolate and treat pulmonary tuberculosis in an early stage are not only justified but necessary. It is especially the general practitioner who should seriously accept the slogan “Find and treat tuberculosis early,” for he is the individual who often makes the first contact with the patient. Proper recommendations by him at that time will frequently determine the eventual outcome of the disease.

Follow-up studies of discharged cases have indicated that the permanency of a satisfactory physical condition (with a stationary or regressive lesion, negative sputum, slight or no symptoms, and return to work or normal environment) depends directly on the stage of the disease with the best results in the minimal group and the highest unsatisfactory percentage (with progression of the lesion, positive sputum, symptoms, need of hospitalization, or failure to return to normal environment) in the far advanced stage. Moreover, the importance and necessity of uninterrupted sanatorium care until the condition becomes arrested has been further evidenced by the follow-up observations that:
(1) The closer the physical status on discharge approaches a condition of complete arrest, the greater the probability of continuation of a satisfactory condition after hospitalization; (2) the percentage of good results is less for those patients who leave the institution against advice; and (3) arrested cases form a majority of those patients who after discharge are able to return to a gainful occupation or are in condition to work.

The next great function of the sanatorium is its service as an educational medium for the patients. In the teaching of new health habits and demonstration of proper mode of living, the sanatorium instructs patients not only how to care for their own health but how to live with and protect others. The patients receive both didactic and practical instruction. The didactic training is covered by lectures, the content of which is briefly outlined as follows:

The functions of the sanatorium (i.e., for treatment, removal of positive cases and education of patients) are explained.

Items in a book of rules and regulations given each patient are discussed with constant emphasis on the need of the patients' cooperation to get the best results of sanatorium treatment. This booklet contains not only rules of conduct and sanatorium regulations, but items of a general nature and their influence on tuberculosis, such as rest, fresh air, heliotherapy, food, tobacco, etc., and instructions and suggestions for the patients in relation to these factors.

The manner of spread of tuberculosis is explained and the many methods responsible such as coughing, sneezing, spitting, kissing, contamination of utensils, body discharges, etc., are expounded upon. The viability of the tubercle bacillus in sputum droplets and dust particles, under conditions of drying and...
freezing, and poor light and ventilation and its death by sterilization, sun and fresh air, is discussed. All of these items are commented on in relation to the patient and his hospital activities and also to the home environment that is to follow.

The prophylaxis of tuberculosis is emphasized and proper personal hygiene is explained. This includes care of the hands, (particularly after every possible contact with infectious material), mouth hygiene, and the use of gauze or paper napkins and sputum cups. This instruction is important as the patients learn how to prevent spread of infection to other people and how to maintain scrupulous personal cleanliness.

The fundamental requirement of rest and good food and fresh air in the treatment of tuberculosis is stressed. Particular emphasis is placed on the efficacy of rest, and the meaning of true medical rest and the sanatorium rest hours are explained. Thus patients learn that complete rest is unobtainable with any degree of physical activity or mental stimulation, and talking, reading, writing, radio playing, are not allowed during rest periods. A proper mental outlook is important and an atmosphere of cheerfulness, a spirit of contentment and a feeling of hopefulness are engendered.

The indications and mode of action of the various surgical adjuncts of collapse therapy are explained so that the patients will cooperate with the physician and understand the needs for these various measures.

Readmissions to tuberculosis institutions average between 15 and 20 per cent. Special discharge advice is given patients because it must be strongly impressed on them that there are causative factors for relapse and readmission that can be avoided and prevented.

This advice includes,*
1. Personal hygiene (sputum, dishes, hands, bed linen, kissing, contact at home).
2. Continuation of habits of institution. (Rest hours, good room, proper ventilation, temperature and sunshine).
3. Weight and temperature checked regularly.
4. Continuation of care by physician or in clinic.
5. Additional activity should be added slowly, and only by the instruction of a physician.
6. The return to a former or new occupation should be guided by a physician.
7. Avoidance of excess alcohol, tobacco, fatigue and loss of sleep.
8. Emphasis on need of continued frequent routine examinations, especially periodic x-rays and sputum examinations, as the patient's progress must not be judged by symptoms.
9. If pneumothorax is present at time of discharge it is to be continued, and discontinued only on the advice of a physician.
10. Inciting causes of tuberculosis are to be avoided (fatigue, worry, excesses, colds, poor food, contact with tuberculous persons).
11. Immediate check with the occurrence of any symptoms of relapse (fatigue, loss of weight, increase in expectoration, or cough, temperature, indigestion, streaking, chest pains or shortness of breath).

