# Country Clinics or Dispensaries for Treatment of Cases of Leprosy.

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N the annual report of the Taiku Leprosy Hospital for the year beginning June 1st, 1923, we wrote as follows:—

"The ever increasing number of patients being dismissed as apparently cured makes us long to be able to place the benefits of the modern treatment within reach of every sufferer in the province. It has long been our dream to send out a qualified assistant who would visit regularly once a week each of six large towns in the province holding a clinic and administering treatment to all the cases in and around each town. By this means, hundreds whom we could never care for in our institution could be treated, cases needing hospital treatment could be better selected, and those discharged as free from symptoms could be kept under observation and further treatment administered if desirable.

"It will always be financially impossible to care for more than a fraction of the sufferers from leprosy in this province by gathering them into institutions. But what a great and beneficent work could be done by making the modern treatment easily accessible to all! Such a programme, if inaugurated, would inspire us with new enthusiasm in our task, and would bring the day near when our dream of ridding the country of this baneful disease might be realised."

During the year 1925, in a pamphlet designated the "Romance, Tragedy and Opportunity of Leprosy Treatment," we set forth a very definite plan, with budget attached, for taking the treatment to every sufferer in the province. We quote the following:—

<sup>&</sup>quot; Our problem :-

<sup>&</sup>quot;The Taiku Leprosy Hospital is located in the capital

of North Kyong-Sang Province (Keisho-do). At present, it accommodates 410 patients. In this province, with an area of about 7,380 square miles, and a population of a little more than 2,000,000, a recent survey revealed the location of 1,700 sufferers. Undoubtedly there are a few hundred not yet discovered. For financial and other reasons, the leprosy hospital has almost reached its limit of capacity. Two thousand cases in the province are depending upon us for treatment. Shall they suffer and die without help when there is a well-established remedy?"

## "Our plan:-

"The plan is to get all the cases of leprosy in this province under treatment as soon as possible. To this end, country clinics will be established in centres where the greatest number of sufferers are located. This will be a comparatively inexpensive method as the great majority of those who will come regularly to the stations for treatment will continue to live in their homes and be self-supporting.

"Where conditions in the home, or the contagious stage of the disease, indicate the need of isolation, such cases will be referred to the Taiku Leprosy Hospital. Patients discharged from this hospital as apparently cured will be kept under observation at the country clinic nearest their home and additional treatment given if indicated.

"As the disease is not hereditary, untainted children of leprous parents will be removed to a home for such children where they will be properly cared for and permitted to grow up healthy and strong. This home will be centrally

located in the city of Taiku.

"Medical supervision of these country clinics will be provided by a doctor who will have an itinerary that will make possible a visit to each station once every week, or once every ten days. To visit each of the ten stations, the doctor will travel a distance of 322 miles. Part of the time he will travel by rail and part by car.

"At each country clinic, a nurse or some one qualified to give the hypodermic treatments will be permanently located. Preferably the nurse should be one, who in the early stage of the disease, having entered the leprosy hospital as a patient, was not only freed from all symptoms but

trained in the treatment and care of the disease.

"The following budget for ten country clinics is made on the assumption that the Government will co-operate and provide the ethyl esters free of charge.

#### BUDGET FOR TEN COUNTRY CLINICS.

| To establish site and buildings, 10, at \$500      |    | \$5,000        |
|--|----|----------------|
| To maintain:                                       |    | Per yr.        |
| Korean doctor's salary, 12 months at \$75          |    | \$900          |
| " ,, travelling expenses, three trips per month,   | 36 |                |
| trips at \$12                                      |    | \$432          |
| ", ", food, 12 months at \$15                      |    | <b>\$</b> 180  |
| Clinic Assistants' salaries, 10, 12 months at \$10 |    | <b>\$1,200</b> |
| " fuel, water, 10, 12 months at \$5                |    | <b>\$</b> 600  |
| ,, repair, 10, 12 months at \$2                    |    | <b>\$24</b> 0  |
| Total cost maintenance                             |    | \$3,552        |

### "Our opportunity;—

"By removing untainted children from their leprous parents—by isolating more severe cases—and by treating all cases—to prevent further spread of the disease, and thus entirely to eliminate it from this province. Such an opportunity as this will find its climax, either in a great tragedy or a great romance."

