A Report
to the

Colorado State Board of Public Welfare
By

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Colorado, despite the fact that this State has been for a number of decades a leading center for the tuberculous, had no plan whatsoever for taking care of those of its residents afflicted with this disease who were financially unable to take care of themselves until about 15 years ago. This was in spite of the fact that most states in this Country by 1935 had definite appropriations for tuberculosis hospitalization, and most of them had TB state sanatoria. Perhaps the problem looked too great to the Legislature, or possibly the legislators feared that the State program of tuberculosis care might entice indigents into the State from other places in the Country, in order to avail themselves of this care and our favorable climate. Legislature after legislature turned down bills providing State care from 1922 on. In 1931 and again in 1933, Senator Lawrence Phipps offered Agnes Memorial Sanatorium in Denver, which is now a part of Lowry Field, to the State as a gift, but the General Assemblies turned down the offer.

In 1935, House Bill 481, badly mangled, did pass. It carried an appropriation of $5,000.00 for the biennium, or $2500.00 a year to be used by the Dean of the Medical School of the University of Colorado for treating indigent tuberculosis patients. This represented the first appropriation ever made by this State for this purpose. This, as I say, was 15 years ago.

The late Dean Reese, then Dean of the Medical School, turned over the responsibility for the expenditure of this large sum of $2,500.00 a year to the Colorado Tuberculosis Association. Arrangements were made for the care of indigent patients in private sanatoria and counties were requested to pay half the cost of care. The funds provided hospitalization for 24 patients in 1935 and they were treated in seven private sanatoria, and this demonstration really laid the groundwork for our present system which, to the best of my knowledge, is unique in this Country. It encouraged the Colorado Tuberculosis Association in February 1936 to initiate a measure on the ballot, providing for a Division of Tuberculosis in the State Department of Welfare, with a director and the payment of half the cost of care in private sanatoria. The other half to be paid by the county welfare departments from which the patients originated. The residence requirements would be three years and the total amount allowed for care was $2.50 a day. A continuing appropriation of $50,000 was provided.

This Tuberculosis Assistance Law was endorsed by both political parties and was placed on the ballot along with the Old Age Pension Law and, as you know, both passed. The vote on the Tuberculosis Assistance Act was 176,872 "for" and 133,516 "against."

Since Colorado was unique in having a number of very good private sanatoria many of them supported by national organizations like the Swedish Sanatorium in Englewood, supported by the National Swedish Church; Bethesda, supported by the Dutch Reform Church; Lutheran, by the Lutherans; and the Mennonite Sanatorium in La Junta, one of the very best ones we have, supported by the Mennonite Church; and several Catholic institutions, both in Denver and in Colorado Springs, which

are supported by that religious group, it was felt that it was unwise to build a State sanatorium at that time, since the care could be provided at a lower cost in private sanatoria. Therefore, the Director started placing patients under the State Tuberculosis Act beginning in 1937. Dr. Forney was the first director and continued to serve until succeeded by me in 1946. As you remember, Dr. Forney went from here to an important post in Michigan, where he became chief of the clinical staff at Northern Michigan Sanatorium, the newest of their State institutions.

Over the past 13 years there have been increases in the appropriation made by the Legislature, in order to provide for more patients and to assist the hospitals with increased cost. At the present time the appropriation is $500,000.00 for the biennium which, when matched by a similar amount by the counties, makes a total of a million dollars for tuberculosis care of the indigent in Colorado for the biennium period. Also the 1947 Assembly provided for a 30 bed wing at the Colorado General Hospital just for tuberculosis care. This wing, it was understood, would be used chiefly for cases of chest surgery and for diagnostic purposes on difficult diagnostic problems which might arise among our patients in the various sanatoria.

It was stipulated by the 1947 State Assembly that the cost of care should not average more than $6.00 per day. This cost includes nursing care, drugs, medical care, laboratory examinations, x-rays, surgical operations if emergencies are necessary and have to be performed away from the Colorado General Hospital. It also includes transportation, burials, etc. Obviously the individual case receiving streptomycin or undergoing major chest surgery will cost much over $6.00 a day, whereas the ambulant patient getting ready for discharge, with little need for nursing care, will cost much less. It is the average figure with which we are concerned and last month this figure was $5.71 approximately, (well below the average permitted by the Legislature.) Payments are made directly to the sanatoria each month and cover all expenses incurred for each patient. These expenses are listed on one bill for each patient which is sent to me, as director, for approval, or correction and then through Mr. Ward's office to the county from which the case originated, for payment. The State later reimburses the county 50% of the amount of each bill. All of this may sound complicated but it is in actual practice relatively simple. The sanatoria and the physicians find that they are fairly promptly paid and <u>always</u> paid, something that does not happen by any means all the time in the general practice of medicine.

