

REHABILITATION PRACTICES
FOR TUBERCULOSIS PATIENTS
AT THE OREGON STATE HOSPITAL

by

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CHAPTER 1

OBJECTIVES OF REHABILITATING
TUBERCULOUS MENTAL PATIENTS

A. Introduction

In developing an effective rehabilitation program for tuberculous mental patients, all phases of the program must be given due consideration. This study is concerned with patients who have two disabling conditions, tuberculosis and mental illness. Which condition preceded the other in onset may or may not be of consequence as indicated later. Tuberculosis imposes certain physical limitations and the mental disorder contributes certain psychological restrictions. Therefore, it is necessary to develop simultaneously adequate medical care, psychiatric treatment, and all the other ancillary services.

It will be the purpose of this study to investigate the rehabilitation practices now being used in the Tuberculosis Ward at the Oregon State Hospital and to suggest, perhaps, means of broadening the program. This study will be conducted by visiting the hospital and interviewing the doctors and other personnel dealing with the

tuberculous patients. By referring to the literature and through contacts with other hospitals, it is hoped that some helpful comparisons may be made.

In summary, this study will attempt to describe the rehabilitation practices commonly used for tuberculosis patients in combination with those practices usually reserved for mental patients in order to arrive at a workable program.

B. Some Definitions Pertinent to the Study

In the field of rehabilitation there seems to be a problem in much contradiction of terms. Much of this is due to the fact that there is often overlapping among the various professional groups; each one having its own definition of what constitutes rehabilitation. Quite often too, each group places a different connotation on the activities of all the other groups involved. There appears to be even a certain amount of rivalry among different members of these groups.

Rehabilitation is a word that is possibly overworked. It has become very popular to "Rehabilitate" everything from the wide-open spaces of our deserts to the crowded, big-city slums. In this paper the term will be somewhat more limited. Generally, rehabilitation has come to mean "training that prepares for the employment of

physically handicapped persons." This is too narrow a conception of the many medical and social problems facing the tuberculous mental patient. The Century Dictionary's definition of rehabilitation is more applicable: "to restore to a former capacity or standing, or to re-establish in the esteem of others or in social position lost by disgrace." The "restoration" of the tuberculous mental patient must be individual in nature and involves both physical and social readjustment, and it must do away with common misconceptions about tuberculosis, mental illness, and about the people suffering from them both.

There are other definitions of rehabilitation: one with a purely medical connotation which is, "the use of those medical measures which expedite recovery." These measures are for the most part in the field of physical medicine and are employed as a supplement to the specific medical and surgical treatment that is contributed by the physician. Another definition, more broadly conceived, which is mainly accepted by the professional workers in the public and private agencies dealing with the handicapped is: "Rehabilitation is the restoration of the handicapped to the fullest physical, mental, social, vocational, and economic usefulness of which he is capable." This definition was adopted by the National Council on Rehabilitation in New York City, May 21, 1942.

This is the definition to be used in this study.

Rehabilitation is creative. It aims to define, develop, and utilize the assets of the individual. Its purpose is to restore competitive ability, independence, and self-determination. It seeks to utilize all the available resources both within the individual and within the community toward this end. Rehabilitation is not a process; it is not something you do to someone; rather, it is a philosophy that must pervade the thinking of every individual working with the handicapped. Rehabilitation requires sympathetic understanding.

Rehabilitation should begin when the disability occurs, and it should not end until the disabled person is using his newly limited abilities to the maximum. The emphasis should be in strengthening the individual's remaining abilities and not in protecting his disabilities. A prime necessity is for scientific medical care throughout the process. It is also necessary that nursing, technical work, physical therapy, occupational therapy, psychology, social casework, vocational guidance, workshops of different kinds, family counselors, civic and fraternal organizations, and the enlightened efforts of public-spirited citizens in all walks of life all join together in order to develop a truly effective program

of rehabilitation.

Rehabilitation is good business, especially from the standpoint of the government. It is financially sound to rehabilitate the handicapped. A self-sustaining rehabilitated worker eliminates welfare payments to himself and his family. This is a very sizable sum out of the public treasuries. The American people must realize that this nation suffers an economic loss of nearly ten billions of dollars every year because disabled men and women are away from their jobs.

Each year 250,000 people become disabled by injury, disease, or congenital defect. Out of these 250,000 only about one-fifth or 50,000 are rehabilitated each year. Certainly there is a need to expend every effort to reach and restore the remaining 200,000 individuals to productive living. In addition, there is a need to reach the backlog of 200,000 or more from each of the preceding years, who did not have the opportunity to benefit from some organized program of rehabilitation services. (44)

Modern rehabilitation had its beginnings in Belgium in 1907. A school was started for the physically disabled, essentially for those too ill to be admitted to the regular apprenticeship programs. The program was known then as "re-education" and to a great extent in Western Europe, rehabilitation is still called "re-education."

Vocational re-training started in England during the latter years of World War I, chiefly for disabled war veterans. Gradually the process was expanded to include the sick, congenitally disabled, the blind and the deaf.

In 1920, the Congress of the United States passed Public Law 16, often referred to as the "Rehabilitation Bill." This bill set up a federal-state program of vocational training and placement of the physically handicapped. On July 6, 1943, with the Barden-LaFollette Amendment, Public Law 113, Congress authorized the state rehabilitation bureaus to extend their services to the mentally handicapped. This law provides for remedial services as well as job training and placement for both the physically and mentally handicapped. The mentally handicapped are both the psychiatrically handicapped or mentally ill person and the mentally retarded or deficient. (22)

On August 3, 1954, Congress unanimously passed Public Law 565 which expands the rehabilitation program still farther. (45) It encourages the expansion of rehabilitation facilities, authorizes training programs for professional rehabilitation counselors, expands the financial base to permit the States to bring better rehabilitation services to more disabled people. The new law also opens the way for non-profit voluntary

organizations to participate in the State-Federal program making Federal funds available for the first time to such organizations.

C. The Nature of the Problem

The psychiatrically handicapped could range from the neurotic individual to the most severely psychotic. As long as the individual's mental condition prevents him from carrying on his usual activities in the manner accustomed, he could be considered to be handicapped. Many of the tuberculous mental patients who will be discussed in this study are neurotic but not truly psychotic. Later in the study a more detailed description of various mental disorders will be given. At the present time it will be noted that the neurotic and psychotic individuals differ chiefly in the degree of mental or emotional involvement.

The mentally retarded, on the other hand, are primarily those people with limited intelligence, although many individuals with apparent deficiency have later been found to be suffering from some emotional conflict or block instead of some congenital type of limitation. A common mistake is to assume that all individuals within a given range of intelligence are alike and can be treated accordingly. Nothing could be farther from the

truth, because there is a great amount of individual differences present in retarded individuals just as in the normal and superior intelligence ranges. Many of the mentally retarded are so because of brain injury or degenerative illness. It is certainly more of a handicap to suddenly have an IQ of 70 when previous to the illness or injury it had been 105, than to have been born with an IQ of 70. There is a place in society for the mentally retarded, if they receive specialized training. Some of the patients discussed in this study belong to the mentally retarded rather than the mentally ill.

The admission of the psychiatrically handicapped to the rehabilitation program greatly increased the numbers and varieties of the cases to be handled. Each mentally ill person has a different sort of individual background and although it is very often possible to characterize generally the nature of the illness, a common practice is to over-emphasize the diagnosis and try to standardize the treatment. There is no panacea for mental illness.

Another thing which must be considered is that quite frequently a mentally handicapped person may also have a physical disability. Much has been written about emotional stress bringing on physical illness or physical symptoms. Dr. Helen Flanders Dunbar expresses the view in her book "Mind and Body" that fifty to seventy per cent

of all the physical ills presented to the doctors of America are mentally or emotionally inspired. (12) Weiss and English hold a very similar view. (55) Conversely, many physical handicaps resulting either from illness or injury can bring about much emotional stress and often a mental condition that could be considered a handicap in itself.

Tuberculosis is more prevalent in mental hospitals than anywhere outside of tuberculosis sanatoria. Surveys in mental hospitals reveal 27 to 40 active cases per thousand examinations, compared to one case per thousand in our general population (2), and 12 cases per thousand in our prisons. (15) The tuberculosis death rate in mental institutions is 19 times the death rate for tuberculosis in the general population. In 1949, the death rate for tuberculosis in mental institutions was 500.9 per 100,000 patients, as compared to 26.3 per 100,000 in the general population. (15)

It has been estimated that at least 30,000 Americans hospitalized because of mental illness are also afflicted with tuberculosis, even though not all have been so diagnosed. Perhaps the main reason that many of these patients have not been diagnosed as tuberculous is that modern case-finding procedures for tuberculosis are not used in many of the mental hospitals throughout the

country. Indeed many hospitals do not provide adequate medical treatment or even isolation for the known tuberculosis patients under their care. (24)

In trying to work out a total rehabilitation program for the tuberculous mental patient, it is often necessary to go beyond the usual domain of the Division of Vocational Rehabilitation. It is necessary to overcome most of the disabling effects of two major disorders in the hospital setting before final consideration of vocational placement and training can be started. All rehabilitation to be effective should have a tentative vocational goal set up as early in the treatment process as possible. It must be recognized that in many individual cases complete and total rehabilitation cannot always be attained, however, and that with many patients simply the achievement of a degree of self-care would be a commendable objective. It must be remembered too that the mental condition will often impose some psychological restrictions to the programs usually carried out for tuberculosis patients. Likewise, the tuberculosis might conceivably present some physical limitations to many of the activities used in the treatment and rehabilitation of mental patients.

D. The Objectives of This Study

The objectives of this study are:

1. To study the organization of the present rehabilitation program for the patients in the Tuberculosis Unit of the Oregon State Hospital.
2. To study the methods used at other installations for the rehabilitation of tuberculous mental patients.
3. To recommend possible methods for expanding the total rehabilitation program for tuberculous mental patients at the Oregon State Hospital.

E. The Method of Arriving at the Objectives

In order to arrive at the objectives of this study, many hours of research were spent studying the activities employed at the Oregon State Hospital and other facilities; in reading the literature; and interviewing workers at the hospital and other agencies; and in corresponding with other workers throughout the country. This study covers the period from May 1952 when the Tuberculosis Treatment Building was opened, until July 1958. Without appearing presumptuous it is hoped that several recommendations could be made as a result of direct experience and from research.

F. Summary

In summary, it is felt that a complex problem exists in the rehabilitation of tuberculous mental patients. Just how the most effective program might be

carried out is largely a matter of opinion; however, this study will attempt to assemble the best opinions available in order to arrive at its conclusions. In all instances the primary purpose will be the restoration of a useful, healthy, and happy individual, capable of self-determination--a worth while member of society.

CHAPTER 2

SOME PROBLEMS IN REHABILITATING
TUBERCULOUS MENTAL PATIENTSA. Introduction

It will not be a purpose of this study to give a complete clinical description of the pathology and treatment of tuberculosis or mental illness. Instead, some general remarks will be made on the etiology, the symptoms, the various therapies, and other considerations as a background for the main theme of rehabilitation. Again it is necessary to repeat that this study conceives rehabilitation to be of the broadest possible nature. In order to resolve the difficulties resulting from these two major disabilities, the most intensive coordinated efforts are required.

B. Characteristics of The Tuberculosis Problem

Even with all the latest developments in chest surgery and the many new kinds of chemotherapy, tuberculosis is in itself one of the major health problems confronting this nation today. In Oregon alone there are at least 600 new cases every year. (30, 31) Often regarded strictly as a medical problem, it is necessary to consider many other factors. The new medical practices have reduced

the patient's time in the hospital, but in many ways may have increased the accompanying emotional problems.

Being ill in the home presents difficulties with which many families are not able to cope. Dr. Eric Wittkower seems to feel that in most people suffering from tuberculosis there are concomitant feelings of dependency as an underlying factor. (58) Also anxiety and depression seem to be present in most cases. Much of this is acceptable to many individuals as a normal reaction to having such a disease. Actually the patient must accept the facts of the illness and fight with complete faith and determination that he is going to recover. He must also be willing to cooperate with the workers who are trying to effect a cure of the disease and return him to normal living.

In the case of the father who must leave his family to enter the hospital or sanitarium, most frequently the wife and children must of necessity become welfare cases. To many people this is a terrific blow to their pride and one they find difficult to accept. With others this reaction may be a cover-up for their true dependency feelings. In the case of the mother who must leave her home and family, some arrangement must be made to take care of the children while the father is away at work. Often the anxiety over the children precludes anxiety over the symptoms or the course of the disease.

There are many other possible emotional reactions to having tuberculosis; some may even have deep-seated guilt reactions, feeling that this illness is the result of some previous sin or feeling of wrongdoing. Many of these feelings are never expressed openly and often the patient himself is not consciously aware of them, or they may be repressed, sublimated, or distorted into some other reaction. Again, a certain amount of these reactions are normal and should be viewed as such, but excess feelings of depression or anxiety or unwarranted moods of elation indicate problems of a more serious nature. These feelings have been recognized by many individuals working with the tuberculous and many different solutions have been tried.

Tuberculosis is a rather insidious disease in that its onset is often quite slow with no marked symptoms in the very early stages so that the patient is quite unprepared when the diagnosis is finally confirmed by the physician. It should be noted that pulmonary tuberculosis is not the only form taken by this disease. Almost any tissues of the body can be invaded by the tubercle bacilli; it merely happens that the respiratory tract is particularly susceptible. Other forms are tuberculosis of the kidney, of the bone, the skin, and larynx, which make up the bulk of the non-pulmonary forms of

tuberculosis. The first symptoms may be a generalized restlessness or conversely, lassitude. All too often, the diagnosis is told the patient quite casually with little consideration of the emotional trauma involved. It seems that much more thought should be given to the very presentation of the diagnosis to the patient.

The rehabilitation process should begin at this point or possibly even before the diagnosis is made. Social and family background data should be available, and then should be utilized to the greatest extent possible. If this area were fully considered, many of the emotional stresses that build up within the patient could be eased considerably. To be sure there needs to be a period early in the treatment of nearly all tuberculosis patients that involves complete bed rest; but this does not mean that a social worker or counselor could not visit the patient to reassure him that his family was being adequately provided for, or to tell the mother how her children are doing. A cavity in the lung does not mean that all the rest of the person is at a standstill. Life goes on; the patient must be made to feel that he is not left out, that he is still needed and important and must return to his normal place in society. Dr. Bruce Merrill of the Montefiore Hospital in New York has a great deal to say on this subject. (48)

The tuberculosis patient is usually considered to be positive or active as long as he is coughing-up positive sputum, or if x-ray examination shows cavities or soft lesions, or if the culture of a gastric or bronchial lavage shows positive bacteria. If after six months of bed rest and chemotherapy, the patient has no more positive sputum, and no positive culture from a gastric or bronchial lavage, and if x-ray and flourescopy shows the cavities to be reduced or encapsulated, he may be considered negative. After six months classification as negative with no positive sputums or other indications of relapse, he may be considered as arrested. At this time the patient may be considered for discharge from the hospital. He may have to continue the chemotherapy and some bed rest for a period up to a year after discharge, with only moderate activity and monthly examinations and x-rays. If there is no further recurrence the patient might be considered cured, and should be able to undertake most normal activities observing certain precautions as to adequate rest and diet and the avoidance of over-exertion. The writer is indebted to Dr. Ambrose Churchill, Chief of the Tuberculosis Survey Section of the Oregon State Board of Health for the above information during a personal interview.

There is often a rather emotionally trying

readjustment period following discharge from the hospital and the resumption of more or less full normal activities. If an adequate program of rehabilitation were undertaken during hospitalization with competent follow-up after discharge, much of this stress could be relieved. It has been often demonstrated the relationship between emotional security and tuberculosis breakdown, therefore, adequate rehabilitation would tend to reduce recurrence and rehospitalization. (48)

The background of much of this emotional unrest has its origin prior to the time that the patient develops tuberculosis. As long as the patient did not have tuberculosis he did not care very much, but concepts were developing about tuberculosis that very often were not well-grounded in fact. Frequently these ideas are so undesirable that when the diagnosis has been confirmed they are repressed often along with the acceptance of the diagnosis. This often leads to people refusing to undergo hospitalization. Many who do enter the hospital refuse to follow the full prescribed course of treatment. Nearly thirty per cent of all patients leave the hospital or sanitarium before treatment is complete. Leaving the hospital A.M.A. or Against Medical Advice, constitutes one of the greatest problems in tuberculosis control. (54)

The facilities which seem to have the best tuberculosis

treatment also seem to make the fullest possible use of the ancillary services. They usually have a lower rate of irregular discharge as well.

It has been attributed to Sir William Osler many years ago, "The cure of tuberculosis depends more on what the patient has in his head than what he has in his chest".

(6) Dr. Karl Menninger has this to say, "Tuberculosis is after all, a graceful way to destroy oneself--slowly, tragically, often with relative comfort, good food, rest, peace, and the sympathetic tears of all". (25) Weiss and English (55) find that a strong need for love and protection seems to be present in some of the cases studied. One patient may have been overworking in order to obtain satisfactions for this emotional need meanwhile taking poor care of himself. Another patient may have reacted much more passively, readily submitting to the slightest indisposition and almost eagerly embracing hospitalization.

Dr. Wittkower points out some very subtle relationships in an address before the National Tuberculosis and Health Association at their Fiftieth Anniversary Meeting at the Hotel Statler, New York, November 21, 1952. (27) Dr. Wittkower considered: 1. The Premorbid Personality, 2. Reactive Phenomena, to symptoms, to diagnosis, to illness, to treatment, to discharge. Then

he draws some practical conclusions that everyone working with tuberculosis patients should keep in mind. These conclusions involved: 1. The First Approach, 2. Hospitalization, 3. Personnel, doctors, nurses, and social workers, 4. Types of Patients and Reactions, 5. Management, operations, housing, irregular discharge, morale, and after-care. He presents all of these points with a great deal of insight in a most provocative manner. The main theme involves the tuberculosis specialists shifting their focus of interest from the tubercle bacillus to the person that harbors it.