## " Tragedy;—

"If treatment is withheld, 2,000 sufferers without any hope of a cure, will be left to the ravages of the most loathsome of all diseases, which destroys both the flesh and the spirit. As the 2,000 deteriorate, they will gradually spread the infection, hundreds of others will contract the disease, helpless children fall victims to their parents' malady, and thus the vicious cycle of the tragedy of leprosy will go on and on."

### " Romance:

"On the other hand, if treatment is made available according to the plan proposed above a new chapter will be written in the history of leprosy, a chapter full of thrilling interest and 'with a happy ending' that might well rival that of any ancient romance. It would mean that not only 2,000 sufferers would be given new life, and new hope, but the other 2,000,000 inhabitants of the province would be safeguarded from the contagion of this dreaded disease, and perhaps the first forward step taken in a definite programme to 'rid the world of leprosy.'"

## " Fear :-

"This plan made a strong appeal to people in America who freely offered the necessary funds. However, Government officials were fearful that the country clinic would attract vagrants. They thought these would take up their abode in the vicinity and, being without means of a livelihood, would wander about to beg in such numbers as to

become a menace to the healthy community of the district. For this reason, although we had the money necessary to initiate our plan, we were unable to secure permission from the Government until 1928. Even then, we were only permitted to establish one clinic as a demonstration.

#### Demonstration Results:—

1. Early cases discovered. The three years' work of our clinic in Koon We county has been very interesting and very successful. We have demonstrated that the total number of cases in any given district cannot be ascertained even by the most modern and thorough methods of survey, and that the actual number is many more than the survey number. For instance, in our Koon We clinic district, the police reported 20 cases whereas we have now 70 registered. As we only give treatment to those who are permanent residents, evidence of which is required in the form of a copy of registration from the Government official of the district, we are certain that none of these 70 have migrated from neighbouring districts. Another clinic was started at the beginning of this year and within two months, 75 patients were receiving treatment. On my last visit, I saw several very early cases of leprosy, a case of psoriasis and several other cases of skin diseases.

2. Chaulmoogra oil is in itself a sufficient remedy for early cases of leprosy. The results obtained depend largely upon the proper administration of the oil. However, the method of treatment is another subject which we discuss more at length in our paper on "Massive Doses of Chaulmoogra Oil in the Treatment of Leprosy." In the report on the Study Tour of the Secretary of the Leprosy Commission of the League of Nations is the following paragraph:

"The efficacy of chaulmoogra should be tested as follows:—Two groups of cases, as nearly as possible of the same type, should be placed under the same régime and general treatment, one being given chaulmoogra but not the other. After treatment for a certain period, the two groups should be compared. This comparison, which is a crucial test, has, according to the above authorities (Denny and Wayson) never been made."

The inference from this report is that the great improvement in the condition of cases, which is noted so frequently in leprosy hospitals, may not be due so much to the chaulmoogra oil treatment as to the improved régime of the hospital as compared with the home condition of the sufferer.

<sup>\*</sup> To be published in a forthcoming number of the International Journal of Leprosy.

The patients attending our clinic live in their homes under exactly the same conditions as before treatment. Their food, their work and their habits remain just the same as before. At the clinic we give no money, clothing or food to our patients. Twice a week they are given injections of chaulmoogra oil. All of our early cases have shown a decided improvement, some being entirely freed from all symptoms, while 10 to 15 per cent. of our more advanced cases have also been greatly benefited.

3. Country clinics, when properly conducted, are not in any way a menace to the healthy people of the district. On the contrary, they are the greatest blessing imaginable. It is unnecessary to go into details here as to the character of the blessing, for we all know that cure of the early cases prevents further spread of the infection to relatives and friends. We also know that if these early cases are not treated, the disease will continue to make progress, and it is only a matter of time until finally they, as advanced cases, would be disfigured and crippled and cast out from home and friends. As "the proof of the pudding is in the eating of it," the fact that from the healthy people of many widely separated districts we are receiving urgent requests to establish clinics for the treatment of leprosy, is in itself sufficient evidence that the country clinic is not a menace.