At the present time the patients are placed by me in 10 different tuberculosis sanatoria in the State. Patients at each institution are placed under the care of one physician at that institution. He must be experienced in the practice of tuberculosis and selected by the Director from among two or three such qualified physicians nominated by the board of the hospital. Thus, he is a man that is satisfactory to all concerned. The final result of all this is one of the best examples of cooperative medical care known to me. Since the inception of the program some 13 years ago, approximately 1800 cases have been given care. The present case load is approximately 250 patients. Occasionally patients on pneumothorax are discharged from the sanatoria when ready and carried as out-patients. These out-patients continue to receive pneumothorax at State and county expense at the hands of qualified physicians as long as this method of treatment is necessary. Since these patients live outside the institutions, their cost for care is far less than it would be if they remained hospitalized.

At the time of the last analysis approximately one-third of all patients under care had come to Colorado for their health and then had exhausted their resources. National studies have shown that 94% of patients exhaust their resources before they can return to a self-supporting basis. That is because of the very long drawn out nature of the disease. About one-third of the total cases are Spanish-Americans.

Numbered among the health seekers are school teachers, nurses, engineers, and a number of others with a rather high degree of educational achievement. Each case before acceptance has passed a means test, given by the county welfare department, and residency in Colorado has been proved by the county department and the case accepted by them before the application is forwarded to me.

You might be interested in the duties of the Director which are, of course, to coordinate the whole program, which is not an easy task with patients scattered in so many institutions over an area of 200 miles. He also determines the medical eligibility of each application and makes the necessary arrangement for hospitalization of approved cases or their transfer from one sanatorium to another; visits each institution as often as necessary in order to determine the type of care received and consults with the physicians who are taking the day-to-day care of the cases, regarding the progress of each case and necessary changes in treatment. Once every six months one of the chest surgical staff of the Colorado General Hospital is taken along on these visits, so that each case has a surgical review regarding the possibilities that chest surgery may offer, at least twice a year. In addition to the above duties, the Director must also approve all bills and under the law he, alone, determines the time that each patient shall be discharged. All changes in the approved list of charges is worked out by him with the consent of the State Board of Public Welfare and as you know once a month he reports to the Borad regarding the progress of the program. The Director must also assist the sanatoria on disciplinary cases, and a considerable time must be spent with lay, health and rehabilitation organizations interested in tuberculosis in order to keep them informed of what we are doing.

What are the advantages and disadvantages of our unique system of care? First the advantages, as I see them, are about as follows:

1. Most of the patients are housed near their homes, which would not be the case if we had one central institution. This is especially important in persuading Spanish-Americans to accept hospitalization.

2. The standard of living can be raised for the patient in almost every case, and this is important in tuberculosis. He should get the stimulation of better living conditions than he has at home, especially in the matter of nutrition.

3. By and large our patients are under more skillful care than would be the case were they housed in one central State hospital. The chief of staff in the hospital would be a man of considerable training in tuberculosis, but the rest of the staff probably would be residents in training and thus relatively inexperienced.

4. Since our institutions are smaller, they have a more home-like atmosphere and the food is likely to be better than in one large institution.

5. The morale of the patients is helped when they see that they are receiving the same care as private pay patients in the same institution.

6. The cost to taxpayers in Colorado is about 25 to 30% less for care of the tuberculous on a per day basis than in states like Massachusetts, New York, Connecticut, and California, all of which have been visited by me within recent year As I said our cost was $5.71 last month; cost in these states range between $8.00 and $10.00 per day. Even New Mexico, where the state sanatorium is really a reconverted C. C. C. Camp, costs are $7.00 per day.

7. Every one of these institutions to which our patients are sent is more adequately supported and staffed at the present time than is usually found in public institutions.

8. The religious influence in the sanatoria is helpful in maintaining morale. In general, patients are placed in institutions of their own faith. I cannot over-emphasize the importance of this point. I think it helps very much in holding patients. Our discharges against advice are about two-thirds the nationsl average, according to the best figures which I have been able to find, and I think the percentage of discharges against advice is one of the best guides as to how well satisfied patients are with their care.