C. Characteristics of Mental Illness

It has recently been established that between fifty and seventy per cent of all illness is due to some form of mental disorder. In this study it is not possible to describe all of the various types of mental disorder in great detail. Some of the more common types of mental illness, particularly those types which seem to be encountered most frequently by the tuberculous mental patient will be described. The outstanding characteristic of all mental illness is its individual nature; however, mental illness can be categorized in several different ways. Historically, Pinel, the great French leader in the treatment of the insane in the early 1800's,

contented himself with four categories of mental disorder: mania, melancholia, dementia, and idiocy. In the past hundred and fifty years great strides have been made in classification, diagnosis, facilities, and treatment.

The first terms to be discussed are functional and organic. An organic disorder is one in which some part or parts of the nervous system has been damaged or destroyed due to injury or some physical illness such as brain tumors, meningitis, alcoholic toxicity, encephalitis, cerebral arteriosclerosis, or syphilis. Brain waves taken from the electroencephalogram often point out many organic brain conditions such as the different forms of epilepsy.

A functional disorder is somewhat more obscure and much more common. An individual is unable to perform one or more functions normally, though there is no damage or destruction of any part directly involved in the function. The functional disorder, then, includes that type of secondary reaction to some actual organic damage or impairment, such as loss of speech following an injury to the hand. These reactions are usually quite unconscious in the individual patient. There may be some subtle metabolic chemical change in the brain tissues during the functional disorders, but at the present time research has not confirmed this. The recent rather widespread success of the tranquilizing drugs has led to a great deal

of speculation on this account and points out the need for much research in the fields of biophysics, biochemistry, and neurology.

Another form of classification of mental illness is concerned more with the degree or seriousness of the disorder. Starting with the least involved, though not necessarily the least serious if we consider the impact on society as a whole, due to the overwhelming numbers, would be the maladjusted individuals. Following this, more or less in the order of progressively more serious involvement, would be: the neurotics, those with psychosomatic disorders, the delinquent or psychopathic personalities, and the psychotic.

The maladjusted personality is not considered mentally ill in the sense that he needs hospitalization or actual psychiatric treatment. Generally these individuals tend to be rather unhappy, ill-at-ease, or poorly adapted. They have not lost contact with reality, they have no stereotyped reactions, or symptoms of various kinds. There is seldom an undue amount of anxiety; the individuals are just slow to react to changes in their environment, or perhaps they just do not see what sort of action is needed. Frequently a little information and direction is all that is needed for the individual to clear up most of his problems on his own

initiative.

The second category is the neurotic. An individual suffering from a neurosis has a more severe involvement than the maladjusted individual. Usually there is a great deal of anxiety which is probably the chief distinguishing factor of neurosis. The anxiety leads to unjustified fears, compulsive acts, obsessions, and frequently hysterical reactions. The individual is usually in touch with reality but seems to be unable to reach any solution of his problems unassisted. Hospitalization is seldom required but trained professional help in the person of a psychiatrist, a clinical psychologist, or possibly a counselor is frequently the only way in which the individual can find relief. Many neurotics go on for years and never seem to get much better or much worse. Others find that their responses to the stresses and strains of their environment become less and less adequate, they may begin to lose contact with reality drifting into a fantasy existence and a "nervous breakdown" or psychosis would result.

Psychosomatic disorders result in an actual physical ailment which had its origin largely in the disordered mental processes of the patient. This is often the type of ailment which defies most medical treatment: chronic backache, headaches, poor digestion, ulcers, some types

of high blood pressure, asthma, even injuries due to accidents in the "accident prone" individual, could all be considered psychosomatic disorders. There is usually some emotional stress or conflict of which the patient is often not even aware. Instead of developing an abnormal behavioral pattern, a physical illness complete with symptoms, which is more socially acceptable, results. Basically this seems to be some sort of escape reaction. Often the physical symptoms will respond to treatment only to recur later or in some other physical manifestation. An ultimate cure results only if the mental and emotional conflicts are resolved. For further reading the book "Mind and Body, Psychosomatic Medicine" by Dr. Helen Flanders Dunbar is recommended. (12)

Delinquent and psychopathic personalities have another type of serious mental disorder centering chiefly around anti-social behavior. The term "psychopathic personality" is dropping out of use since it literally means any form of mental disorder. A preferred term now is "character disorder" since basically these individuals are violating the ethical and moral codes of society and something may be lacking in their character development. One other term proposed for this type of individual was "anethopathic" referring to a lack of ethics, but it seemed to be rather cumbersome. Still another term was

"sociopathic". Generally this type of individual is quite irresponsible and sometimes extremely dangerous. Delinquents, criminal types, chronic alcoholics, ne'er-do-wells, and many sexually abnormal people belong to this category of behavior types. One of the largest groups is the alcoholics who resort to excessive drinking in a disordered attempt to escape the painful realities which they cannot seem to solve.

In a character disorder there is no loss of contact with reality; rather, there is a complete disregard for the ethical, moral, and legal principles and conventions which must be observed in an orderly society. This does not mean to say that anyone who is a non-conformist is suffering from a character disorder; only when the non-conformity is harmful to society with no consideration for the rights and feelings of other people. Some of these individuals have responded very well to treatment and rehabilitation but very often a great deal of resistance is met. Frequently volunteer agencies such as Alcoholics Anonymous have been very successful in dealing with the more refractory individuals. Church and youth groups, social and fraternal organizations, schools, organized athletics, and housing developments are some of the agencies which work well to help prevent the development of some of these anti-social tendencies. Many of

these individuals find themselves in jails and prisons instead of hospitals. Fortunately many of the correctional institutions are becoming just that with professionally trained staffs, instead of being merely punishment centers.

The most advanced or pronounced stage of mental illness is the psychosis. The psychoses usually have some generalized symptoms, often with a similar beginning, course, and outcome. A person suffering from a psychosis has lost almost all contact with reality. Generally the behavior is strange, speech shows irrational patterns of thought, and the patient shows little conformity with the people around him. Sometimes there is posturing and strange affectations of dress. The individual needs careful diagnosis and treatment and all the other ancillary services necessary for recovery, therefore hospitalization is usually required. Contrary to common belief the great majority of mental patients are not dangerous. Their confinement to a mental hospital is often more for their own protection rather than the protection of society as a whole.

In some of the degenerative psychoses there is little chance for a complete recovery or cure although it is often possible to effect a very noticeable improvement. In most all other cases it is possible to achieve a cure if a complete program of rehabilitation is instituted as early in the course of the disease as possible. Indeed

there are many cases on record of deep-seated psychoses being cured with a full program of total rehabilitation.

The psychoses because of their more pronounced symptoms may be classified further according to the general symptom-complex. Generally most patients suffering from a psychosis have some symptom or a combination of symptoms which allows for a certain generalized diagnosis to be made. It must, however, be reiterated, that similar though many cases may be, each patient suffering from a psychosis or any other form of mental disorder is a unique individual with a unique heredity and unique environmental pressures. His reaction therefore will be unique, and oftentimes treatment which is successful on other individuals with similar symptoms may not be successful on him. This necessitates a complete study of each individual patient if the most successful sort of rehabilitation is to be made.

The most common type of psychosis according to its symptom-complex is schizophrenia, which has several distinct sub-types. There are also manic-depressive psychosis, general paresis, senile psychosis, alcoholic psychosis, cerebral arteriosclerosis, and a scattering of other rather rare disorders such as those due to brain injury and epilepsy.

Schizophrenia accounts for about twenty per cent

of all psychotic patients. Literally the term means "split-mind" or possibly the more common term "split-personality", although this is not an entirely accurate description. The disorder was formerly known as "dementia praecox" because of its early "precocious" onset in the late teens and early twenties. Hallucinations, delusions, unwarranted suspicions, posturings, fantasies, and generally bizarre behavior are some of the patterns of symptoms in schizophrenia. Some individuals are very amenable to treatment while others may be disturbed for years. The variations of schizophrenia are: simple schizophrenia, the paranoid type, catatonic type, and the hebephrenic type.

Simple schizophrenia is not as spectacular as the other forms. It is characterized mostly by a general apathy or lack of interest. Only rarely do the patients get angry, usually at suggestions from others. Apparently there are no delusions or hallucinations or at least they are not communicated to anyone else. Generally the patient is quite complacent and satisfied with an extremely simple existence. They don't seem to live up to their potential. Their apathetic approach spreads to all phases of their existence: appearance, diet, lodgings, personal cleanliness, family, friends, job, literally everything. Since they are not disturbed, many people would not consider them mentally ill. Since their illness is not

spectacular they may go along for years without being diagnosed as mentally ill, and as in all mental illness successful recovery often depends largely on early treatment.

The paranoid type is quite different from simple schizophrenia; this is a most spectacular disorder. The patient has very bizarre delusions, and they are often very changeable. The patient often identifies with some historical or Biblical figure, claiming to be Jesus Christ, Napoleon, Virgin Mary, Julius Caesar, Florence Nightingale, and many others. Often they will indulge in elaborate costumes to best portray their identity. Also they hear voices proclaiming "Hail Caesar!" or "Vive l'Empereur!" befitting the personage they have become. There are messages of state, divine revelations, commandments, orders of battle, letters, communiques, financial reports, anything to spread their fame and glory. These flights of fantasy, escapes from reality, are reality itself to the individual patient. In the early stages these delusions are often quite highly organized, but as the illness progresses magical and mystical powers begin to be made known; strange machines and devices play an increasingly important part in the delusions.

One of the key delusions in paranoid schizophrenia is that of being persecuted, people or things being against

him. If he sees two people talking, he feels that they are talking about him and the things they are saying are not very nice. Perhaps they are even plotting against him, so he must act in order to get even. The reaction of seeking some sort of revenge for strictly imagined persecutory behavior makes this type of patient potentially very dangerous. There is another disorder called paranoia in which there are no hallucinations and little break with reality or lack of interest. Actually the patient builds up a painfully logical and complicated delusional system. Just the basic premise is wrong or perhaps the final conclusion. The facts are usually correctly perceived, but incorrectly interpreted. There is usually either a delusion of grandeur or of persecution, but there is no progressive deterioration as in paranoid schizophrenia.

Catatonic schizophrenia is a type of disorder in which the patient withdraws almost completely from reality. Some have practically returned to the foetal stage; curling up into a tight little ball and refusing to communicate, eat, or even perform acts of elimination. This state requires complete physical care: tube feeding, dressing, undressing, and moving from place to place. These patients have sometimes been referred to as "human vegetables". Apparently, however, according to patients who have recovered from this disorder, this quiet

withdrawal period is filled with constant mental activity in an attempt to reorient oneself. Despite the apparent complete detachment from the external environment, there is a constant observation of all that goes on. These periods are often called "catatonic stupor" and they are usually quite long-lasting. They are perhaps the most distinguishing symptom of catatonic schizophrenia.

Occasionally these prolonged withdrawal periods may be broken rather unpredictably by brief outbursts of wild and uncontrolled excitement which may result in homicide or suicide. It is felt that these outbursts are an indication of the continuous mental agitation during the stuporous withdrawal state. Treatment of the catatonic patients is often very difficult because of the extreme withdrawal. A total program using electroshock treatment, psychotherapy, occupational therapy, recreation therapy, adjustment of the environment or milieu therapy, and a general feeling of sympathetic understanding have achieved some very good results. The tranquilizing drugs seem to offer hope for some patients. There is much need for research in all of these areas.

According to Dr. Herbert Nelson, Clinical Director of the Oregon State Hospital, catatonic stupor is becoming a very rare condition. The patients respond very well to milieu therapy, that is everyone dealing with

such patients is very warm and friendly, speaking to them every day and in every way trying to draw them into purposeful activities. Formerly they were treated as if they could not understand what was going on around them, and very often remarks or attitudes were expressed that only caused further withdrawal. Now about the only place patients are found with this condition is on the admissions wards when they come into the hospital following a severe traumatic experience. Within a few days of concentrated friendliness, their acute withdrawal symptoms disappear. Formerly there were whole wards full of this type of patient.

The last form of schizophrenia is the hebephrenic type. The patients with this disorder do not seem to have the pronounced delusions of the paranoid type nor extreme withdrawal of the catatonic type. Basically it seems to be a super-extension of simple schizophrenia with the extreme lassitude transformed into a constant stream of unrelated chatter and all sorts of nonsense syllables frequently referred to as "word salad". Many of the patients make up words and expressions and stick them all together with a general overall theme but with no apparent relationship between contiguous words. Along with the hebephrenic speech are often rather silly actions, many of which seem quite inappropriate such as: smiling

or laughing at something sad, or crying at something funny or comical. Then there are some individual patients who seem to have a combination reaction of hebephrenic and paranoid or catatonic symptoms. There is often considerable intellectual deterioration. In other words the hebephrenic type is also a sort of catch all label for all the schizophrenic reactions which are difficult to classify or which fail to have the more rigid stereotyped symptoms of the paranoid or catatonic types. Although all of these reactions tend to be quite different and individualized, all of the schizophrenic reactions have one general underlying symptom. That is a rather self-centered lack of interest in reality and a very complacent satisfaction with his own little fantasy existence. The internal environment has become much more interesting to him than anything external.

Manic-depressive psychosis presents quite a different picture from the various types of schizophrenia. The manic-depressive patients do not show the delusions, hallucinations, loss of contact with reality, or truly bizarre behavior that characterizes schizophrenia. The very depressed patients feel unaccountably sad and gloomy; to do anything at all requires the greatest effort on their part. The manic patients feel just the opposite, elated, happy, with an exaggerated sense of well-being.

Their energy seems boundless and they feel there is nothing they cannot do and do very well. Occasionally these extreme variations in mood will occur in somewhat of a cyclic reaction in the same patient, hence the term "manic-depressive" psychosis. Many patients are depressed entirely throughout the course of their illness with no manic episodes. Some manic patients never seem to become depressed. These conditions are often quite spontaneous in onset and recovery.

With some patients the depression grows progressively more pronounced to the point of attempted suicide. Others feel so despondent or guilty over something that has happened over which they may or may not have had any responsibility; they often feel unworthy to associate with any other person. This condition requires a rather firm non-sympathetic attitude, if the patient gets sympathy he then feels guilty and becomes more depressed. In many manic patients their tireless enthusiasm and use of energy tend to wear them down physically. This is the type of person who is described as "burning the candle at both ends." Their plans and schemes which probably at first showed originality and a degree of practicality grow progressively more complicated and grandiose until they become impossible to fulfill. About this time the manic patient often becomes very scornful of anyone in authority

and takes them to task at every opportunity. Both manic and depressed patients seem to respond quite well to electro-shock treatments. There is another form of depression called involutional melancholia which tends to follow the menopause in some women. It does not seem to be related to manic-depressive psychosis since there is seldom any manic episodes. There is a similar disorder in men following the involutional period which comes ten to fifteen years later than in women. It is thought that possibly changes in glandular secretions may play a part in the onset of this type of disorder; however, this is doubtful. Hormone therapy has been tried with conflicting results reported; much more research is needed in this area. This age is a period of great psychological stress for many individuals.

General paresis is strictly a degenerative illness due to a definitely organic cause. It is an advanced stage of syphilis wherein the disease causing agent the microscopic spirochaete *Treponema pallidum* invades the tissues of the frontal lobes of the cerebral cortex. This causes a particularly stereotyped symptom syndrome. There is a general forgetfulness, followed by a lack of personal neatness, irritability, occasional convulsions, poor judgment, slurring of speech, handwriting becomes jerky and virtually unreadable, muscular coordination fails so

that walking becomes difficult, and gradual paralysis takes place. There are often accompanying delusions of grandeur or feelings of depression. Formerly this disease resulted only in an early death. Now, by purposely infecting the patient with malaria, the resulting high fevers apparently kill the spirochaetes resulting in almost immediate improvement of the mental condition. Actually the destroyed cortical tissue cannot be replaced so that the disease is only arrested, not cured. Prevention seems to be the best course, with adequate complete treatment of syphilis when it occurs, or preferably the elimination of syphilis through proper instruction in sex hygiene. In the Scandinavian countries where probably the most advanced sex hygiene clinics have been established, general paresis is practically nonexistent.

The senile psychoses or mental disorders of the aged present one of the most challenging social and medical problems of our times. As the general health of society improves the average life span increases, and as more people live to advanced age the prospects of senility become more pronounced. There is a general tendency for all people as they grow older for all of their faculties to be limited somewhat. The rate at which this occurs and the number of faculties involved certainly varies considerably with the individual. Some people would not

be considered senile at the age of 80 while others might begin to show definitely senile tendencies as early as age 45. There is naturally a certain physical deterioration, and the extent to which this might promote an accompanying mental deterioration is pronounced. This does not mean to say that all senile psychoses are organic in nature, some may be quite functional reactions.

An example of physical deterioration could be cerebral arteriosclerosis, wherein the walls of the arteries in the brain become thickened or hardened, limiting the supply of oxygen and food materials to the nerve cells and slowing the removal of waste products. This would certainly limit the normal functioning of the brain. Another physical disorder is cerebral hemorrhage, which if extensive enough can cause nearly immediate death; or if limited in scope may cause pressure on certain areas of the brain giving rise to attacks of apoplexy or paralysis.

The problems of the aging are being studied under a relatively new field of inquiry known as geriatrics. It is interesting to note that many mental hospital senile wards are becoming known as geriatric wards. The geriatrics patients are rapidly becoming one of the largest general groups of mental patients. The senile or geriatric patients often show lapses of memory, particularly for recent events, while remaining quite

clear on happenings of youth or childhood. The geriatric patient is frequently untidy in dress, table manners, personal appearance, and toilet habits. They are liable to be confused, suspicious, eccentric, sad, and generally slow to react or adjust. Because care for such individuals is often quite difficult, constantly more of these patients are being placed in hospitals. Many of the patients' families are not able or do not want to assume the responsibilities for the care of these elderly people in their homes. Whether or not mental hospitals are the best place for these particular patients is largely open to question. Frequently the emotional demands of this new adjustment are very difficult, worsening the patient's condition. This is especially true if the hospital provides nothing more than custodial care with nothing for the patient to do but sit and rock. However by tender affectionate care and by drawing the patients into carefully planned group activities, many hospitals have done a good job of keeping the patients comfortable and occupied at something within their individual limitations.