#### Psychology:

The victim of leprosy dislikes, above all things in the world, to be known to be suffering from the disease. For this reason he will conceal his disease just as long as he possibly can. He will forego the benefits of treatment and make all sorts of sacrifices in order to avoid being identified as having leprosy. In the vicinity of our clinic, a young woman, the daughter-in-law in a family of the gentry, contracted leprosy. Her husband, a student in the Keijo Law College, brought a suit for a divorce. The father of this young woman was perfectly familiar with the clinic and its purposes, yet he postponed coming to the clinic because he could not get up the courage to speak of his daughter as suffering from leprosy, although he knew that once he did so the treatment would immediately be available. Finally, he came to the clinic but went away again without mentioning the reason for his visit. Five or six times he came before he got up sufficient courage to interrogate the nurse. When he did ask at what time the doctor would make his next visit, he said that some one in his neighbourhood was suffering from a "skin disease"

and would like an examination. Later, he appeared again at the clinic and waited for three hours until the doctor had finished his work and the patients were all leaving. Then he said, in a very low tone of voice, "I am ashamed to mention it." "What is it?" said the doctor. "Please lower your voice, doctor, so that no one can hear you," he said excitedly. Then he whispered, "Do you think you could go to my house and examine my daughter? I think she has a skin disease." The doctor advised that the daughter come to see him at his next visit, as it would then be possible to administer the proper treatment after the examination. Some time later she came, and with the exception of one eye, she was entirely covered and thoroughly protected from view. When opportunity was afforded, she said "My disease is unclean," and burst into tears. Since then, she has attended regularly twice a week, and being an early case has made rapid improvement and bids fair to be entirely relieved of all her symptoms.

#### Early Cases:—

Many early cases who are attending the clinic conceal this fact from their neighbours in order that the identity of their disease may not become known. Before leaving their homes to go to the clinic men patients will, to disguise the fact that they are going for treatment, make preparation in the way of proper dress, etc., to visit the market or to get wood from the hills, while women will prepare to gather wild herbs and roots.

#### Skin Diseases :-

Although we have separate days for the treatment of early and advanced cases and during the past three years have made every possible effort to secure the early cases, we are convinced that there are still some who are in hiding in this district. Our next step is to establish a separate room and a separate day for the diagnosis and treatment of skin diseases other than leprosy. To this clinic will come, we believe, the early case who as yet has not the courage to make his disease known. In this way we hope to discover every case of leprosy in the district.

#### Contacts:

When all cases have been discovered we hope that it will be possible through the department of the clinic for skin diseases and by visits to the homes to examine the relatives and others who for some time have been exposed by close association with those suffering from leprosy.

Suspicious cases will be kept under careful observation and examined frequently.

#### House Infections:—

According to Sir Leonard Rogers, Hon. Medical Adviser of the British Empire Leprosy Relief Association, 80 per cent. of the infections in leprosy are house infections, and in 80 per cent. the incubation period is under five years. Therefore, whenever a case of leprosy is discovered, all his household and other close contacts should be repeatedly examined for leprous lesions. If these early cases are treated as discovered it follows that within five years, 80 per cent. of the foci of infection will be removed. By the same process, within another five years the remaining 20 per cent. of foci of infection would be reduced by 80 per cent., so that at the end of ten years but 4 per cent. of the original foci would remain.

## Leprolin Test:—

Should the intradermal leprolin test of P. Bargehr, which has been confirmed by C. D. de Longen and W. de Vogel, for the detection of early and latent leprosy prove to be reliable, this problem of discovering infections among the contacts would be greatly simplified.