The disadvantages, as I see them, of using a number of private sanatoria instead of one large state institution are these:

1. It is difficult to have a large well coordinated and complete program where the patients are scattered over so much territory and so many institutions. A considerable amount of time is consumed by the Director in travel and if the Director fails in his responsibility to visit institutions, frequently considerable variation in the care received by the patient might result. This same draw back, of course would apply to others working with patients, such as our medical social workers and the rehabilitation workers of the State Vocational Training Department.

2. Some of the material for medical school teaching is not being utilized to its fullest extent, except for the cases hospitalized at the Colorado General Hospital.

3. The third disadvantage of our present system is that it is not very popular with the National Tuberculosis Association orperhaps with a few members of the State Tuberculosis Association who are very anxious to have a state sanatorium. It is difficult for outsiders to understand our unique system of care and particularly so since most other states have a state sanatorium. Also they would like to point with pride to a fine state tuberculosis institution in Colorado, resulting from their own efforts. However there is no guarantee that the care would be better or even nearly the equal of the care provided under our present system. There is no question but what the cost would be greater to the State then the present system, if we attempted to have our own State institution. It is my own feeling that with the very rapid decline in the death rate from tuberculosis, both for the Country and for Colorado, the expectation is that by the end of another 10 year period the death rate will be so low that tuberculosis will not be really considered a serious public healt problem.

The expenditure of several million dollars for a tuberculosis institution seems hardly justified when there are so many more urgent needs in Colorado for the expenditure of public funds. This statement, I feel, would only be true so long as the general quality of care received by our patients is equal to what it is today.

There was a time, especially toward the close of the war when many institutions suffered severely from lack of nursing and medical staff and the State reimbursement was so low that adequate care could not be furnished. All this resulted in very justifiable criticism of care, particularly in several of the institutions. It was so bad at one institution that a group of interested health and welfare authorities from one county investigated the situation at that institution and sent in a very scathing report regarding the sort of care received by their patients there

It was suspected that the care at several of the other institutions was not what it should be, and this led to considerable dissatisfaction on the part of the Colorado State Tuberculosis Association Board. I was asked at a Board Meeting held May 11, 1945 if I would make a personal investigation of several of these institutions and report to their Board. (This was of course before I became director) I told the Board that I felt that any investigation made should be made by some out-of-state agency, so that no suspicion of personal bias could enter into the investigation.

As a result Dr. Myron Miller of the U. S. Public Health Service was invited to make this survey which was done by him in 1945. This survey took several months and was quite comphrensive in scope. It brought out a good many of the fundamental weaknesses of some of the institutions and was of a great deal of help to me when I became director in July 1946 in my understanding of the problems which had to be met and corrected. In the winter of 1946 and 1947 a committee was appointed by the State Health Department, which has to do with the licensing of all institutions in the State, to set up standards which would have to be met by all tuberculosis hospitals in order to receive a license as a TB institution. A number of meetings were held by the committee, of which I was a member, and a definite increase in the standards has resulted from the work of this committee. Probably the three most important recommendations by the committee were for medical social service, occupational therapy and a better system of vocational rehabilitation to be made available to all tuberculosis patients. I think I can say, without danger of contradiction, that the care provided our patients at the present time is very much superior to that provided 4 years ago but in saying this I want to emphasize again the fact that all these institutions were greatly handicapped by the stringencies brought about by the war.

Even though medical social service to our patients is still in its infancy, we have reaped a number of benefits from this service. Doctors in the sanatoria have recognized that the social worker is a person who will listen patiently to the problems and complaints of the patients. They are excellent "trouble shooters." The doctors have learned, too, that in the day-by-day contact of the social worker with the patient, she comes to know each as an individual and will share her knowledge and understanding of the individual with the professional members of the staff.

I think that the social workers now functioning on our patients are becoming able to evaluate the information brought to them by the patients. By this, I mean that they can distinguish between the ordinary "gripes" which arise out of a confining and isolated situation, and what are the real problems which have direct bearing on medical treatment and should be shared by the doctor in charge of the case. The social or financial problems of the patients, she can take direct action upon with the agencies which can be of constructive help. This relieves the patient' mind which, in turn, helps to hasten recovery. I can definitely state that the efforts of the social workers have helped to change the attitude and behavior of a good many of our patients. They cannot do the impossible, in the way of changing long standing personality maladjustments, nor can they solve all the patient's problems. Their presence in the sanatorium represents the addition to the staff of a helpful understanding person, who can make a very distinct contribution toward shortening the period of hospitalization of our patients.