In summary, the problems of the mentally ill are nearly as many and varied as the individuals who have the disorders. Much research needs to be done before satisfactory rehabilitation can be effected for all mental patients. Complete total rehabilitation for all mentally

all individuals may never be within the realms of possibility, but it should definitely be a goal for which everyone interested should constantly strive.

D. Characteristics of Tuberculous Mental Patients

As indicated earlier, both tuberculosis and mental illness require a relatively long period of hospitalization. Tuberculosis requires a rigidly enforced authoritarian program of bed rest, medication, and frequently surgery. Most forms of mental illness require a rather sympathetic, permissive program with a variety of activities, some medication, frequently shock treatment, and only occasionally surgery. There is a basic difference underlying the treatment programs for these two conditions. Nevertheless patients do contract the dual disability of tuberculosis and mental illness and both illnesses should receive adequate treatment simultaneously. The welfare of the patient should always be the primary consideration so that there should be little or no reason to suspend treatment of one condition to treat the other exclusively. For example, if all psychiatric treatment were suspended while the patient was assigned to the tuberculosis treatment unit, the possibility of his mental condition growing much worse would be a definite consideration. It must be reiterated that the primary function of a

mental hospital is the treatment of mental illness and that all other treatment should be performed as needed, but that it should remain as a secondary function.

In spite of the views of Dr. Wittkower that there seems to be a common feeling of dependency in most tuberculosis patients, apparently there are few other common mental symptoms in the tuberculous mental patients. (58) Indeed the more refractory tuberculosis patients are those who cannot force themselves to accept these feelings of dependency, reacting with quite a definite feeling of independence, often considerably worsening their tuberculosis condition. The distribution of mental illness among the patients of the tuberculosis treatment ward seems to pretty much parallel distribution throughout the mental hospital population. Nearly all the psychoses could be represented in the tuberculosis ward giving pretty much of a cross-section of the entire hospital which is one reason that a study of this particular facility should be of interest. There may be a slightly higher proportion of geriatric and alcoholic patients because the usual physical deterioration in these patients tends to open the way for tuberculosis infection. The lack of segregation of patients with different mental symptoms could possibly complicate psychiatric treatment.

Because of its highly contagious nature, proper

tuberculosis control demands that all patients having active pulmonary tuberculosis be isolated in a specialized tuberculosis treatment unit. All patients with suspected or arrested pulmonary tuberculosis should be further isolated from those patients with active tuberculosis as well as the non-tubercular patients. This would require a separate tuberculosis treatment facility within the mental hospital. Usually a special treatment ward of this kind should economically house about 150 patients. It has not proven too successful to refer mental patients with tuberculosis to tuberculosis sanatoria because of the lack of proper security precautions. Frequently the more disturbed patients in tuberculosis sanatoria must be referred to a mental hospital if it has adequate facilities for the isolation and treatment of tuberculosis.

The individual patients may have any of the symptoms discussed in Part C; some may be violent, others quite passive, and some may even be cooperative. Their tuberculosis may be highly advanced with large cavities or possibly just minimal suspected lesions. It is entirely possible that a third or even more pathological conditions such as diabetes, heart disease, or cancer might be present as well as the two conditions being studied. This presents the widest possible variation in the type of patients and should demand the fullest

possible use of treatment and ancillary services if the greatest possible measure of rehabilitation is to be effected.

The usual security measures employed at most mental hospitals should tend to relieve one of the greatest problems in normal tuberculosis control; that of irregular discharge or patients leaving the hospital against medical advice. The program of enforced bed rest for most tubercular patients becomes a problem with the more disturbed patients; the use of restraints would seem to be rather ill-advised and yet the patient should remain in bed. Many patients put in restraint will fight the restraint constantly getting very little rest. Perhaps the tranquilizing drugs could be used here unless their use would be contraindicated by tuberculosis therapy. Again it is necessary to warn against the patient who is too passive accepting everything possibly even death.

These two opposite reactions occurring at about the same time seem to be one of the critical points in the whole rehabilitation program. It becomes necessary to somehow communicate to the patient that for his own benefit he should remain in bed; to somehow stimulate him to want to get well; to somehow convince him that his family and friends still love and respect him; and probably most important, to somehow restore his true

feelings of self-respect--that he is a worth while human being. Time hangs so heavily upon the patient's head during this period; it is vital that he have something constructive to occupy his mind and hands during this time of prolonged bed rest. How to get sufficient personnel to devote adequate time to each patient is one of the biggest problems in total rehabilitation. The planned program of rehabilitation will be discussed in Chapter 5.

E. Summary

In summary, the complications facing the individual patient with both tuberculosis and mental illness are many. He has two rather severe handicaps to overcome. Both disabilities carry a degree of social ostracism in addition to their own particular disabling characteristics. In order for a tuberculous mental patient to be restored to society, it is necessary that society itself be informed and perhaps "rehabilitated." It is necessary that society know and accept that patients with both tuberculosis and mental illness can be cured. It is necessary that society cast off the social stigma attached to both tuberculosis and mental illness. When this has been accomplished the task of restoring healthy citizens to

society will be much more effective. All this will take time, money, and well-trained sympathetic personnel.

CHAPTER 3

THE INTEGRATED REHABILITATION TEAM

A. Introduction

In this chapter will be discussed the physical plant, the integrated rehabilitation team, and the other agencies involved in the rehabilitation of the tuberculous mental patients. Any proposed or suggested program dealing with the rehabilitation and treatment of the mentally ill should adhere to and use as a guide the following set of Fundamental Principles adopted by the American Psychiatric Association. (1)

1. Every hospital or clinic should provide active treatment and humane care for its patients, and educational and research facilities for its staff.
2. The superintendent, manager or director should be a well-qualified physician and an experienced psychiatrist with administrative ability. He should be the chief professional administrative officer of the hospital, department, or clinic, free from partisan political interference, and should have authority commensurate with his responsibility. He should be administratively responsible only to the appointing authority.
3. The treatment of patients is the primary responsibility of physicians only, and they may not delegate this primary responsibility. Auxiliary professional personnel render necessary and valuable assistance to the physician but this professional activity must remain at all

times under the direction and general supervision of the physician.

4. A medical staff of ethical, competent physicians should be provided in sufficient number to furnish effective treatment and care of the patients, with increasing opportunity for individual therapy.
5. Auxiliary professional services should be provided by well-trained personnel, adequate in number, properly organized, and under competent supervision.
6. Adequate diagnostic, therapeutic, and rehabilitation facilities, with efficient technical services under competent medical supervision, should be provided.
7. Accurate and complete medical records should be kept. These should be promptly written and filed so as to be accessible for use in clinical reference and research.
8. Competent personnel should be provided to carry out the necessary administrative and maintenance functions of the hospital.
9. A physical plant should be provided, free from hazards, properly equipped, and with adequate space for the comfort and scientific care of the patients.
10. New mental hospitals should be constructed in locations readily accessible to the population they are intended to serve and preferably in close proximity to medical schools or similar centers of medical activity.
11. Every hospital and clinic should be integrated with other health resources of the community.

B. The Physical Plant

There are a number of considerations to be taken into account in the buildings for a treatment center for tuberculous mental patients. First of all, the building should provide adequate sanitary facilities for the treatment of tuberculosis, and secondly it should provide the necessary security precautions observed in general mental hospitals. Usually these treatment centers should provide for between 100 and 300 patients, economically for not less than 150. Somewhere between one per cent and five per cent of the hospital population depending on the adequacy of case-finding and treatment, and facilities available would be expected to be found in the tuberculosis treatment unit. Facilities should be provided for all ancillary services as well as medical treatment.

Some rather general considerations will be taken from the report "Control and Treatment of Tuberculosis in Mental Hospitals" by the Committee on Hospitals of the Group for the Advancement of Psychiatry. (20)

1. The building should be largely self-contained with a suitable range of therapeutic, recreational, and rehabilitative facilities which may be exclusively employed in the care and treatment of tuberculous psychotic patients. Diagnostic and treatment activities requiring elaborate equipment (major operating rooms) or the services of specially trained personnel

(biochemical determinations, K.U.B. studies) will be carried out in common hospital areas available for service to non-tuberculous patients.

2. The building design, the equipment standards, and the finish of the walls and floors should be of a nature to encourage the maintenance of strict asepsis.
3. The bed capacity of the building should be sufficiently large to allow for the development of appropriately sized nursing units and the adequate diagnostic classification of patients without exceeding the bounds of maneuverability and of efficient medical administration.
4. Adequate areas for patient services, personnel offices, ward utilities, and housekeeping facilities should be provided on each ward to allow for the establishment of independent, locked nursing units.
5. Through careful design and the thoughtful choice and location of equipment, all necessary psychiatric safeguards for patients and staff should be inconspicuously obtained, and optimal levels of observation insured.
6. The building design should allow maximum flexibility in the operation of varied medical programs without the sacrifice of present convenience.

It probably would not be necessary for such a unit to be entirely self-contained, for example, most food could be prepared in the central kitchen of the hospital although special consideration for special diet for the tuberculous should be given. Special consideration should be given to the preparation of special supplemental

diet, such as, fruit juices, eggnogs, malted milk for between meal snacks and facilities should be provided on the ward for their preparation. Ambulant patients should probably eat in the ward dining rooms, but bed patients should be fed in their rooms, and the necessary facilities and personnel should be provided. Laundry too, could be done in the central laundry after some preliminary decontamination. All laundry from the tuberculosis unit should be segregated, washed separately in the laundry, and returned only to the tuberculosis unit. Engineering and general repairs could be conducted by the general maintenance staff as long as they observed normal aseptic precautions. Garbage could be put through a kitchen grinder disposal unit and flushed along with the sewage through the regular hospital sewage disposal system. An incinerator should be provided on the ward for all sputum cups and paper waste such as paper napkins, towels, and cleansing tissues.

A surgery should be adequate for at least minor surgery and even major chest surgery. There should be facilities for pneumothorax and pneumoperitoneum collapse therapy as well as phrenicotomy and bronchoscopy. The laboratory facilities should be complete for blood and urinalysis as well as, incubators, autoclaves, centrifuges, and all that is necessary for gastric lavage cultures.

X-ray facilities must be quite complete for immediate development of films and equipment for both 4" x 5" screening films and the full size 14" x 17" films. There should also be adequate fluoroscopic equipment.

Each nursing unit should provide a minimum of seventy to eighty square feet of bed space per patient and thirty to forty square feet of day room space per patient. A separate solarium with windows on three sides should be part of each nursing unit. There should be adequate space and equipment for nurses' stations, attendants, doctors' offices, interview rooms, staff conference rooms, social service, occupational therapy, hydrotherapy, electroshock therapy, visiting rooms, kitchens, dining rooms, recreation, library, canteen, luxury closets, clothes storage and locker rooms, linen storage, bath and toilet facilities for patients, nurses, attendants, doctors, and visitors, janitorial supplies, elevators, and mechanical services.

The tuberculosis treatment center should have accommodations for both male and female patients, housing them perhaps on different floors or at opposite ends of the same floor. Provision should be made to segregate the patients with active tuberculosis from the arrested cases by placing them at opposite ends of the building if the sexes are on two different floors. If both male and

female patients are on the same floor, then the ambulant patients should be on the ground floor, and the patients with active tuberculosis largely on bed rest could be on the second floor. This latter arrangement might aid a great deal in the socialization of the patients since they seldom get to participate in the dances and most of the other social activities of the hospital. There are other architectural aspects, such as materials, costs, style, colors, all of which are important but which will not be pursued further in this study. The overall appearance should more or less harmonize with the other buildings on the hospital grounds. An enclosed courtyard should provide for moderate outdoor exercise and perhaps patients' flower gardens. The building and grounds should be adapted for the treatment of patients and the safety of the staff, but the primary question should always be, "How may these facilities best be used to promote the rehabilitation of all our patients?" An adequate physical plant will aid in the development of an effective rehabilitation program, but it will not guarantee it; the administration and personnel of the hospital see to it that the program is carried out.

C. The Psychiatrist

The personnel involved in rehabilitating the

tuberculous mental patients must work as a closely coordinated team. Both professional and non-professional workers should be imbued with the team spirit, directed at restoring as many of their patients as possible to healthy, worth while, productive lives. There must be a sharing of ideas, purpose, and direction. The patients themselves should not be left out of this sharing; they too should be made to feel a vital part of the rehabilitation team. The effect of one patient on another can be tremendous, and the whole program will not work unless the individual patient wants to get well and cooperates with the staff to that end. This whole feeling of sharing should be a constantly growing, expanding thing, and it can succeed only by the enlightened efforts of everyone concerned.

Since this study is primarily concerned with tuberculosis in a mental hospital setting, the first member of rehabilitation team should be the psychiatrist. Other members should be the chest physician, the nurses, the attendants, the social case worker, the occupational therapist, the psychologist, the chaplain, and the laboratory and x-ray technicians. These are all hospital personnel; others outside the hospital play an equally important part in total rehabilitation; first, the vocational rehabilitation counselor, public health nurse, physician, county welfare worker, state employment service,

the family, friends, and various volunteer organizations such as the Tuberculosis and Health Association and the Mental Health Association. All these agencies and individuals, indeed all of society, have a stake in rehabilitation and in seeing that the best possible job is done.

The psychiatrist is primarily a physician with specialized training and experience in the diagnosis and treatment of mental illness. He must be a graduate of a medical school approved by the American Medical Association, followed by two years of internship and three years of psychiatric residency in approved mental hospitals or psychiatric clinics. Along with the pre-medical college training, this represents some twelve years spent in professional preparation. To qualify as a Diplomate of the American Board of Psychiatry and Neurology, he must have completed three years of psychiatric residency in a hospital or hospitals approved by the American Medical Association, followed by at least two years practice in the field of psychiatry, at which time he is eligible to take the qualifying examination from the American Psychiatric Association. Many practicing psychiatrists have never taken this examination and even though eligible to do so are therefore not yet Board certified. There are at the present time only two on the staff of the Oregon State Hospital who are Board Diplomates, although there

are several eligible to take the qualifying examination. Generally, the psychiatrist has had little or no training in psychiatry or psychological principles until after his graduation from medical school during his internship or residency. Some hospitals have only been approved by the American Psychiatric Association for a one or two-year residency program, so that the resident must find another institution in which to complete his residency program and subsequently become a qualified psychiatrist.

As a physician, the psychiatrist should be qualified to diagnose and treat physical ailments as well as purely mental conditions. One of the first steps in treating a functional mental disorder should be to first rule out the possibility of some organic cause. Only a physician is so qualified. In the treatment of the tuberculous mental patient he should have some specialized background in the emotional and physical aspects of tuberculosis, and should work very closely with the chest specialist to determine the best possible course of medical treatment. He needs to be especially competent because of the dual nature of the disability which certainly complicates the total rehabilitation of the individual patient. In order to make the most adequate mental diagnosis he may call on the clinical psychologist for test interpretation, the psychiatric social worker for

family background and other significant observations, the nurse and attendants about behavior on the ward. Frequently the best means of assembling this information about a patient is at a staff conference with a free interchange of information and ideas. For best results these conferences should be a round-table affair rather than triangular with the psychiatrist presiding.

Not all diagnoses will require this degree of concentration, but once the diagnosis has been made the therapeutic program should begin. The treatment program may call for occupational therapy, hydrotherapy, insulin or electro-shock therapy, work therapy, recreation therapy, and possibly psychotherapy. The psychiatrist should direct and prescribe all treatment directed at the mental and emotional disorders of the patient. He should work closely with the other members of the team in order to know how the patient is responding to the various treatments. He should change or limit the different forms of treatment as indicated by the patient's responses. All psychiatric treatment should be coordinated with the treatment for tuberculosis. Perhaps the most important function of the psychiatrist should be the stimulation of the patient to want to get well.

D. The Chest Physician

The chest physician is perhaps in shorter supply than even the psychiatrist. Ideally he should be a phthisiologist, a specialist in diseases of the chest with perhaps emphasis on the diagnosis, treatment and control of tuberculosis. Of course, he should have experience and training in the diagnosis and treatment of the various forms of pneumonia, pleurisy, and heart conditions as well. However if one is not available, perhaps a general practitioner could be given some specialized training in tuberculosis control. Some hospitals have given this special training to one of the staff psychiatrists and rely on a nearby tuberculosis sanitarium for consultants as needed. He should be especially competent at analyzing chest x-rays as this is one of the chief diagnostic tools of the chest physician. Fluoroscopy and sounding of the chest with the stethoscope are also important techniques. There is some question as to whether the chest physician should be the ward doctor-in-charge. On many mental hospital staffs he would be the only chest specialist and would probably have to act as a consultant to the general medical and surgical unit. Certainly he should be the Tuberculosis Control Officer for the entire hospital responsible for case-finding procedures. He should conduct the educational program for the nurses,

attendants, and other personnel in tuberculosis control measures. Besides the initial orientation for new workers there should probably be a regular program of seminars for continuous improvement and interchange of ideas. Frequently the chest physician is not a qualified chest surgeon, but it is often possible to obtain these services from strictly tuberculosis hospitals or from specialists in private practice.