#### SUMMARY.

- 1. Country clinics constitute one of, if not the most important single factor in the eradication of leprosy from any district or country for the following reasons:—
  - (a) Early cases of leprosy can be freed from all symptoms and rendered negative by treatment with chaulmoogra oil. This is not only our experience but also the experience of men of world-wide reputation such as Drs. Wade and Lara in the Philippines and Dr. E. Muir in Calcutta. The latter says that almost 100 per cent. of cures may be expected in early cases if they are thoroughly treated. By cure is meant the disappearance of all active signs of the disease.
  - (b) Early cases are discovered through the country clinic. Surveys do not detect early cases. They do not come to the leprosy colonies. The psychology of those suffering from the disease is such that the greatest tact and wisdom is necessary in order to discover him. The early case of leprosy before disfigurement occurs goes about undiscovered, just as certain

birds, whose feathers are the same colour as their surroundings, are not readily detected.

- (c) Contacts are best discovered and examined regularly through the country clinic. If all contacts were examined and those infected given prompt and thorough treatment, within ten years the number infected would be reduced to 4 per cent.
- (d) Paroled cases are re-examined and treated if necessary.
- 2. Country clinics should function also as out-patient departments of a well-equipped modern leprosy hospital, and also as out-patient departments of a suitably located leprosy colony.
  - (a) Feeder for leprosy hospital. Among the cases which come to the country clinics are those whose disease is in the infectious stage. The small houses in Chosen and the crowded circumstances under which the average family live constitute conditions that are very suitable for the spread of infection. It is desirable, therefore, that in so far as possible, all those in the infectious stage be referred to the leprosy hospital. The leprosy hospital is a treatment institution with ample provision for research. It should be centrally located and modern in every respect. Advanced and deformed cases should not be admitted. When the Taiku Leprosy Hospital was opened 15 years ago, there was no place where advanced cases could be cared for, so we found it necessary to admit them. However, the Government now has an ideal colony, where the capacity is always increasing, so that for the past two years we have not admitted to our hospital any cases with deformity. The object of the leprosy hospital, aside from research, is two-fold. First, to isolate those in the infectious stage. Secondly, to give these cases the very best treatment so as to free them from all symptoms, render them non-infectious and return them to their homes as soon as possible. In this way, the greatest number of sufferers can be treated and the maximum amount of prevention of infection accomplished.
  - (b) Feeder for leprosy colony. Advanced cases of leprosy tend to hinder the work of the country clinic. They are always the first cases to come and many of them are the first to become discouraged. There

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are three reasons for this. Comparatively few are materially benefited by the treatment; such improvement is only manifest after some months of treatment; lastly, their weakened physical condition makes the necessary bi-weekly travel of several miles to and from the clinic a real hardship. For these reasons, therefore, after taking treatment for some months, without appreciable benefit they begin to complain to their relatives and friends and to other patients that the treatment is no good. In this way, they scatter rumours that tend to discourage prospective early cases and those already attending. another and more important consideration attached to the advanced case who attends the clinic. Although we always separate the early and advanced cases and treat them on different days, nevertheless, the advanced case by his very disgusting appearance, which he cannot help, casts a stigma on the clinic, which tends to keep early cases away.

For these reasons, advanced cases should be sent to a distant colony, located on an island or peninsula where there is plenty of land and room and where they may spend the rest of their days in comfort and peace so far as the disease will permit. The central Government of Chosen has such a place on Little Deer Island, and as many of our advanced cases as possible are referred to this institution. The system of segregating early cases who come for treatment with the late hopelessly-deformed cases constitutes the most serious obstacle to the solving of the leprosy problem in any district and should be condemned. We should always put ourselves in the place of the sufferers from leprosy, and in accordance with his desires, plan for his treatment. As an early case of leprosy, before the disease has become infectious, would you not prefer treatment, ostensibly for a mere skin disease at a near-by clinic to segregation in a leprosy hospital with frankly infectious cases, or worse still in a leprosy colony with those who are badly deformed and doomed to death? We must conclude then that the country clinic is the most humane and efficient method of eradicating leprosy.

We feel, therefore, that our plan for ten country clinics, in conjunction with our treatment hospital near Taiku City and in co-operation with the Government colony at Little Deer Island will meet every need of all the sufferers of our province, and will within a minimum time, and for a minimum cost, insure the complete eradication of the disease.