We have made available at Bethesda Sanatorium and, to a certain extent, at the Colorado General Hospital, a limited number of beds for cases of tuberculosis with personality maladjustments. At these institutions, these cases can be under the daily observation of a psychiatrist as well as receiving care for their lung disease.

Thanks to these improvements and, especially, thanks to the introduction of streptomycin and better chest surgery, which we can now offer our patients through the facilities at Colorado General Hospital, our death rate has declined 40% during the last five years. Our percentage of relapses has decreased very markedly, and the percentage of patients discharged with their disease arrested, has increased over three-fold since 1945. We have stepped up our service to the county welfare departments with reports on the condition of their patients at least every three of four months. Also they receive a report from the medical social department with regard to all plans for the patient's future.

Rehabilitation, and in this I include occupational therapy, is now available to all our patients and starts soon after the patient's entrance to the institution. In arranging this, medical social service is of great value. I want to acknowledge the great help of Mr. Haase of the Colorado State Department of Vocational Rehabilitation, and of Mr. Ralph Susman, Rehabilitation Director of the State Tuberculosis Association, in this connection.

Every patient receiving a medical discharge now has some plan worked out for his future, so that he is just not turned out into the world from the relatively sheltered environment of a sanatorium to suddenly make his own way again. I think perhaps one of our greatest improvements has been the setting up of the ambulant care centers, where patients are sent following their period of bedrest to receive graduated exercises under competent medical supervision. I think this has been a very great factor in cutting down our cases of relapse, because if the patient is permitted to go home directly from bed-rest, as was done heretofore the sudden change from the sheltered environment of the institution to the hurly-burly of family life, plus a great increase in physical activity which is unsupervised, very frequently results in an unnecessary relapse.

Most of our patients are a fine group of people anxious to get well and very appreciative of what is being done for them by the taxpayers of Colorado. There is always a small minority, not over 10 or 15 percent, of trouble makers. This small minority group takes up a very disproportionate amount of time of the director and the medical social service, as might be expected in trying to straighten out their problems or in attempting to help them see the importance of cooperating toward their cure. I have been agreeably surprised by how few, actually, in number these patients are. We have made an attempt to give all patients a second chance, especially the alcholics, where there is a breach in hospital discipline but we have attempted to back up the institutions in every way in the insistence that our patients follow all reasonable rules invoked by the hospital. I think this spirit of cooperation has made our patients quite welcome with most of the institutions. We do try to insist that no discrimination against our patients shall be made and in general I think it can be said that this is the case.

Every attempt has been made to cooperate with the Colorado State Department of Health. Copies of all quarterly progress reports on every patient, and copies of every discharge letter are sent to the office of Tuberculosis Control. No case of positive sputum has received a medical discharge in the past year without my first requesting an investigation of the home condition by the Health Department and its approval of the step taken. The liaisonbetween our Medical Social Department and the workers of the State Health Department is excellent.

All in all, I am fairly well convinced that our system of care for the needy tuberculous in Colorado can give our State patients considerably above average care when compared with that furnished by other states. It is far from perfect and there is still room for further improvement. Partly as a result of the Denver Mass Survey, we now have approximately 40% more patients then we had a year ago, which is

severely taxing the endurance of all of us working on the program. Our quarters are inadequate with five people working in a space designed for two. If the present case load is to continues, certainly a part time medical assistant should be furnished the director. It is probable that the time has come when the residence law of the State should be changed from three years to one year. At the present time some of the counties are maintaining cases not eligible for state care because of the three years residence rule, at their own expense, paying the full amount of hospitalizatio

It is possible that a law making hospitalization compulsory for the person with a positive sputum who flouts all reasonable rules for the protection of those about him, might be a good thing. Several states have such laws and some of the authorities in these states tell me the law must be enforced rarely and with great discretion. The best public health official is an educator, and not a jailor. If we do have compulsory hospitalization in Colorado, I believe commitment should be in a separate institution with bars on the windows, especially provided at the Medical Center by the Legislature. Commitment to this institution should be on the recommendation of a Board, after careful study of the facts, and/not just on the authority of one individual.

I have found my job as Director one of the most interesting I have ever tackled and it has been made pleasant by the very fine interest and helpfulness of the Board and the spirit of cooperation which exists within the State Welfare Department and in its relations with the county welfare departments.