The chest physician should administer pneumothorax and pneumo peritoneum collapse therapy as needed by the patients, frequently as often as once a month. He should make daily ward rounds, especially in the bed rest wards. He should carefully determine the activity tolerance for each individual patient and prescribe appropriate occupational therapy. He should work closely with the psychiatrist being especially watchful for extreme agitation or depression in the patient and taking proper corrective measures. He should prescribe the chemotherapy for tuberculosis. At present, intermittent treatment with streptomycin and either para-amino salicylic acid or isonicotinic hydrazide are achieving good results. These drugs are more commonly known by their initials: P.A.S. or I.N.H. An interesting sidelight is the effect of the I.N.H. on the mental condition which is usually quite favorable, but which occasionally has had some

undesirable results. (39)

As tuberculosis control officer the chest physician should read and interpret the 4" x 5" chest x-ray of each new patient to the hospital. Any suspicious films should be repeated on a full size 14" x 17" film followed by a thorough chest examination if indicated. It might be wise to take a gastric lavage for culturing as well. The social worker attached to the tuberculosis treatment unit might be able to uncover something in the patient's history which might help to indicate the presence of tuberculosis. There should be a yearly hospital x-ray survey of all patients who have been in the hospital more than one year. It might be well to have this done on or about the anniversary of their admission. The same procedure could be used as on admission films. From the data so collected a tuberculosis registry could be set up for all the patients in the hospital; this is a very important step in the control of tuberculosis. All staff too should have regular x-rays, those working on the tuberculosis wards about every three months. The patients on the tuberculosis wards for treatment should be x-rayed monthly, bimonthly, or as the chest physician sees fit, on full size film to better check on the course of the disease.

In addition to reading and interpreting all chest

x-rays, the chest physician should supervise and interpret all tuberculin tests, smears, cultures, blood tests, and other laboratory reports. The laboratory and x-ray personnel need to be especially capable; it would be preferable for them to be on the level of medical technologists. One of the most important functions of the chest physician in total rehabilitation would be to maintain liaison with the local and national societies interested in tuberculosis, as well as county health departments for the follow-up of released patients. He should keep abreast of the modern trends in the control and treatment of tuberculosis, working very closely with the psychiatrist in helping to meet the emotional needs of the patients. The chest physician can reassure the patient almost better than anyone else by gaining the confidence of his patients and by keeping their relationship as warm as possible. The patient must want to recover from his tuberculosis as well as his mental condition. The basic philosophy of the chest physician should center around the restoration of a healthy effective person and not exclusively in the healing of a pulmonary lesion.

E. The Nursing Staff

The nurse plays a vital role in the rehabilitation

of the tuberculous mental patient. Traditionally it is the function of the nurse to carry out the treatment orders of the physician. Usually the nurse actually administers the medications, maintains the standards of cleanliness and hygiene on the ward, keeps the records of all medication and treatment, supervises the attendants, and generally manages the activities of the ward. The Registered Nurse is a graduate of the standard three-year curriculum of nursing training in a hospital school of nursing. Many nurses earn a Bachelor's Degree in Nursing Education by attending college in a prescribed course for about one year in addition to the hospital training. Most supervisory positions require the Bachelor's Degree. In many states at the present time all nursing trainees must take a three-month period of psychiatric nursing in an approved mental hospital.

The Head Nurse on the tuberculosis treatment ward of a mental hospital should have specialized training in tuberculosis control as well as be a well-trained psychiatric nurse. She should have her Bachelor's Degree, with a minimum of sixty hours of college credit, a six months' post-graduate course in psychiatric nursing, and two years' experience in a psychiatric hospital or clinic, and at least one year in a tuberculosis sanitarium. (1)

The other nurses on the ward could have appropriately

less training and experience. It would be partially the responsibility of the Head Nurse to provide instruction for the other nurses under her charge and for the attendants in the care and treatment of tuberculous mental patients. Care should be taken to prevent her from becoming an administrator exclusively; her training makes her too valuable merely to sit at a desk; she is needed on the ward working with the patients.

The nurse has been included with the physicians as a part of the professional medical members of the rehabilitation team since she is in more constant contact with the patients. Observation of the patients and informed recording of such observations is one of the fundamental functions of the nurse without which the treatment phase of the total rehabilitation program would be definitely limited. The nurse sets the mood for the non-professional personnel of patience, understanding and tact, which is so necessary in working with tuberculous mental patients. The nurse too, sometimes finds herself drawn into a more or less psychotherapeutic relationship with various patients. It is necessary that she then understand something of psychodynamics and at the same time realize her limitations as a therapist. She should report to the psychiatrist any conclusive observations and turn over to him any situation that becomes too

involved for her to handle. Personality traits being what they are, occasionally the nurse or some other individual may be able to achieve a better therapeutic relationship with some patients than the psychiatrist himself. The difficulties of such a procedure are many, the training of very few people is adequate to do a good job; however, if closely supervised by the psychiatrist some positive results have been obtained.

F. The Attendants or Aides

The attendants or psychiatric aides are the most numerous and the least well-trained of all the personnel working with mental patients. There are almost no requirements for being an attendant; many are not even high school graduates. The pay scales are usually commensurate with the lack of qualifications, bare subsistence in many cases. Some hospitals have set up a training program for attendants from three months to a year in duration. Some hospitals have even included college course work as a part of the training for supervisory workers. (57) One of the greatest needs in mental hospitals today is for better trained, sympathetic people to work as attendants.

There are frequently eight to ten times as many attendants as nurses in mental hospitals. Frequently there are from two to ten times as many nurses as doctors.

The ratio of attendants to doctors could vary anywhere from ten to one up to thirty or forty to one. (57) This results in a tremendous problem in supervision of personnel, and the problem is increased by the lack of education and training of the attendants. There is usually about one attendant to every five or six patients; this includes janitors, mess attendants, practical nurses, barbers, beauticians, and so forth, and assumes this figure accounts for all the shifts with these personnel working an eight-hour day, forty-hour week. The attendants have by far the most time of any staff members with the patients. It is not enough that they keep the doors locked and take the patients to the bathroom. The attendants must become active, functioning members of the rehabilitation team. As it is, many attendants often have responsibilities for which they are not at all prepared. If no training program is instituted for attendants, the best attempts at rehabilitation on the part of the professional staff would often result in nothing more than custodial care with no one to follow through on the ward.

Attendants are usually present on the wards twenty-four hours a day, usually in shifts of eight hours. They have the responsibility of feeding, clothing, and generally seeing to the needs of the patients; bathing, shaving, fixing the hair of the women patients are all a part of

the task. On the tuberculosis treatment ward, all the sweeping, cleaning and ward work would fall to the attendants instead of the patients as on general wards. Since the tuberculosis ward is isolated from the rest of the hospital, most of the responsibility for recreation for the patients would rest with the attendants and therefore some of them should have specialized training in recreation therapy. On a tuberculosis treatment ward of 150 beds, there should be at least one full-time Registered Occupational Therapist, but there should be two attendants trained to assist in occupational therapy. (1) By maintaining friendly relationships with the patients, talking to them as individuals, and lending a sympathetic ear to what the patient has to say, the attendants can help out effectively in the therapeutic program.

It might be advisable to adopt a training program for attendants such as in California or Texas with subsequent upgrading and salary increases. After a two-year college training program, during which they work about half time at the hospital, they are known as psychiatric technicians instead of attendants or aides. (57) The course includes in the first year: English, chemistry, anatomy and physiology, micro-biology, psychology, history of nursing, professional adjustments, and nursing arts. In the second year they take: dietetics, diathermy,

psychiatry, medical and surgical diseases, principles of sociology, rehabilitation therapy, psychiatric nursing, and operating room techniques. They earn a total of 27 semester hours of credit each year. After completion of the course, they are considered for positions as charge attendants and supervisors. Since this course closely parallels the regular nursing curriculum, many of these trainees go on to become Registered Nurses.

After a course of this kind, it would be possible for the attendants to converse fairly intelligently with the physician, psychiatrist, nurse, social workers, psychologists, and other professionally trained personnel. Also their observations of the patient would become more significant. They could become contributors and achieve some personal status on the rehabilitation team. The most important benefits would be passed on to the patients through increased understanding and more skilled handling of their problems by the personnel in most constant contact with them. There is reportedly an increased recovery rate in the hospitals where the attendants have had this increased training. In California there is an attempt to eliminate altogether the classification of attendant, making all such workers either psychiatric technicians or trainees. If such an extensive educational program is not possible, then at least some sort of intensive in-service

training should be given in the hospital by qualified members of the staff.

G. The Clinical Psychologist

Two professional members of the hospital team in very short supply are the clinical psychologist and the psychiatric social worker. The clinical psychologist should have a Ph.D. degree in psychology with his clinical experience in an approved psychiatric clinic or mental hospital. This is usually a three-year program beyond the master's degree with two years in academic and research work and possibly some teaching followed by the one year of supervised clinical experience. One of the chief responsibilities of the clinical psychologist is the administration and interpretation of psychological tests of various kinds. These tests could be standardized tests of intelligence, interest, and aptitude, or the more projective personality tests such as the Rorschach Ink Blot Test or the Thematic Apperception Test. The behavioral responses of the patient while being tested are often quite as significant as the actual responses to the test items. The psychologist must be sensitive to these responses and be able to record and interpret all significant observations. This testing information should be of particular concern to the psychiatrist in formulating his

diagnosis and the resulting treatment program. The testing data also enters into the planning for the vocational rehabilitation of the patient.

The clinical psychologist is particularly well trained for teaching in the areas of psychodynamics, research methods, and interpersonal relationships. As such he would be an important part of any hospital program for the in-service training of nurses and attendants. His background in research and statistics would make him a vital part of any psychological research program carried on at the hospital. More and more the mental hospitals need to become teaching and research centers. In order to more adequately pursue a research program it is not enough just to have the man; the man must have the time, he has to have faith, he must have an insatiable curiosity, and he must have the materials with which to work. There must be a free interchange of ideas and information. There must be coordination of effort. Frequently recordings of seminars about problem situations on the wards could raise more than enough questions for which to seek answers. The psychologist can prove extremely valuable in this area.

One of the most disputed areas in which the clinical psychologist can work is psychotherapy. Many psychologists are quite expert in this rather difficult field. Some are quite adept at individual psychotherapy;

while perhaps the most proficient leaders of group therapy sessions are often clinical psychologists. The psychologist regardless of his competence should not of necessity become impatient nor aggressive in seeking to perform therapy. He must understand that in a medical setting that the physician or more specifically, the psychiatrist, should prescribe and direct all treatment. It must be understood too, that many physicians cannot yet accept the contributions of the psychiatrist let alone the psychologist. Some psychiatrists seem to resent the intrusion of a clinical psychologist into the treatment program with his Ph.D. degree allowing him to be called "Doctor." This presents a very real threat to many physicians, although those psychiatrists who seem to be achieving the highest degree of success in their therapy welcome the addition of the well-trained clinical psychologists to the rehabilitation team. (57) There is a place for the clinical psychologist in therapy, not necessarily subordinate to but rather cooperating with the psychiatrist. The need is much greater than actually indicated because of the general reluctance or resistance of many physicians to using the services of the psychologists in testing, teaching, research, and therapy, particularly in therapy. When relatively untrained attendants and nurses are being urged to enter some phases of treatment, it seems a

tremendous waste to ignore the clinical psychologist with his seven to eight years of professional training in psychodynamics. Indeed in some Veterans Administration Hospitals tuberculous mental patients are treated by a team of a chest physician and clinical psychologist. (51)

H. The Psychiatric Social Worker

Another professional member of the rehabilitation team is the psychiatric social worker. There seems to be none of the reluctance toward utilizing social workers that is felt against the clinical psychologists. The social worker gathers family data, digs out significant social history, interprets the hospital to the patient and his relatives, and at the same time the patient to the hospital. In many ways the psychiatric social worker is the bridge between the hospital, the patient, and the community. The social worker should be one of the first people the patient sees on entering the hospital and one of the last people to be seen on leaving. The case-work report prepared by the social worker can be one of the most effective diagnostic tools used by the psychiatrist. The primary function of the social worker is gathering information about the social background of the patient. To be effective this information should be shared with appropriate personnel, the psychiatrist,

psychologist, nurse, rehabilitation counselor, and even attendants. All this can be done properly without violating confidences. One of the best ways to do this is at a case conference where all the personnel participate.

The psychiatric social worker must be a graduate of a recognized school of social work. He should complete at least the two-year graduate course leading to the Master's degree in Social Work. The first year of graduate training is rather common to general case work, supervision, medical social work, or psychiatric social work. Specialization comes in the second year with emphasis on psychiatry and psychopathology. There should be closely supervised clinical internship for a year or two in a psychiatric clinic or mental hospital. There is a tremendous shortage of trained psychiatric social workers; many hospitals have to be satisfied with four-year graduates or even less. Care should be taken that social workers' positions do not degenerate into clerical jobs. Adequate clerical help should be provided by typists, stenographers, and filing clerks so that all professional workers can spend more time in the duties where they are most needed.

The social workers may find themselves in therapy situations especially with the relatives of patients. Many mentally ill patients are reacting to what is basically an unhealthy environmental situation. Very often the

unhealthy situation exists in the family and the social worker must attempt to relieve some of these family pressures before the patient can be returned to society. The social worker belongs out in the community at least part of the time gathering data which will be helpful to the patient's recovery in the hospital or which will facilitate his successful return to the community. Perhaps in the case of a male patient the psychiatric social worker could help to gain the aid of county welfare departments in caring for the family during the hospitalization period. It should be the responsibility of the social worker to follow-up discharged patients to see what kind of adjustment is being made. Because of their special study of group dynamics psychiatric social workers have been successfully used as teachers or as group therapy leaders. One hospital holds such group therapy sessions for discharged patients. The social workers are especially needed in out-patient clinics where they exist. They would probably be attached to the admissions service and would not work directly on the tuberculosis treatment wards. The importance of social history in formulating a diagnosis has already been pointed out, however, the case workers could also work up excellent research projects from the case histories they have available. Therefore the psychiatric social worker is an important member of

the rehabilitation team in diagnosis, therapy, community relationships, follow-up, and research.

I. The Occupational Therapist

Occupational therapy plays a vital part in any hospital setting where a prolonged recovery is involved. The Occupational Therapist should be a graduate of the five-year college program approved by the American Medical Association and should be registered by the American Occupational Therapy Association. They are then known as O.T.R. or Registered Occupational Therapists. Occupational therapy has as its major purpose the utilization of organized purposeful activities. Some of the goals are: to help restore self-confidence in the patient by providing him with an opportunity for the successful completion of tasks within his competence at the moment; to assist in and encourage the socialization of the patient and his participation as a member of a working group; and to provide opportunities for the patient to perform activities which may gain him the approval and emotional support of the therapist and his fellow patients.

Occupational therapy is especially helpful in the tuberculosis treatment program as well as that for mental patients because it provides a form of diversion for the bedfast patient, and also provides an opportunity for the

patient to work through some of his conflicts. One psychiatrist has expressed the thought that occupational therapy is a form of non-verbal psychotherapy; that the patient who is unable to communicate in words may be able to express himself through the various media of occupational therapy. Successful occupational therapy should be on the prescription of the physician, directed at the needs of the individual patient, and should not exceed his limitations. Some of the projects that might be used are: knitting, embroidery, metal tooling, leather working, needlepoint, crocheting, basketry, beadwork, woodwork, plastics, pottery, ceramics, modelmaking, drawing, painting, radio repair, and many others. Actually the things that the patients can do are limited only by their own enthusiasms, interests, and abilities. Very often the therapist must originate some enthusiasm, stimulate interest, and frequently must develop abilities. Many patients respond very well to this type of therapy. Materials present somewhat of an economic problem as do tools, however, the chief problem is finding a competent, imaginative therapist who can improvise and utilize the materials that are available.

The American Psychiatric Association recommends one Registered Occupational Therapist and one Occupational Therapy Aide for every one hundred patients on the

tuberculosis treatment ward of a mental hospital. On a unit with 150 beds, there certainly should be one trained occupational therapist with one or better two attendants trained to assist in this form of therapy. The occupational therapist is usually bright and cheerful and brings something quite apart from the usual hospital routine to occupy the patients' hands and minds. Not only a diversion, the project chosen by the patient can be an expression of his inner motivations. Frequently a successful adaptation to occupational therapy has been followed by a resolution of the conflicts which have led to the patient's mental condition. With individual and group psychotherapy, and other supporting treatment recovery is frequently effected. The pathological aspects of tuberculosis seem to respond favorably to occupational therapy as well. Occupational therapy can begin to establish some work tolerance which is very necessary in setting up any broad vocational plan. The observations of the therapist can be very helpful to the other members of the rehabilitation team.

J. Other Therapists

There are several other workers who should be mentioned in conjunction with the occupational therapist. They are the rehabilitation therapists--both educational therapists and manual arts therapists, physical therapists,

and recreation therapists. The Veterans Administration Hospitals have been instrumental in the formation of the relatively new field of Rehabilitation Therapy. There are two recognized branches: Education Therapy and Manual Arts Therapy. At the present time they are striving for professional recognition by setting up a registry and specific requirements. They have as their purpose the restoration of the patient to at least his former level of efficiency, and if possible, to increase his level of functioning. (28) These therapies by means of practical training or retraining in necessary, marketable skills seek to bridge the gap between the more or less hobby or crafts nature of Occupational Therapy projects and actual on-the-job vocational training.

The aims and purposes of Education and Manual Arts Therapy are as follows:

1. To provide basic academic skills for the student to use to facilitate his future adjustment.
2. To provide basic personal skills for the student to use to facilitate his future adjustment.
3. To provide accredited academic work on primary and secondary levels.
4. To provide information which will serve as a basis for their discrimination in introspection.
5. To occupy the student constructively.

6. To provide activities and entertainment which are designed to keep the student in contact with his concept of normalcy.
7. To provide opportunities for social interaction.
8. To provide opportunities for success.
9. To provide an accepting atmosphere.
10. To collect data which may shed light on these conditions, their amelioration, education and perhaps their prevention.

Notice the emphasis on the term "student" instead of "patient". This is one more indication that the patients are somewhat further along the road to recovery. There seems to be some overlapping with Occupational Therapy as far as the goals are concerned; however, the techniques are quite different. There is no competition between occupational therapy and education or manual arts therapy. It is conceivable that a patient could be engaged in both at the same time. The therapists should be willing to cooperate and pool their talents for the optimum benefit of the patient, and of course, all should be under the direction and prescription of the physician. Occupational therapy seems to be aimed at the bedfast or at patients with limited "up time" or possibly at patients with limited concentration or attention span; whereas the rehabilitation therapies are directed at patients capable of more sustained effort.