The patients procure practical training by actually living the regime outlined in the lectures with help and advice from the physicians and nurses. These activities become good habits, almost automatic reactions, that enable the patients to pattern their lives at home and at all times, according to the routine learned in the sanatorium. They become safe tuberculous patients from the standpoint of spread of infection, and moreover, countless numbers of relapses have been avoided by the patients living according to the sanatorium education.

The treatment of tuberculosis is not complete until the patient is free of all active disease and in a satisfactory economic situation, and thus the need for rehabilitation. Rehabilitation represents activity, either physical or mental, that not only aids in the recovery from tuberculosis, but also assists in the adjustment of the individual to a new economic status. It involves a gradual increase in exercise and work by the patient and is ergo therapy.

Rehabilitation covers a multitude of forms and needs, and includes many subjects, such as commercial (stenography, clerical, typing); various arts and crafts (printing, bookbinding, photography, wood, metal and leather work, carpet making, reed weaving)

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and miscellaneous occupations like laboratory technician, barber, tailor, gardener and farmer.

The general plan in associating patients with rehabilitation is to grade the patients' physical activity, and in this manner the work is constantly under the direction of the physician. The occupational therapist guides the choice of work by consideration of the educational background of the patient, previous work experience, mental attitude, occupational inclinations and interest and manual dexterity. In more complete programs, a very thorough aptitude test is done to determine the occupation the patient is best suited for. In this a psychologist aids the therapist.

As the patients continue to improve, the activity and time allowed for occupational therapy is gradually increased so that on discharge, they are performing the equivalent of four or more hours work a day.

The desirability of rehabilitation is emphasized by the fact that tuberculous patients are young enough, well enough and intelligent enough to receive skilled training, and there is a particular need for teaching new vocations. To aid in the return to industry, sanatoria are associated with welfare employment agencies, state job placement bureaus or sheltered work shops.

Although the work taught in a sanatorium may not always be of a type directly applicable by the patient for return to an outside occupation, all work performed is definitely useful because it aids and speeds recovery, improves the physical condition of the patient, serves as a hardening process, provides mental stimulation, promotes individual contentment and actually teaches new skills.

We have presented the actual phases of treatment of tuberculosis in a sanatorium, and yet this subject is not complete without mention of the other functions of the sanatorium:

1. Public health duties.
   (a) The hospitalization of open cases.
   (b) Public education.
   (c) Case finding.
   (d) Cooperation with health agencies and follow-up studies.

2. As a center for diagnosis (laboratory work and consultation in tuberculosis and chest diseases).

3. Clinical and laboratory investigation in tuberculosis and chest diseases.

4. Scientific teaching and education for medical students, nurses, dietitians, resident staff and visiting staff.

5. The work of the Social Service Department in properly adjusting the patient and helping the procurement of a permanent cure by various aids while in the sanatorium and proper reference and advice on discharge.

The activities of the general practitioner are closely related to the sanatorium in many ways. The sanatorium offers him a consultation service and assists in caring for his tuberculous patients. The private physician should impress on his patients the need and value of sanatorium care and the necessity of treatment until discharge occurs as arrested. Collaboration with the sanatorium is essential in order for him to (1) carry out discharge instructions given to the patient; (2) provide frequent x-ray and sputa examinations; (3) aid in the economic and social improvement of the patient; (4) and guide any increase in the patients' physical activity or return to a vocation, or needed change of treatment.

The early diagnosis of tuberculosis is very often the responsibility of the general practitioner and in this lies the most important relation of the physician to the sanatorium. For the success of sanatorium treatment depends particularly on this early diagnosis for with the consequent isolation, treatment and education of the patient, we have our most potent means of reducing the morbidity and mortality of tuberculosis.