The education therapy program consists of actual academic instruction in English, reading, composition, typing, science, foreign languages, mathematics, bookkeeping, spelling, political science, history, geography, business law, in fact any subject which might be taught in a regular school curriculum. Manual arts therapy would include actual wood, metal, and electrical shopwork with the kinds of tools and equipment that might be found in places of employment rather than simply hobby equipment. Radio repair and electric motor rewinding and repair have been very popular media in manual arts therapy.

Instruction is often very difficult because of the abnormalities of the patients. Classes must be held to quite small numbers because of this and extreme diversity of interests, abilities, and backgrounds of the patients. It is conceivable that some students might profit from college level of instruction, but for the most part the courses would be limited to basic skills. This sort of educational program would require the highest possible level of teaching and the personnel should be correspondingly well trained. A Master's degree should most probably be one of the requirements; a very good background in psychology would also be necessary. The personality of the teacher would be another important factor, a warm, patient, outgoing individual seems to be able to identify

better with the patients and the patients with the teacher. As in many other activities, the personnel are more important than the facilities; intelligent, dedicated, active, well-trained personnel can do a good job in any kind of adaptable facilities. This may seem like an expensive program, but in the Veterans Administration Hospitals it seems to be definitely paying off in better, more rapid adjustments by the patients who can show after discharge a concrete improvement in skills as a part of their stay in the hospital.

Physical therapy was the earliest developed of the adjunctive therapies. It developed originally to help amputees learn to get about on artificial limbs, gradually spread to other post-surgical treatment, and is widespread in the treatment of poliomyelitis and other crippling and paralytic diseases. There would be some need for a Physical Therapist in a unit for tuberculous mental patients, particularly in post-surgical cases and with patients requiring extended bed rest. There are very few things which are as debilitating as complete bed rest, necessary as it may be in tuberculosis treatment. The physical therapist through massage and passive exercise can do much to maintain some muscular tone and circulation, also to prevent so-called bed sores which are common in periods of long hospitalization.

The training of qualified physical therapists varies somewhat, but generally two years of college are required with rather intensive study of anatomy, physiology, kinesiology, and so forth. Many physical education majors enter the field of physical therapy. After a two or three-year college course, the physical therapist takes a two-year course in a hospital training institution approved by the American Medical Association.

Hydrotherapy remains an effective form of treatment for some mental patients and should be supervised by a qualified physical therapist, especially if the rigid aseptic conditions for the treatment of the tuberculous are to be maintained. The physical therapist should supervise and instruct the attendants in proper methods of massage and passive exercise. It may be that the use of the tranquilizer drugs could somewhat limit the need for hydrotherapy. In any event, the physical therapist has a valuable contribution to make in the total rehabilitation of the tuberculous mental patient.

Carefully planned recreation is of vital importance in the tuberculosis treatment unit. Many hospitals have a program called recreation therapy and this title is particularly appropriate on the tuberculosis treatment unit because all activities are on the prescription of the physicians. This includes games, parties, sports, dances,

field trips, picnics, swimming, cards, chess, checkers, roller skating, movies, dramatics, talent shows, ping pong, library facilities, patients' canteen, and other entertainment or diversionary activities. The more strenuous activities would most probably be prohibited and a progressive schedule instituted according to the patient's chest condition. Croquet, shuffleboard, cards, and even dancing might be acceptable; while swimming, tennis, volleyball, and other such activities might not. Care must be taken to insure that recreational activities do not interfere with the routine treatment program. Also it should be remembered that everyone, even a mental patient, needs some time to be alone with his own thoughts and that a constant swirl of activities might actually hinder recovery. It seems that the most effective times for recreation would be on the weekends and in the evenings. If there is television on the wards, patients should not be dragged away from a favorite program to participate in an organized tiddleywinks tournament. There is a need for organized and supervised recreation, but the recreation should be tailored to the needs of the patient.

The American Psychiatric Association recommends one full-time recreation worker for every 1,000 patients. They should most probably be college graduates, although no specific requirements are made. Frequently they will

be physical education majors who have specialized in group recreation. Armed forces service clubs, Red Cross canteens, and YMCA work might be good sources of experienced workers. On the tuberculosis treatment ward, most of the recreation duties would fall to the attendants since the patients must be isolated from the general hospital population. It might be wise to select attendant from the evening shift to be in charge of the recreation activities. Possibly some special training and coordination could be worked out with the Recreation Director of the hospital. An important phase of the program could be the utilization of volunteer workers, naturally the utmost care would have to be taken to protect them from tuberculosis infection. The medical staff should certainly have the final approval as to which activities were appropriate for the individual patients. A well planned recreation program is an integral part of total rehabilitation.

Another important rehabilitation worker is the hospital chaplain. Actually chaplains would be preferred since religious expression should be given to patients of all religions, Catholic, Protestant, and Jewish. It might even be advisable to have someone available who is familiar with other religions such as Moslem, Buddhist, and Hindu, since people of these faiths occasionally find themselves in mental hospitals. In many cases of mental

illness, religion seems to be a precipitating, even a causative factor. The personal demands placed upon a person by his religion seem to often be the chief stress factor in his illness. Many patients with delusions or hallucinations will concern themselves with religious or supernatural things. Many patients identify with Biblical characters even to the point of becoming these characters in their delusional system. Again many patients feel guilty about having sinned or about some imagined sinful act. Some other patients may have had little or no religious experience and as a result developed some instability. The reactions are almost limitless.

Anton Boisen, who was for many years Chaplain of the Elgin Illinois State Hospital, makes some very interesting observations on religion and mental illness in his book "Exploration of the Inner World". (5) This book is especially interesting as it describes his own mental involvements, his return to mental health, and later to working with mental patients and helping them on the road to recovery. A similar case is that of Clifford Beers who founded the Mental Health movement. In his book Mr. Boisen states:

In going through the case records one is not infrequently struck with the evidences of fluctuation in religious interest. We find in some histories that shortly before the onset the patient began to display great interest in religion. He would spend

much time in prayer or reading the Bible or attending religious services where before he had been rather indifferent. In other cases we read that some months before commitment the patient stopped going to church and lost all interest in religion. There seems to be an accentuation of religious concern at the time of onset in panic reactions and its diminution in the concealment and drifting reactions.

It seems only logical that if religion has apparently played some part in the onset of mental illness, that it should play equally or even more important a part in the recovery process. Perhaps a re-orientation is indicated. In any event a competent chaplain emerges as an important rehabilitation worker.

Two workers whose main function is to aid the physician to make his diagnosis, but who can play an important part in rehabilitation are the x-ray and medical laboratory technicians. By being friendly, cheerful, and engaging the patients in conversation during the course of routine x-ray examinations and laboratory procedures is just a small part of what they can do. With selected patients they can be much more constructive. When the patients are well enough along the way towards being considered negatively tuberculous, one or two of the more stable mentally might be allowed to work for brief periods in the laboratories. If they seem well adapted to the work, the periods might be increased to a half day or even a full day. Some patients might have the capacity to

learn to do this type of work other than simply washing the glassware, and so forth. They might even be inclined to enter laboratory work after discharge. Perhaps it would be possible to enter a training program through the offices of the Division of Vocational Rehabilitation. If one or two patients in the course of several years were so encouraged, the experiment might be considered successful. With other patients it might be regarded as a form of occupational or more properly industrial or work therapy. In any event this is one possibility that should not be overlooked. In many cases a logger, truck driver, bulldozer operator, or other heavy worker must change his occupation after a bout with tuberculosis; this sort of thing might be particularly appropriate here in Oregon.

K. The Rehabilitation Counselor

The last individual member of the team to be considered is one of the most vital, because the most important evaluative criterion of the team concept of rehabilitation is the placement of the patient in suitable, satisfying employment as a productive member of society. The vocational rehabilitation counselor needs to have a wide array of skills and background in order to accomplish this. Whether he works for the state Office of Vocational Rehabilitation, the Veterans

Administration, private rehabilitation center, or is on the staff of the hospital he should be familiar with human development and behavior, be able to interpret medical terms and processes, be sensitive to the social aspects of each client's disability, be able to integrate test data into meaningful patterns, be skilled in counseling and interviewing techniques, be aware of the latest educational and occupational information, be able to utilize fully the resources of the community, be able to achieve the most satisfactory job placements for his clients, and be willing to follow up these placements to see that his clients are making an adequate adjustment to their new employment. It is a full-time job. (17)

At the present time most mental hospitals do not have trained rehabilitation counselors on their staffs. This seems to be one of the weakest points in the entire rehabilitation program. The hospital program should be geared to healing, curing, or arresting the physical and mental disabilities of the patient, but if after discharge, he is left to shift for himself with an inadequate notion of his abilities, with no firm convictions as to the best vocational choice for him, it is very likely that he will return to the hospital or to some other facility. Many patients of course return to their old jobs or to the same type of employment, but frequently job

tensions are precipitating factors in many kinds of mental and physical illness. It is necessary therefore to give very careful consideration to the proper vocational objectives while the patient is still in the hospital.

Does the patient have the necessary abilities for the job; can he assimilate the necessary training or education required; is he interested in this type of employment; these are some of the questions that must be asked.

Physical requirements of the job must be considered as well: is the job indoors or outdoors; is there dust; is the light adequate; is there any lifting or straining; is there noise or relative quiet; is there climbing; is it necessary to move about or is the worker relatively stationary; is he sitting or standing; all these and many other factors in the job situation must be carefully analyzed.

This type of selective placement requires that the worker be matched very carefully to the requirements of the job. In addition to the above qualifications it is necessary to note: what is the nature and extent of the patient's disability and to what extent can it be overcome? Still others are: what are the opportunities for advancement; what are the possibilities for expansion; how about retirement benefits; what is the demand for this type of work; does the client have adequate transportation

to and from work; what is the client's level of aspiration; is adequate housing available; will the client have to move to a new community; all must be considered. This type of placement differs from the typical employment or personnel service where a job vacancy exists and it must be filled by a worker who has the necessary qualifications. Here there is just the reverse; a worker with certain abilities and limitations must be placed in a job that he can satisfactorily handle. As the difficulties of this type of placement are recognized, the need for competent rehabilitation counselors becomes more apparent.

In the past there were few specific requirements in the training of vocational rehabilitation counselors. Most counselors had a background in teaching vocational education courses since it seemed to be the closest related field. Since 1955 however, there has been a concerted effort to set up a program of professional training specifically for vocational rehabilitation counselors. The training cuts across several professional lines. This is generally a two-year graduate program with a practical internship of nearly one year leading to a Master's degree. There are some thirty colleges and universities across the country offering this course at the present time. Sometimes the course is under the School of Education; in others the Department of

Psychology; in the Graduate School of Social Work, and in some cases in special Departments of Vocational Rehabilitation Counseling. (17, 52)

The emphasis varies slightly from college to college depending upon which department is offering the course. Psychology is the dominant area of study with the emphasis on individual differences, test interpretation, growth and maturation, and interpersonal relationships. Social work is important, stressing interviewing, case report procedures, and group dynamics. Schools of Education teach largely counseling techniques, and educational and occupational information. It is necessary for the student counselor to have some training in anatomy, physiology, pathology, and certain other technical phases of medicine, so that he can converse intelligently with physicians about the disabilities and progress of his clients.

The counselor is not a psychologist but he must have a thorough understanding of psychological principles; neither is he a social case worker yet he must know enough about case writing to work up adequate reports; nor is he a personnel worker and yet the ultimate end of his labors is the successful placement of his client in a satisfactory job. First, last, and always, he is a counselor and as such should be aware of the desires, abilities, and limitations of his client, and trying to help his client

choose the most adequate vocational objective.

L. Other Agencies Involved

Outside of the hospital setting, there are many organizations both public and private which can do much to facilitate the rehabilitation of the tuberculous mental patient. The State Employment Service is one; some of the others are: County Health Departments, County Welfare Departments, U. S. Veterans Administration, State Department of Veterans Affairs, employers groups, labor unions, veterans organizations, Tuberculosis and Health Associations, Mental Health Associations, fraternal organizations, religious groups, rehabilitation centers, if any, and Goodwill Industries.

The State Employment Service operates offices throughout the state in practically every major city. They have the largest, most complete listing of job openings in the state and occasionally out-of-state. Most of the employers of the state contact the Employment Service when they have a vacancy. This is a rich source of leads for the rehabilitation counselor. The Employment Service is trying to upgrade its personnel considerably in order to provide more adequate services. Recently they have added a Special Placement Section to aid in finding jobs for handicapped workers. The Employment Service can be of

great help in the rehabilitation of tuberculous mental patients.

The County Health Departments are important because each patient returns to a community that is served by the public health nurses of each county office. Since the patient had tuberculosis, the chances are that he will not be allowed to work for a few months after discharge from the hospital. The home visits of the public health nurse along with subsequent examinations are excellent means of checking on the progress of the patient. The nurse can provide the patient and family with many tips about diet and general home care that will speed continued recovery. Under the direction of the County Health Officer a registry of tuberculosis cases is maintained as one means of controlling the disease. The public health nurse is one more person to whom the patient can talk freely about personal problems which may be of some concern. If further professional attention is desirable, the nurse can make the proper referrals. Thus the County Health Departments have an important place on the community rehabilitation team.

County Welfare Departments can provide subsistence to families whose chief wage-earner is hospitalized for an extended period without income. Also if there is a period after discharge when the ex-patient is not allowed to work

he can also be carried on subsistence until such a time as he is able to resume employment. There are other services that the caseworkers can perform. It is often possible to gather social information which might be especially helpful to the hospital rehabilitation workers. They could also be a reassuring force to both the patient and the family through their periodic visits; however better communication must be established. Too often the welfare workers put a cloak of confidentiality around their findings, not even sharing with other professional workers who may be in a position to utilize the information to good advantage in the rehabilitation of the patient. The best test of data collected is the use made of it. It should be remembered that total rehabilitation as soon as feasible should be the fundamental goal of all these efforts, not doling out subsistence payments. Subsistence is only one of many means to a common end, rehabilitation.

The United States Veterans Administration has perhaps the largest complete organization directed towards rehabilitation. It is limited in that it deals only with veterans of the armed forces; and by the regimentation, real or imagined, that carries over from this service relationship. Many veterans eligible for services and treatment prefer private or state facilities for varying reasons. Still the Veterans Administration does a great

deal to rehabilitate thousands of veterans annually. There is a great emphasis placed on whether or not the disability is service-connected, since there is a considerable variation in the extent of services that can be provided. The Veterans Administration has been a leader in the whole rehabilitation movement, in fact, its original purpose was the treatment and rehabilitation of disabled veterans of World War I. Through the facilities of its regional offices and its hospitals scattered throughout the country, it can render services to many veterans paralleling those mentioned throughout this paper. The Veterans Administration has learned that as large as it is, it cannot do the job of rehabilitation alone; it must make use of all the resources of the community. This was pointed out in an address by Dr. Donald A. Covalt of the Institute for Physical Medicine and Rehabilitation, Bellevue Medical Center, New York University. His address was part of the program of a Veterans Administration Workshop in Houston, Texas in 1954. (51) Dr. Covalt was associated with Dr. Howard Rusk in the formation of the first U. S. Army Air Force Rehabilitation Center at Miami, Florida, in 1945 which served as a model for many subsequent developments. He and Dr. Rusk are still recognized leaders in the field. The State Department of Veterans Affairs can also aid in the rehabilitation of disabled veterans

through their education and loan departments.

The National Association of Manufacturers, Lions Clubs, Kiwanis Clubs, and the Chamber of Commerce are typical of employers groups that are expanding facilities for hiring handicapped workers because they have found that these people do good work. This has applied chiefly to the more obvious physical defects such as amputations, polio, arthritis, and so forth. There has been a slightly different feeling toward the more insidious disabilities of tuberculosis and mental illness particularly. It will take a great deal of education and experience by employers and the general public before the stigma attached to these two particular illnesses disappears completely. The feeling against tuberculosis is not nearly as strong today as in past years, but in spite of a concentrated campaign by mental health organizations, there is still a great deal of ill-feeling and misunderstanding toward the mentally ill. Actually business and industry must accept more of the responsibility in the area of mental health, since one of the most common causes of various kinds of mental illness is the stress and strain of our modern competitive economic society. More and different employers and business men should be encouraged to participate on committees, in discussions, and in visitations to mental hospitals and clinics; so they can receive positive

information on the care and treatment of mental illness and the rehabilitation of mental patients.

Labor unions are sometimes quite progressive in their thinking about hiring handicapped workers. Many of their fellow employees have been injured in on-the-job accidents or otherwise, or have acquired some disabling illness. The hard facts of disability are quite familiar to them. Labor unions have worked very hard for all forms of social legislation, including vocational rehabilitation. There are doubtless many individual workers who do not have much understanding of the dynamics of mental health, the relationships of physical illness to mental distress, or the need for adequate psychological evaluation of disabled workers. Many of these individual workers are prejudiced against people with mental illness, but as better mass education on this subject evolves, much of this feeling should improve. Generally working people are rather sympathetic to rehabilitation. Actually many unions have special sick stewards who work for adequate placement of disabled members.

Veterans organizations represent an extremely vocal segment of our society. Much of their activity is in the promotion of Americanism, sports, beauty contests, and conventions; however, they have been quite instrumental in lobbying for legislation for disabled veterans. Just why

disabled veterans should have preference over other disabled individuals is not too clear, and it is not a purpose of this study to explore this topic. This has been a start of many of the splendid programs in the Armed Forces and Veterans Administration Hospitals which are often considered to be pace setters in rehabilitation. A result is that some of these processes, therapies, and activities gradually filter down to civilian hospitals.

The National Tuberculosis Association with its affiliated State and County Tuberculosis and Health Associations has been one of the true pioneers in the rehabilitation movement. Starting in 1904, the National Tuberculosis Association has sponsored many programs in research, education, rehabilitation, and employment which have had dramatic results in reducing the incidence and fatalities from tuberculosis. The efforts of the National Tuberculosis Association are financed chiefly through the annual Christmas Seal Drives. On the local level the County Tuberculosis and Health Associations are chiefly interested in educational matters related to the prevention, detection, and treatment of tuberculosis. They work very closely with County Health Departments in promoting x-ray examinations, and so forth. Many county organizations have expanded their activities to include mental health as well. They can play a vital role in the needed

mass education program for rehabilitation and possibly could even extend some more direct, volunteer services to patients and their families.

The Mental Health Associations, state, county, and national, play an increasingly important role similar to that of the Tuberculosis Associations. Though not as widespread in their organization, the Mental Health Associations have an even more important part to play since mental illness is the current number one health problem in the United States. In promoting mass education for mental health, however, it is necessary that the end result is not mass hysteria. It is perhaps more important to educate educators and others engaged in educational activities for sound mental health practices. Actually the chief efforts of the Mental Health Associations should probably be aimed at preventive mental hygiene rather than at rehabilitation; but the problem is so great that it requires help from all of the available sources. One of the most beneficial activities of the Mental Health Associations has been the employment of trained consultants to work with teachers, PTA's, church groups, and other interested parties. They also usually maintain a large supply of pamphlets, books, films, and other materials for the promotion of mental health.

Fraternal organizations can do a lot to promote

rehabilitation; the Shriner's hospitals for Crippled Children are but one example. Some of the organizations confine their good works to members and their families but many have no such requirements, helping anyone in need. One thing they could do which does not require so much outlay of money as it does time is in volunteer services: visiting the hospital, taking patients on outings, arranging entertainment, taking some of their leisure time to help others. Many groups are doing this sort of thing; many more groups could be.

Religious organizations and church groups can implement the program in much the same way as fraternal organizations. It is not necessary for them to visit in groups giving an evangelistic service, singing a few hymns, and saving a few lost souls. It would be just as desirable for them to engage the patients in friendly conversation, to read to some, to play cards or checkers with others, to teach some to knit or crochet, and there doubtless are many other possibilities. Some churches have "adopted" an entire ward, making drapes and other things to soften the hospital atmosphere. The whole volunteer program is something to be extended and expanded.

Rehabilitation centers offer a unique contribution. Here is a place outside of a hospital which gives its full attention to all the ancillary services which help to

effect rehabilitation. The important thing is that there is no sense of emergency, no smell of ether, no hurry to get the patient out as there frequently is in the hospital setting. The atmosphere is as relaxed as possible, taking as much time as necessary to effect each individual rehabilitation. At the present time there is only one such center in the state of Oregon, the Portland Rehabilitation Center. The objective is to continue the treatment of disabled individuals who do not require complete hospitalization. They are able to stay at home and go into the center for necessary therapy; in many ways this seems to hasten total rehabilitation over prolonged stay in the hospital. First, the patients are with their families; second, getting to and from the center often seems to help build a feeling of independence; and the contact with people having other different kinds of disabilities has in the case of many patients given them the feeling that they "don't have it so bad after all." At any rate rehabilitation centers are something that need to be utilized more and more.

Sheltered workshops such as run by the Goodwill Industries and the Salvation Army and others give handicapped workers a chance to learn new skills, establish self-confidence, and earn something for their efforts. Many of the activities may seem rather menial to some

people, but they do have great success in getting people back on their feet, psychologically at least. Many individuals continue to work for these organizations, but others go out into industry as full-time workers as productive as many non-handicapped employees. Most sheltered workshops have a doctor and nurse in attendance as well as other therapists occasionally. The workshop offers many opportunities for socialization, as well as the training in occupational skills. There could very likely be a more complete utilization of these services.

Perhaps no other single force or agency in the community can have as much effect on the ultimate rehabilitation of the patient than his family. If the family situation is basically healthy, the patient stands a good chance of attaining total rehabilitation. If the family situation is unhealthy, the best efforts of the hospital workers and the patient may collapse when the patient returns home unless certain precautions are taken. If the patient has no family, his chances for rehabilitation are decreased. One of the most important things the family can do for patient while he is in the hospital is to give him support through visits, letters, and gifts. If the family is unable to influence the patient constructively, they should perhaps be isolated from the patient until some positive changes can be effected in

the family situation. Depending on the circumstances, these changes might range from comparatively slight changes in attitude to the rather drastic change of moving the family from one place to another. It is sometimes actually easier to move the family, however, than to change their attitudes.

The security of the family is of major concern to the patient; to the husband and father who knows that his wife and children have sufficient funds to meet their needs; and to the wife and mother who knows that adequate care is being provided for her children. These or the reverse can be items of great concern to the patient. Another very important consideration is for the patient to know the family members still love and respect him regardless of the illness. One way this can be demonstrated is to let the patient go home on pass as soon as it is medically practicable. It would be advisable to observe the patient's reactions upon return to the hospital. The reaction of the patient to the family and the family to the patient are vital to the rehabilitation of the patient.

The foregoing have been brief summaries of the community resources that are available to aid in the rehabilitation of all handicapped persons. There are doubtless many more that should be incorporated; until all are being utilized to the fullest possible extent, total

rehabilitation for the maximum number of people cannot be effected.

M. The Team Approach To Rehabilitation

In this chapter have been presented the members of the rehabilitation team and some of the community resources that can expedite rehabilitation. The teamwork approach does not in any sense imply competition; instead, to be successful, rehabilitation demands cooperation of the highest order. In order to insure this cooperation, the lines of communication must be constantly open, and not just a one way line from a particularly vocal or authoritarian member of the team. There must be a free interchange of ideas around one central theme, "What is best for the patient?" Along with this freedom of communication should be a feeling of morale, of really belonging to a team that has a vital job to do. There should be no sort of wrangling nor juggling for professional status. One therapist should not feel that the next therapist is trying to take the patient away from him; he should realize that all therapies required for the maximum rehabilitation of each individual patient should be utilized. Actually it might be desirable for each therapist to prepare the way for the next by some constructive comments.

One of the most effective forms of communication among the members of the team other than in their normal daily routine is the staffing conference. This conference should be held at least once weekly with the principal members of the team present contributing their observations of the various patients in different stages of recovery. There should be present at each meeting the psychiatrist, the chest physician, the head nurse, the charge attendant, the social worker, the psychologist, the occupational therapist, and the rehabilitation counselor. Other therapists and personnel should be welcome to attend any time they have some significant observations to discuss with the eight regular members of the staff conference. Careful records should be kept of each session and from these pooled observations a carefully scheduled plan of treatment and activities for each patient should be worked out. It would be virtually impossible to discuss each patient at each weekly conference, but certainly each patient's case should be reviewed at least once a month. If any individual case is in a particularly crucial stage, it might warrant discussion in several continuous conferences until the emergency aspects are relieved. These case conferences should be a progressive thing; none of the individual patients should be regarded as static, rather as either improving or worsening, but constantly changing.

The emphasis should, of course, be toward constant improvement. Again the main purpose of these discussions should be the planning or altering of plans of action designed to best meet the rehabilitation needs of each individual patient.

In addition to the case conferences all members of the rehabilitation team should be able to confide in all other team members. For example, if an attendant observes something in a patient, he should be able to communicate this directly to the proper responsible person at an appropriate time without having to go through a whole chain of command. Certainly there should be lines of authority and carefully defined areas of responsibility, but the feelings of cooperation and freedom of communication should be so all-pervading that it extends from the bottom to the top of the team, as well as from the top to the bottom. More adequate training of all personnel would help to establish this relationship, since each member would have more understanding and self-confidence. This atmosphere is contagious and should have the desired result of drawing the patients too into feeling free to communicate with each other and with the staff. Patients too, have comments or observations of other patients and themselves worthy of notice; this has been one of the most important factors in group therapy. The patient's

feelings toward himself are perhaps the most significant of all since they are vital in the rehabilitation of the patient.

Finally working as a team, there should be a concerted effort to relate to and draw from the community the necessary support and action which will result in the restoration to society of effective, productive, participating individuals.

CHAPTER 4

THE PRESENT PROGRAM AND HOW IT DEVELOPED

A. The History of Tuberculosis Care at the Oregon State Hospital

In May of 1952 the Tuberculosis Treatment Unit of the Oregon State Hospital was opened under the competent direction of Dr. Rudolph Rosenfeld. Dr. Rosenfeld had his medical training at the University of Vienna and had served on the staff of several tuberculosis sanatoria in both Austria and Switzerland before coming to the United States. He practiced medicine for a time in Connecticut before coming to Oregon. Quite incidentally he had taken a few courses in psychiatry from Dr. Sigmund Freud; however, his chief interest was in tuberculosis. Dr. Rosenfeld remained in charge until his death from leukemia in 1956.

In September of 1956, Dr. Eleanor Gutmann assumed the position of Ward Physician. She had had long experience in Public Health Work and consequently had much to do in the prevention and treatment of tuberculosis. In addition to her duties as Ward Physician and Tuberculosis Control Officer she was also taking the two-year psychiatric residency program at the Oregon State Hospital. Both she and Dr. Rosenfeld have done an excellent job in

the treatment of tuberculosis.

In September of 1957 Dr. Gutmann was transferred to the Reception Ward as a part of her psychiatric residency program. A young physician, Dr. Tarrant, assumed her position on the Tuberculosis Treatment Unit while waiting for his induction into the armed forces. In February of 1958 the tuberculosis patient population had been reduced to only 28 and it was no longer economically feasible to continue the Tuberculosis Treatment Unit as a separate service. For some time the General Medical and Surgical Service had been housed in rather over-crowded and out-moded quarters. It was felt best to transfer the Medical and Surgical Service to the Tuberculosis Treatment Building and incorporate the treatment of the tuberculosis patients into the General Medical Service. This places the treatment of the tuberculous mental patients under Dr. Russell Guiss, who is incidentally the Assistant Superintendent of the hospital, in addition to his duties as chief of General Medicine and Surgery. Working with him are Dr. Arthur Lawler and Dr. James Baxter. The old Surgical Unit is now used entirely for the treatment of diabetic patients.

In addition to patients regularly assigned or admitted to the Oregon State Hospital, the Tuberculosis Treatment Unit also treated patients referred from other

institutions. Any patient from the Eastern Oregon State Hospital in Pendleton who might have contracted tuberculosis was transferred to Salem since there were no facilities for the treatment of tuberculosis in Pendleton. Any patients of the Oregon State Tuberculosis Hospital in Salem, the Eastern Oregon Tuberculosis Hospital in The Dalles, and the University State Tuberculosis Hospital in Portland who became mentally disturbed were also referred to the Oregon State Hospital since there were no facilities for the treatment of mental disorders in those institutions. The Veterans Administration Hospitals made some referrals as did the Fairview Home. The Oregon State Penitentiary also referred convicts, but this practice has been discontinued with the improvement of the prison infirmary.

Dr. Rosenfeld was chiefly responsible for the institution of the very modern tuberculosis case-finding procedures and the resulting reduction in the incidence of active tuberculosis among patients of the Oregon State Hospital from three and one-half per cent in 1952 to one-half of one per cent in 1956. All new admissions to the hospital receive a 4" x 5" chest x-ray and subsequent medical laboratory examination. Any suspected cases of tuberculosis are transferred to the Tuberculosis for confirmation and treatment. All patients of long standing in the hospital population are x-rayed once each

year in order to discover any new cases of tuberculosis among them. Patients on the Tuberculosis Treatment Unit have full-size 14" x 17" x-rays taken as prescribed by the physician. Medical laboratory procedures, blood tests, urinalysis, and gastric or bronchial lavages, are performed according to a similar schedule.

The treatment regimen consists largely of streptomycin injected intramuscularly along with either isonicotinic acid hydrazide, known as INH, or para-amino salicylic acid, known as PAS, usually in tablet form. Some patients may have only one of these medications being administered; however, according to Dr. Carl Muschenheim the intermittent combined therapy is best treatment generally available. (27) There has been collapse therapy using both pneumothorax and pneumoperitoneum, however, thoracoplasty is almost never done any more. Chest surgeons do come in as needed from the State Tuberculosis Hospital to perform needed resections and so forth. Indiscriminate surgery is definitely not a practice, only when there is a fairly large cavity which does not respond to chemotherapy and bed rest is an operation performed. Bed rest is still a fundamental part of the treatment program although the length of time a patient must remain in bed is being reduced through the success of chemotherapy and improved surgical procedures. Generally

as will be shown, the treatment for tuberculosis has been very good.

The physical plant for the Tuberculosis Treatment Unit is quite adequate. A modern two-story, brick and concrete masonry building with bed space for 150 patients provides an excellent facility. There are two wings on each story providing for the separation of positive and negative cases. The women patients have been housed on the second floor and the men patients on the ground floor. There is a kitchen and dining room on each floor but most of the food is prepared in the central kitchen and transported to the ward in portable steam carts. The food has been adequate but rather unappetizingly prepared in the past. Recently there has been an attempt to improve the diet realizing that good food is very essential to good treatment of tuberculosis patients.

On the ground floor is an entrance lobby, doctor's office, medical laboratory, and x-ray and darkroom facilities. On the second floor is a very adequate surgery and examination rooms. These are all in a central wing along with the two dining rooms on each floor. There is an elevator off the entrance lobby and five different stairways. In the basement is an incinerator for burning sputum cups, waste paper, and other contaminated material. Heat is steam supplied from the central heating plant.

Each of the four nursing units, two on each floor, have bed space for about 35 to 40 patients. Most of the beds are in four bed wards, although there are some two-bed rooms and single rooms. Most of the single rooms are in a side wing which can be used for disturbed patients if necessary. There are separate rest room and shower facilities for this wing, as well as a small day room. Each nursing unit has its own day room with windows on three sides, and a nurse's station in each. There are visiting rooms, a locker room, rest room, shower room, barber or beauty shop, janitor's rooms, hydrotherapy room and linen storage. There is television in each day room. Patients may have their own radio in their rooms, but there is no provision for headphones, and so forth, as in some tuberculosis sanatoria. Each patient has a night stand and an adjustable bedside table if needed. There are two enclosed yards at the rear of the building in which patients may walk during good weather. Generally the physical facilities would have to be considered very adequate.

After the consolidation of the Medical and Surgical Service with the Tuberculosis Treatment Unit a number of changes took place. Both the x-ray and medical laboratories were expanded to take care of the increased patient load. All tuberculosis patients were moved to the

ground floor with men patients in one wing and women patients in the other. All patients with active tuberculosis are isolated in the former segregation wing for disturbed patients. The negative tuberculosis patients are mixed in with the rest of the general medical patients. This may not be the best arrangement, but it seems to be working out satisfactorily at present. The upper floor is entirely for surgical patients, with men patients on one wing again and women patients on the other. On both floors the ambulatory and wheelchair patients from both wings eat their meals together in the common dining rooms. This provides for considerable socialization between the men and women patients, with resulting improvement in personal appearance and neatness.

There are now somewhat more personnel than before; three physicians instead of just one; six nurses on the morning shift where previously there had been only four; four nurses on the evening shift where there had been only two; and two nurses on the night shift when previously there were often none. The ratio of attendants to patients remains about the same. It is hoped that the increase in medical staff will continue to result in more adequate care for the tuberculous as the improved facilities will no doubt contribute to better treatment of the general medical and surgical patients.

The following figures will give some indication of the effectiveness of the tuberculosis treatment program. Note the definite decline in number of patients with a positive culture although the total number of patients remained about the same in Table 1. Starting in July 1955 the total number of patients begins to decrease as well, as the direct result of effective case-finding and treatment procedures. These figures were compiled by Mrs. Merritt, the Medical Technologist in charge of the Tuberculosis Laboratory.

Table 1

Patient's Movement in the Tuberculosis Unit
from May 1, 1952 to July 1, 1955

	<u>Total Number</u>	<u>Number of Total with positive culture</u>	<u>Per Cent</u>
Patients in May 1952	130	58	44%
Patients admitted from May 1952 to July 1955	281	90	32%
Transferred as inactive TB to other OSH wards May 1952 to July 1955	187	0	0%
Paroled or discharged as inactive TB May 1952 to July 1955	46	0	0%
Deceased	23	7	30%
Patients on July 1, 1955	131	20	15½%

Another indication of the effective work being done by the Tuberculosis Treatment Unit is in the numbers of x-ray examinations made each year. The chest x-ray is perhaps the most important case-finding and diagnostic tool available. Each x-ray must be studied and evaluated by a competent chest physician, and when he thinks necessary followed by a thorough personal examination of the chest with a stethoscope. Adequate laboratory tests should also be made where indicated. The small 4" x 5" survey machine is located in the basement of the receiving ward and the large machine in the Tuberculosis Unit. Following in Table 2 are the numbers of x-ray films taken for the year 1955 which is typical for the period covered by this study. The figures are from the records of Mrs. Guy, the x-ray technician of the Tuberculosis Treatment Unit.

Table 2

Numbers of x-ray Films taken
for the year 1955

	<u>Full-size</u> <u>14" x 17"</u>	<u>Survey</u> <u>4" x 5"</u>
January	105	219
February	99	160
March	134	339
April	97	221
May	91	237
June	100	325
July	83	216
August	75	173
September	107	328
October	98	212
November	40	238
December	99	296

From these figures March was the busiest month with 339 small films and 134 large films taken. November had the least number of full-size films with only 40; and February the least survey films with 160. Altogether there were a total of 1,128 full-size 14" x 17" films and 2,964 of the small 4" x 5" survey films taken in 1955. They would average 94 full-size and 247 small films per month. Each film must receive careful scrutiny, because

only through continued observation of newly admitted patients and repeated examinations of chronic patients, with resultant isolation and treatment of all known and suspected cases of tuberculosis, can the tuberculosis rate continue to be reduced.

In 1955 there were 2,890 admissions to the Oregon State Hospital patient population, 1,150 being readmissions of previous patients, yet the hospital seems to grow at the relatively constant rate of 100 patients per year. The average patient population for 1955 was approximately 3,500. It is difficult to arrive at an exact figure because of the daily turnover in admissions and discharges of some ten to twenty patients. Of this large number of 3,500 patients, 2,387 were released by discharge or parole, and there were 413 deaths. The latter figure is accounted for largely by the ever-increasing senile population. There were in 1955 around 1,200 patients over sixty years of age. Of first admissions 22 per cent are schizophrenics, 21 per cent are seniles, 20 per cent alcoholics, 7 per cent other psychoses, and 20 per cent miscellaneous, such as personality disorders, sometimes called psychopathic personalities, and mental deficiency. (34)

On the Tuberculosis Treatment Unit the distribution of mental illness parallels fairly closely that of the general patient population. The following are incomplete

figures for the period from May 1952 to July 1955; if complete figures had been available, it is conceivable that the relationship would have been closer. These figures were obtained from the files of the Tuberculosis Treatment Unit by permission of Dr. Rosenfeld and Dr. Dean Brooks, Superintendent of the Oregon State Hospital. In Table 1 it was shown that the Unit opened with 130 patients and that 281 patients were admitted during this period for a total of 411 patients. There were 187 patients transferred to other wards, 46 paroled or discharged, and 23 deaths to leave 131 patients still on the ward on July 1, 1955. Many of the records were transferred along with the patients and it was virtually impossible to trace them; however, there were available the mental diagnoses of 116 male patients and 75 female patients for a total of 191. Note that this is somewhat less than half the total number of patients treated by the Tuberculosis Treatment Unit during this time.

Table 3

**Mental Diagnoses
of 116 Male Patients**

Schizophrenia, paranoid	21
Schizophrenia, paranoid, with mental deficiency	1
Schizophrenia, simple	12
Schizophrenia, hebephrenic	11
Schizophrenia, catatonic	7
Schizophrenia, mixed	<u>1</u>
Total Schizophrenia	53
Manic-Depressive, depressive	5
Paranoia	6
Psychopathic Personality	5
Alcoholic Psychosis	10
Alcoholic Psychosis, Korsakoff's Syndrome	3
Alcoholic Psychoneurosis	<u>2</u>
Total Alcoholics	15
Narcotics Addiction	1
General Paresis	4
Senile	6
Pre-senile	1
Mental Deficiency, without psychosis	10
Mental Deficiency, with psychosis	1
Epilepsy, without psychosis	1
Epilepsy, with psychosis	1
Encephalitis	1
Chronic Brain Syndrome, arteriosclerosis	3
Acute Brain Syndrome, intracranial neoplasm	1
Adult Situational Reaction	1
Unclassified	<u>1</u>
Total	116

Table 4
Mental Diagnoses
of 75 Female Patients

Schizophrenia, paranoid	15
Schizophrenia, simple	8
Schizophrenia, hebephrenic	3
Schizophrenia, catatonic	5
Schizophrenia, mixed	2
Schizophrenia, unclassified	<u>1</u>
Total Schizophrenia	34
Manic-Depressive, manic	9
Manic-Depressive, depressive	2
Paranoia	2
Alcoholic Psychosis	2
General Paresis	1
Senile	4
Mental Deficiency, without psychosis	1
Mental Deficiency, with psychosis	6
Epilepsy, with psychosis	2
Chronic Brain Syndrome, arteriosclerosis	5
Involutional Melancholia	5
Unclassified	<u>2</u>
Total	75

These partial figures differ somewhat from the general patient population but possibly some conjectures could be drawn from them. First of all the figures are incomplete, since many of the records were transferred. Then too the groups were relatively small, which interferes

with any attempt at statistical analysis. The figures for male patients with schizophrenia show 45.7 per cent and the females 45.3 per cent compared to only 22 per cent for the new admissions to the hospital. One inference that might be made is that schizophrenic patients are somewhat more refractory toward the treatment of tuberculosis and require a longer stay on the Tuberculosis Unit. This may or may not be the case. Alcoholism accounts for only 12.9 per cent of the male patients and 2.6 per cent of the female patients compared to 20 per cent for the new admissions to the hospital generally. Even though there is a high incidence of tuberculosis among alcoholics, regular hours, no alcohol, adequate diet, and medication for the tuberculosis seem to clear them up so they can be discharged or transferred to other wards after a relatively short stay in the Tuberculosis Treatment Unit.

The comparatively small percentage of senile patients, only 6 per cent for the male patients and 5.3 per cent for the females, could be accounted for by the higher death rate from tuberculosis and other complications in the older patients. The trend nationally, however, is for tuberculosis patients to be progressively more in the older age groups. (32) The high rate of mental deficiency can be readily accounted for since the Fairview Home for mentally deficient individuals has no facilities for the

treatment of tuberculosis, so that any resident contracting tuberculosis is referred to the Oregon State Hospital for treatment. One interesting observation though of questionable significance is that though mentally deficient males without psychosis outnumbered those with psychosis by ten to one; among the women patients with mental deficiency the reverse is true, those with psychosis outnumbering those without by six to one. Again the numbers are too small to make any general assumptions. Another observation is that there are five manic-depressive, depressive men patients and no manic patients; whereas there are nine manic women patients and only two depressive patients. The conclusions which might be drawn would have been more interesting and perhaps somewhat more valid if the records had been available for all 411 patients. The distribution could be said to roughly parallel that of the rest of the hospital.

Prior to 1952 there were some attempts to segregate and isolate tuberculosis patients from the rest of the hospital population, but they were not too successful. The ward in which isolation was attempted had no facilities for aseptic techniques, no major or minor surgery, no x-ray, no laboratory, and many other necessities for the treatment of tuberculosis. Proper case-finding procedures were not in effect. Most of the patients with known

tuberculosis were isolated, but many with suspected or arrested tuberculosis were scattered throughout the hospital. Reference to Tables 1 and 2 should indicate the significance of adequate case finding, isolation and treatment. There was a decrease in the patients having a positive culture from 44 per cent down to only 15½ per cent in the first three years operation of the Tuberculosis Treatment Unit. There was a further significant decrease in the next three years.

B. Activity Analysis of the Present Program

Generally the medical and nursing care for the tuberculous mental patient at the present time seems to be quite adequate, even though the nursing staff could be increased. Shock treatment is given as needed, however, there is no subsequent psychiatric treatment. There is no occupational therapy, although there have been some sporadic efforts in this area in past years. There is very little done in social service since the entire hospital program is very limited in this area. There is little planned recreation, however, socialization among men and women patients has improved tremendously since they have been eating their meals together in the common dining rooms on each floor. The diet has improved materially since the new central kitchen was built and the professional

dietician hired.

At present there are very few direct referrals to the State Division of Vocational Rehabilitation. It is hoped that as a result of the current research project on rehabilitation that more of these services will be extended to the tuberculous mental patients.

The chief limitation is a financial one. The shortage of personnel is a direct reflection of the attitudes of the Oregon State Legislature which must appropriate the necessary funds for the operation of the hospital. The legislature must also appropriate funds for the expansion of state college and university training programs for needed personnel, particularly in social work and psychology. The teaching nature of much of the work of the hospital itself needs to be re-emphasized. The psychiatric residency program, the nurses' training program, the training of aides and volunteers, and the psychology internship, if any, all require instructional time. The only way this time can be provided is for the legislature to appropriate sufficient funds to have enough professional staff to do the teaching as well as carry on the therapeutic program. It is also necessary to develop coordinate programs in the colleges and universities; therefore the legislators and the college administrators must be encouraged to participate in the

total rehabilitation program. There is enough implied here for a whole series of studies much more involved than this one.

C. Personnel Requirements for Further Expansion

In 1954 the Oregon State Hospital was inspected by the Central Inspection Board of the American Psychiatric Association and was conditionally approved because of deficiencies in number of personnel, organization, and food management. The last two deficiencies have been corrected to a large extent through the appointment of a Clinical Director and a Director for Research and Education; and the fact that the Food Management has been completely reorganized with the completion of an entirely new central kitchen and the appointment of a professional dietitian. In order to bring the number of personnel up to standard, legislative action will be required. However, it must be said that of 132 mental hospitals inspected in the United States through 1955, only nine were fully approved and the Oregon State Hospital was amongst the 32 conditionally approved. (39)

The Superintendent is the chief professional and administrative officer of the hospital. He should be free from partisan political interference and should have authority commensurate with his responsibilities. He

should be responsible only to the appointing authority. In the State of Oregon this authority is the Board of Control, composed of the Governor, the Secretary of State, and the State Treasurer. The Board of Control has full authority over all state institutions as its primary function with other duties prescribed by the legislature. The legislature appropriates all funds for the operation of the Hospital.

The qualifications for Hospital Superintendent are: he should be a graduate of a medical school approved by the American Medical Association; he should be a Diplomate of the American Board of Psychiatry and Neurology; or similarly qualified; he should have not less than five years experience in a mental hospital, of which not less than three years should be in a responsible position involving administrative duties; and he should be licensed to practice medicine in the state. The Assistant Superintendent is Dr. Russell Guiss, who is a surgeon instead of being a psychiatrist as recommended.

The Clinical Director provides the guidance necessary to maintain integration and coordination in the treatment program. He should encourage and assist the physicians and auxiliary professional personnel to maintain high standards of patient treatment and care to improve and advance their skills and their training.

His qualifications are essentially the same as for the Superintendent, except that his experience, a minimum of five years, should be primarily in the diagnosis and treatment of mental illness and the teaching of psychiatry. In a hospital of less than 500 patients, the duties of Clinical Director and Assistant Superintendent could be combined. In hospitals of more than 2,500 patients there should be at least two Clinical Directors. (1)

Each hospital should make provision for a continuing program in education, training, and research. Hospitals with such a program provide better and more effective treatment for their patients. Such a program is generally more effective when coordinated by a qualified person who serves as a Director of Education and Research, but the ultimate responsibility rests with the several department or service chiefs. It is strongly recommended that each hospital make specific budget provisions for this program. Research activities should be carried out on a clinical as well as laboratory level. (1)

At the present time at the Oregon State Hospital, all three of these positions are filled by very capable and personable young physicians: Dr. Dean Brooks, Superintendent, Dr. Herbert Nelson, Clinical Director, and Dr. Howard Sexsmith, Director of Education and Research. The Oregon State Hospital is the only facility in the

state where student nurses can obtain psychiatric training. At the present time the hospital trains approximately sixty girls each quarter. They work on the wards about half time and spend the other half day in class. There are a few clinical psychology internes working towards a doctoral program at the University of Oregon. The hospital has been approved by the American Psychiatric Association for a two-year residency program for physicians who wish to qualify for Board certification in Psychiatry and Neurology. It is still necessary to qualify by completing a third year of residency elsewhere.

The University of Oregon Medical School Department of Psychiatry is expanding considerably under the direction of Dr. George Saslow. This may have some direct implications for the future of the hospital. More and more it may come to be regarded as a training institution as well as a treatment center. Actually this sort of thing has generally resulted in an improvement of treatment because more people get drawn in to the treatment process. Gradually this improvement in therapy with resulting improvement in ancillary services will be reflected in the Tuberculosis Treatment Unit.

In 1956 the following personnel figures were drawn up. The recommended figures are those determined by the Central Inspection Board of the American Psychiatric

Association in 1954 when the population of the Oregon State Hospital was 3,300 patients. Now in 1958 the population has expanded to 3,540 patients. Consequently the staff should be further expanded to better meet the needs of the patients. The only thing now holding the hospital back from full approval is deficiency in certain personnel.

Table 5
Personnel of
Oregon State Hospital 1956

	<u>Positions Available</u>	<u>Positions Filled</u>	<u>Recommended</u>
Physicians	20	17	39
Nurses (Students ½ time)	78(47 RN's)	71(40 RN's)	218
Aides (Men and Women)	594	557	656
Occupational Therapy	6	6	23
Recreational Therapy	3	3	23
Dental Department	4	4	9
Social Service Dept.	4	4	54
Psychology Department	3	3	7
Pharmacy	2	2	2

Table 6
Personnel of
Oregon State Hospital 1958

	<u>Positions Available</u>	<u>Positions Filled</u>	<u>Recommended</u>
Physicians	26	26	42
Nurses (Students ½ time)	90 (60 RN's)	83 (53 RN's)	225
Aides	608	598	670
Occupational Therapy	10	8	25
Recreational Therapy	6	5	25
Dental Department	4	4	10
Social Service Dept.	11	10	40
Psychology Dept.	5	2	10
Pharmacy	2	2	2

These figures do not show some fifty clerical workers of all kinds, stenographers, secretaries, typists, file clerks, bookkeepers, and administrative workers. There are some significant gains in personnel from 1956 to 1958. The increase in physicians from seventeen to twenty-six; Registered Nurses from forty to fifty-three; Occupational Therapists from six to eight; Social Service from four to ten; and Aides from 557 to 598. Psychology is the only department to show a decrease in personnel from three to two, although the total of authorized

positions in psychology have been raised to five. The chief reason for this situation is the extremely low pay scale in the state of Oregon for qualified psychologists. Seven of the physicians are now taking the two-year psychiatric residency program. In a training hospital, residents should not be counted as staff physicians since they are undergoing training. Actually there should be additional professional staff to direct and supervise this training. During the three summer months, there are five students from the University of Oregon Medical School serving as externes on the Admissions and Treatment Wards assisting the physicians as needed.

The more than doubling of the number of social workers from four to ten, has resulted in a much more adequate case work program, however, this is still the area of most critical shortage in staff. There is only one actual psychiatric social worker of the ten. The American Psychiatric Association recommends that there should be one qualified psychiatric social worker for each 80-100 admissions per year which would make a very minimum of thirty workers. With adequate supervisors the total number would be close to forty. The recommended figure of fifty-four which was made in 1954 has been revised to a somewhat more realistic figure because of the national shortage of trained personnel. Most

hospitals have to use less than completely qualified psychiatric social workers.

In Physicians the present number of twenty-six compared to seventeen in 1956 is still short of the recommended number of forty-two. There are only two Board certified psychiatrists and one Board certified surgeon on the staff. Several of the staff physicians are eligible to take the qualifying examinations and they should be encouraged to do so. This would result in a great improvement in status, and it could conceivably increase the number of allowable residents. In time with continued improvements in staff and facilities the hospital might be approved for a full three-year residency program. All of which should result in better treatment for the patients. One weakness of the present program is that there is only a two-year psychiatric residency.

Dr. Ralph M. Chambers, Chief Inspector, Central Inspection Board, American Psychiatric Association, Washington, D.C., recently completed an inspection of the Oregon State Hospital on June 2, 3, and 4, 1958. His findings will be published later this year. With the many improvements in physical plant and additions to the staff since 1954, it is anticipated that his comments will be generally favorable.

The ever-growing population of the state of Oregon

will doubtless continue to mean more patients for the Oregon State Hospital. If standards of care and treatment are to continue to improve, there will have to be further increases in personnel, particularly among the professional staff. There should be more physicians, primarily psychiatrists; more nurses; more occupational and educational therapists; more psychiatric social workers; and more psychologists. Even though not primarily assigned to the hospital staff, the Division of Vocational Rehabilitation will necessarily have to provide more counselors to help bridge the gap between hospitalization and rehabilitation.

The American Psychiatric Association recommends that there should be one physician to every fifty patients on both the Medical and Surgical Service and the Tuberculosis Treatment Unit. (1) Since these two have been combined this ratio has been in effect. It is hoped that it will be possible to continue this relatively high level of doctors to patients. Nurses and attendants should both be at a ratio of one to every five patients. At the present time neither nurses nor attendants approach this figure. The ratio of nurses runs about one to every ten patients; attendants about one to eight. In any event the ratio of registered nurses should be increased on a ward such as this with so much medical and post-surgical treatment to be carried out.

Generally Occupational Therapy is not carried on in the Medical and Surgical Service, however, some provision should be made for the tuberculosis patients who may be on the ward for months even with the best of treatment. Psychiatric treatment is not completely abandoned; but the guiding philosophy of the Medical and Surgical Service has been to cure the medical or surgical fool and return the patient as soon as possible to other wards of the hospital for treatment of his mental disorder. This is difficult in the case of the tuberculosis patient, especially the bedfast, positive patient. Something constructive should be provided to help occupy the time and talents of such patients to help stimulate them to want to get well, even if only on a twice-a-week basis. This is done in tuberculosis sanatoria; it should be done in a psychiatric hospital with tuberculosis patients. One of the most difficult things for a patient to do is just lie in bed for months with nothing to do but get well. The feeling of the patient is often, "What do I have to live for?" or "Why not just fold up and die?" Psychiatric treatment of different kinds, occupational and educational therapy can do much to help overcome these feelings with resulting improvement in the physical of the patients. Vocational Rehabilitation counseling can help with sound planning for the future.

For the past two years and for the next one year, there has been a special research project conducted jointly by the Oregon State Hospital and the State Division of Vocational Rehabilitation. This project has been confined to patients from Lane County, however, it is hoped in time such efforts will be extended to all patients. In this project the full team approach to rehabilitation has been utilized with both hospital and county workers participating in weekly conferences. The results although not final are already having definite, positive results on the total therapeutic program of the hospital, according to Dr. Herbert Nelson, the Clinical Director, and Dr. Howard Sexsmith, the Director of Training and Research.

As for specific personnel requirements for further expansion of the rehabilitation program on the Tuberculosis Unit of the Medical and Surgical Service, they will be discussed here although they have been implied throughout this study. The three physicians, one surgeon and two internists, now assigned should be sufficient to care for the physical complications, with a chest surgeon available on call as needed. However, it would seem necessary to have at least one psychiatrist assigned to the ward to deal with the mental disorders. The nursing staff should be approximately doubled, although student nurses are being used now, whereas they were not

allowed to work in the former Tuberculosis Treatment Unit. This could help to alleviate the nursing personnel shortage somewhat, however, the object of having the student nurses at the Oregon State Hospital is for them to observe as part of their training correct psychiatric procedures in the treatment of mental patients. At the present time this is not a function of the Medical and Surgical Service. This practice, however, might help to alleviate the nursing personnel shortage. Attendants are perhaps quite sufficient in number, although there should be a consistent to upgrade these people with training programs.

In the ancillary services there should be one full-time Registered Occupational Therapist on such a ward which might have up to 160 bed patients. There should also be one or two specially trained attendants to assist in occupational therapy. If a full-time therapist is not available, then one should be on the ward at least twice a week for a half day, letting the attendants carry on the rest of the program. There should be available as needed by individual patients an educational therapist; this person need not be a regular ward staff member, but rather be on call from an educational center of the hospital. At the present time there are no educational therapists on the hospital staff. For each 200 to 300 patients, there should be a regular Division of

Vocational Rehabilitation counselor assigned to help the patients to consider their proper vocational objectives and to develop vocational plans. Many patients may have to change their occupations; some of the younger patients may have never have worked before; some may need education or training. These things can be started while the patient is in the hospital and continued after he has returned to his local community.

It might be wise to have one psychiatric social worker assigned directly to the Medical and Surgical Service. Many of the patients may have a rather prolonged stay on the ward, and because of importance of the case worker in the family care program and the necessity for adequate background information in the treatment of tuberculosis and many of the other medical and surgical disorders, it might work out better to have a regularly assigned person to handle this information. It might also be economically more feasible to utilize a clinical psychologist to conduct the psychotherapy on such a service instead of a psychiatrist when there is already such a high ratio of physicians. Naturally the ward physician would supervise and direct such therapy and psychiatrists could be on call from other services as needed. This has been the procedure in many Neuropsychiatric-Tuberculosis

facilities in Veterans Administration Hospitals. (51)

With these changes and additions to the staff it is hoped that a more effective program of rehabilitation could be instituted for the tuberculous mental patients as well as other patients on the Medical and Surgical Service. There is no valid reason why treatment for the mental disorder should be discontinued until the treatment phase of the physical complications is completed. The aim should be rehabilitation and discharge, not merely treatment and transfer to other wards of the hospital. Through a co-operative, integrated, multi-disciplined team approach this total rehabilitation of most patients could be attained.

D. Summary

Although there was some treatment of tuberculosis at the Oregon State Hospital prior to its completion, the most effective work was done after the opening of the Tuberculosis Treatment Unit in May 1952. The unit was first under the direction of Dr. Rudolph Rosenfeld, who instituted the case-finding procedures, diagnosis, and treatment of tuberculosis that is still largely in effect. Following his death in August 1956, Dr. Eleanor Gutman assumed the position of ward physician. Through the diligent use of the new chemotherapy, intermittent

streptomycin with either PAS or INH, the number of patients with active tuberculosis began a steady and relatively rapid decline. Also chronic negative patients who might have relapsed before the advent of the new drugs were cured of their tuberculosis instead of being merely arrested. This allowed for their discharge or transfer to other wards, reducing still further the tuberculosis patient population.

From a relatively steady load of 120-130 patients on the ward; and with a total of 411 patients moving through the ward during the first three years of its operation; the tuberculosis load continued to decline until only 28 patients of both sexes remained in February of 1958. In this month the Tuberculosis Treatment Unit ceased to function as a separate service; it was consolidated with and put under the direction of the General Medical and Surgical Service. This service under the direction of Dr. Russell Guiss moved from its old, inadequate quarters to the modern, former Tuberculosis Building. This was perhaps the most economic use to which these facilities could be put, having virtually treated themselves out of existence.

There is still a shortage of many professional personnel, particularly in psychiatry and the major ancillary services, psychiatric social work, clinical psychology,

and occupational therapy. In order to remedy these shortages, adequate training programs should be instituted at the hospital and in the various colleges and universities of the state. The legislature should take action to appropriate the necessary funds for these programs. It is hoped that the results of the current three-year research program in rehabilitation teamwork will be able to convince the legislators and others of the feasibility of such a broad, long-range program of total rehabilitation.

CHAPTER 5

A SUGGESTED REHABILITATION PROGRAM
FOR TUBERCULOUS MENTAL PATIENTSA. The Recommended Program

An adequate rehabilitation program for tuberculous mental patients must be based first on adequate case-finding, isolation, and treatment. All new admissions to the hospital should have a small survey type 4" x 5" chest x-ray. So should all chronic patients of long standing on a once yearly basis. If upon examination by the physician any of these small films appear cloudy or lesions are evident, a full-size 14" x 17" chest x-ray should be taken. This should be followed-up by a thorough examination of the chest by a physician with a stethoscope and appropriate medical laboratory tests.

Any patient with active pulmonary tuberculosis should be isolated immediately on the Medical and Surgical Service in the rooms provided for that purpose. If surgery should be required, the facilities are available. Any patient with suspected tuberculosis should also be isolated until subsequent tests prove the patient to be negative. Treatment of intermittent streptomycin and PAS or INH should be instituted as soon as the diagnosis is made. Such treatment has eliminated

much surgery except when large cavitation is present.

Since many of the patients may be isolated on the Medical and Surgical Service for the treatment of their tuberculosis shortly after admission to the hospital, their psychiatric treatment should be continued space with the treatment of their tuberculosis condition. The nurses and attendants need to be especially skilled because of the dual nature of each patient's disability. It is necessary to care for the whole patient and not just his lungs, heart, liver, stomach, or whatever else is ailing. As the tuberculosis condition improves, patients could take on more extensive activities. As they reach negative status they could be moved from the isolation ward to the regular medical ward. This would allow them to mix with other patients and attain a degree of socialization, while still undergoing treatment. At this time group psychotherapy might be used to some advantage. It is even possible group therapy could be used in the isolation ward since all the patients would have one thing in common, their tuberculosis. Naturally every precaution, masks, gowns, and so forth, should be used to protect the therapists. This sort of therapy could be handled by a psychiatrist or possibly a clinical psychologist, having the proper training and experience. Some means of dealing with the mental and emotional illness should be provided

as well as for the physical illness. There are enough implications of the psychosomatic relationships in tuberculosis to warrant an attempt to get at the mental motivations of the patients and get them out in the open for examination.

The psychiatric social worker has a vital place in the rehabilitation of the tuberculosis mental patients. The emotional stress of having tuberculosis and many other physical disorders is often a precipitating factor in the mental condition, as mental disorders often cause physical symptoms to develop. The relationship of the patient to the family members is important; whether the patient is over-concerned with their protection and has hence withdrawn from them, or whether he somehow blames them for his pathological condition, which is sometimes the case. The reaction of the family members to the patient and his illness is another aspect to be considered. This is the area in which the psychiatric social worker can work most effectively. As well as gathering background information about the patients, he is often able to work out some therapy with the family members if needed. A healthy, stable home situation is conducive to satisfactory rehabilitation. It is felt that at least one and perhaps two psychiatric social workers should be assigned to work with the patients of the Medical and Surgical Service.

On a service of this size with possibly 150 to 160 patients, there could very well be one full-time Registered Occupational Therapist. Not only the tuberculosis patients but many of the other medical and surgical patients could benefit from occupational therapy on the prescription of the physician. Whereas formerly occupational therapy may have been used largely to help the patient pass the time; today its chief function is purposeful activity, developing skills, measuring certain abilities and responses, and providing the patients with another means of expression. Anything such as this would aid rehabilitation, particularly with those patients who require a relatively long stay on the ward. The trained Occupational Therapist is often able to observe the patients in such a way as to make very significant recommendations to the other rehabilitation team members.

Educational therapy is another of the ancillary services which could very well be considered as a part of a total rehabilitation program. To be sure not all the patients might be able to profit from such efforts. The sub-normal individuals would require a very specialized program. The over-age or senile patients might be considered not able to profit much from an educational program. Those patients undergoing shock treatment would suffer periods of lack of retention or attention. Patients

with organic brain damage, particularly of a progressive type, would not be likely to benefit much either. Most all other patients could probably gain quite a bit from such a program. Possibly credit could be given through such an agency as the General Extension Division of the Oregon State System of Higher Education. No definite recommendations have been made as to the number of educational therapists that should be assigned; however, one therapist to every 200 or 300 patients would definitely not be overloading.

All rehabilitation to be truly effective should have a vocational objective. If the patient returns to the same occupation, he should feel that he can do it as well or even better than before his hospitalization. Actually many patients can do a better job after having had a mental illness. If a new type of occupation is considered some training may be required. Very often this can be started while the patient is still in the hospital. The specialist in this area is the Division of Vocational Rehabilitation counselor. He keeps in touch with current job trends, opportunities, training, community relations, and many other factors relating to successful vocational placement. There should be one vocational counselor for every 200 to 300 patients in the hospital.

All of these workers should meet together at least

once a week to discuss the problems of the patients and report any significant observations, generally pooling their knowledge. They should work too with family and the agencies both public and private of the community to which the patient will return after discharge. Every effort should be expended to reach the maximum level of restoration of each patient to be an active, productive member of society.

After a patient is discharged from the hospital there should be sufficient follow-up services to see that the patient makes a satisfactory adjustment and does not suffer a relapse of either condition. The psychiatric social worker is the hospital staff member best qualified to handle such activities. The vocational counselor assigned to the hospital could maintain an active interest in the patient as he progressed through his vocational plan, and also keep in close contact with the counselor in the patient's local area. Of course, not all patients would undertake or require vocational rehabilitation as such. In which case the contact would have to be maintained through other agencies such as county health offices or county welfare.

Every ex-patient should feel free to return to the hospital at any time for help or counsel, or perhaps just a little support. With many patients, particularly those

having had tuberculosis, there is often a period of several months following discharge from the hospital when he is not allowed to resume his full, normal activities. This is a very critical period in his rehabilitation. The ex-patient needs every bit of support in order to restore his self-confidence. Perhaps various community agencies could aid in this supporting role as indicated in Chapter Three. Care has to be taken that the ex-patient is not smothered with help; he must be free to make his own decisions, but he should feel free to discuss them if he feels it necessary. He should not feel that all these people are prying into his private life. This is why the need is so great for professionally trained personnel who have acquired an almost intuitive sense of how to approach these problems and when to leave them alone.

CHAPTER 6

GENERAL SUMMARY,
CONCLUSIONS, AND RECOMMENDATIONSA. General Summary

Rehabilitation today is becoming to be regarded as an almost fundamental right. If a citizen becomes disabled for any cause, the government has an obligation, through the combined efforts of national, state, and local public and private agencies, to "restore the individual to the fullest physical, mental, social, vocational, and economic usefulness of which he is capable." The Oregon State Division of Vocational Rehabilitation of the State Department of Education, in conjunction with the U. S. Department of Health, Education, and Welfare, is the legally constituted authority for providing rehabilitation services. Other agencies must also participate if rehabilitation is to be complete. Rehabilitation should not be thought of as a process; rather it should be an all-pervading attitude or philosophy based on cooperation and dedicated to the welfare of the disabled. In the case of the tuberculous mental patient there are many complications because of the dual nature of the disability.

Rehabilitation should begin when the disability occurs and should not end until the disabled individual

is using his limited abilities to the maximum. Rehabilitation is not charity, nor is it welfare; it is helping people to regain their independence, helping them become self-sustaining, productive citizens. Rehabilitation must be expanded. About 250,000 people in the United States become disabled each year. At the present time only 50,000 to 60,000 receive rehabilitation services. The huge backlog left by the 200,000 each year who are not rehabilitated must be reached and restored to full, happy lives. It is necessary to regard each handicapped person as a unique individual with a unique heredity, background, abilities, interests, and aspirations. This tends to complicate rehabilitation and at the same time make it more of a challenge.

Tuberculous mental patients, because of their dual disability, require an especially concentrated effort on the part of those working toward their rehabilitation. It is fundamental that every patient should be regarded as capable of rehabilitation and should continue to be so regarded until virtually everything has been done to try to restore him to society as a functioning member. There are many variations of mental illness and some of these are discussed briefly in Chapter Two. Some of the characteristic problems of tuberculosis are also discussed. The necessity for treatment of both pathological

conditions becomes evident when it is realized that either illness might become more severe without treatment. Tuberculosis untreated can be fatal; mental illness untreated can often be almost worse than death. The mental anguish to which mental patients can subject themselves and their families almost defies description.

Adequate facilities for the treatment of the tuberculous mental patient require x-ray and laboratory equipment, a surgery, solarium, sufficient space per patient, provision for ancillary services, and all other modalities that may aid in the recovery process, as discussed in Chapter Three. In order to hasten this recovery process, the appropriate personnel should be utilized to the fullest extent. A close-knit, well-integrated team approach is needed. This team should be headed by the psychiatrist or chest physician and include the nurses, the attendants, social workers, psychologists, ancillary therapists, and the rehabilitation counselor.

In order to have a truly effective rehabilitation program, the resources of the community need to be coordinated with the efforts of the hospital team members, everyone making their own contribution. The patients should not be overlooked because they often have many unique suggestions, and the main objective is to re-establish them as functioning individuals. In order to

secure total rehabilitation of the greatest possible number of patients, cooperation, teamwork, and freedom of communication among all involved must prevail. All staff members should constantly strive to further their professional preparation and training to help insure this freedom of communication. At the same time it is necessary to reiterate that there should be no jealousy or bickering among workers in the various disciplines. The team spirit should be one of cooperation not competition.

There should be some planned recreation for the patients, chiefly in the evening hours and on weekends, to take up some of the slack in the treatment program. There should be some provision for religious worship and guidance by means of a regular hospital chaplain or by visiting ministers. Not only public agencies, but private citizens as well, must participate in rehabilitation, particularly employers since the end result of most rehabilitation is successful placement in a job. There could be more sheltered workshops, rehabilitation centers, and outpatient clinics where patients who need their services could take an intermediate step before assuming full independence. The family should not be overlooked since it is perhaps the single, most powerful social force operating on each patient. If the family situation is basically healthy, the chances for successful rehabilitation are good.

If, however, the family situation is basically unhealthy, then perhaps some constructive changes could be made in the family status. This is a very delicate area of operation, requiring the greatest possible skill. The psychiatric social worker is probably the best qualified to work with situations of this kind.

The Oregon State Hospital has had adequate physical facilities for the treatment of tuberculosis since May 1952. Under the capable direction of Dr. Rosenfeld and Dr. Gutman, the incidence of tuberculosis was drastically reduced. In Chapter Four the movement of patients in and out of the Tuberculosis Treatment Unit is discussed at length. In the six years the ward was in operation before its consolidation with the Medical and Surgical Service in February 1958, the treatment and control of tuberculosis have been most adequate. Psychiatric treatment, social service, occupational therapy, and planned recreation for the tuberculous mental patients, however, have been rather lacking. This is primarily because of the shortage in professional personnel in all these areas throughout the hospital. Gradually this shortage is being overcome; but there are still critical areas where the staff needs to be expanded, in psychiatry, social work, psychology, nursing, and occupational and related therapies.

The educational nature of the hospital needs to be critically examined. The psychiatric residency program, nurses training, and the possibilities of training in psychiatric social work and clinical psychology should be thoroughly investigated. Concurrent programs in the colleges and universities of the state and at the University of Oregon Medical School should be encouraged and expanded.

The Oregon State Legislature and the Board of Control are the agencies which govern the further expansion of any of these programs. The legislature appropriates the funds which would be available and the Board of Control, consisting of the Governor, the Secretary of State, and the State Treasurer, supervises the administration of all state institutions. The State Board of Higher Education supervises the administration of all state-owned colleges and universities and establishes what courses may be offered. There is also the possibility of obtaining federal funds for certain programs. Thus any expansion of existing or new programs would require working with a great many federal, state, and local organizations. There should be some clearly demonstrable facts and carefully prepared figures to prove the necessity and advisability of expanding and improving the total rehabilitation program. The current Oregon State Hospital-Division of

Vocational Rehabilitation three-year research program for the patients from Lane County should provide some of the desired facts and figures.

More important than the facts and figures, however, are the savings in human resources and the building of solid, happy futures for all the patients of the mental institutions of the state. It is impossible to measure all the benefits of such a program. As the Tuberculosis Treatment Unit virtually treated itself out of existence, it is hoped that eventually mental hospitals will do essentially the same.

B. Conclusions

As a result of this study a number of conclusions have been drawn. They are as follows:

1. In spite of the advances in the treatment of tuberculosis, the rehabilitation of tuberculous mental patients is still a complex problem.
2. There is a shortage of critical professional personnel at the Oregon State Hospital, particularly in psychiatry and the ancillary services.
3. There is a critical shortage of professional personnel to handle the Educational Program of the Oregon State Hospital.
4. In spite of the various individual programs in the different areas studied, a total rehabilitation program for the tuberculous mental patients as a cooperative effort among the hospital personnel, state agencies, and community organizations does not exist

at the present time.

5. A total rehabilitation program is not now generally available to all the mental patients of the Oregon State Hospital.

C. Recommendations

In order that these conclusions might be borne out, the following recommendations are made:

1. The present program of tuberculosis case-finding, isolation and treatment should be continued.
2. Psychiatric treatment of tuberculous mental patients should be increased as needed by the patients.
3. Occupational therapy and perhaps educational therapy should be provided tuberculous mental patients.
4. More adequate psychiatric social work services should be provided for the hospital generally.
5. More adequate clinical psychology services should be provided for the hospital generally.
6. More Division of Vocational Rehabilitation counselors should be assigned to work with the hospital staff.
7. The psychiatric residency program should be expanded.
8. A graduate school of social work should be established in the state.
9. The clinical psychology training program should be further expanded at the college level.

10. The Oregon State Legislature should appropriate the necessary funds, particularly for salaries in the areas of deficient staff.

D. Further Studies Needed

In many ways this study has raised more questions than it has provided answers. In order to provide some of the answers to these questions, there should probably be some more extensive investigations into the following areas:

1. The actual financial cost of each of the various programs outlined.
2. A detailed study of the mutual working relationships among the various agencies.
3. The proper college or university for a graduate school of social work.
4. The continued economic use of some state institutions.
5. The possibility of sheltered workshops and community rehabilitation centers.
6. The possibilities of expanding the psychiatric residency program.

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