IMPORTANCE OF THE PREVENTORIUM IN THE RE-HABILITATION OF THE CHILD OF THE LEPER

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Today the preventorium has assumed great significance in the prophylaxis of leprosy. Indeed, it is an essential factor in the control of the disease. The child, because of its susceptibility to the infection, is regarded with respect to the dissemination of leprosy like resinous lightwood, laid in readiness for burning. As long ago as 1778, Shilling recommended that children be removed from contaminating environment. In 1883 the "Apostle of Lepers," Father Damien, proved by concrete observations that leprosy is contagious but not hereditary. Children when isolated at the time of birth remained healthy. In confirmation of this fact we have the testimony of Dr. H. C. de Souza-Araujo who, while visiting in 1925 the first preventorium in the world at Kapiolani, Honolulu—the celebrated Kapiolani Girls' Home, founded in 1885-found 219 children that were born in the Kalaupapa settlement on Molokai Island between 1909 and 1924 and reared in the preventoria. Not one of them had developed any sign of the disease.

PREVENTORIA IN THE PAST

In the past we find not only the example of Hawaii. Preventoria were established in the Philippines and India. In the latter place Bailey founded several of them many years ago.

In Brazil, in the state of São Paulo, a group of ladies organized the first society for the sole purpose of building a preventorium for the healthy children of leprous parents. The society, the "Associação Terezinha do Menino Jesus," was founded in 1915, but the first institution of this kind in the country, the "Asilo Santa Terezinha," was not inaugurated until 1927.

In the state of Pará, when the leprosarium of Prata was opened in 1924, there was also built near the physicians' residence a nursery that was opened during the same year. Seven years later it was transferred to Belem and called "Creche Santa Terezinha." Other nurseries were opened in other states, and in 1934 a preventorium

with a capacity of 200 children, "Santo Tarcisio," was inaugurated at Belo Horizonte in Minas Gerais.

PRESENT CONDITIONS

According to the latest statistics there are in Brazil 13,500 interned lepers. With the completion of the new leprosaria that the Federal government is building there will be twice as many in isolation before the end of 1940. For this reason, since 1936, the Federation of Societies for the Aid to Lepers has taken upon itself the work of motivating the construction of preventoria all over the country—institutions that for the most part are built and maintained by the various member societies of the Federation.

Some authorities state that the capacity of the preventoria should be about 10 percent of the number of isolated lepers, varying of course in different states. Thus we should plan for a long building-period, not only for present needs but also for the necessary enlargements in the future. At present we have in operation eight preventoria, five of which are on an "emergency" basis. More than one thousand children are cared for in them. Furthermore, fifteen new model preventoria, with a 'total initial capacity of 2,250 children, are under construction. Of these institutions three are ready to be inaugurated and five others should be ready by the middle of 1940.

NEW PREVENTORIA

An important matter in connection with the establishment of such institutions is the question of their location and construction. There was a time when some leprologists favored their location near the leper colony and at some distance from any city. That idea has been entirely abandoned. The specialists and technicians recommend, according to the findings of the First Brazilian Congress on Social Aid to Lepers, promoted by our Federation of societies in 1939, that "the preventorium should be conveniently distant from the leprosarium, and where prompt and efficient medical attention will be available for the children." Almost all of the new establishments are situated a short distance from a city.

Among the most modern of these institutions, and those of the greatest capacity that are now in construction, one in each section of the country may be mentioned.

Belem, Pará.—This preventorium, located in the extreme north of the country, seven miles distant from the capital of the state, is a model one for 300 children. All of the model preventoria are organized in accord with the plan of this one, which consists of ten buildings: (a) Nursery for children

from birth to two years of age. (b) Dormitory for children from two to ten years of age; on the ground floor are class-rooms and recreation halls, and above are the dormitory, the teachers' apartment, etc. (c) A similar building for small boys. (d) A similar building for girls from 10 to 20 years of age. (e) Administration building, in which is also the residence of the superintendent. (f) Observation building for children who have recently arrived or who are suspected because of having lived for some time where there was a leper in the family. (g) General infirmary. (h) Central dining-room and kitchen. (i) Shops or vocational school. In this building, which is some distance from the central group, there is on the upper floor a dormitory for boys from 12 to 20 years of age. On the ground floor are the class-rooms and also the work-shops for tailoring, shoe-making, leather work, mechanical work, blacksmithing, carpentry, etc.

Pernambuco.—Here, in the northeast, is another model preventorium for 300 children, with seven buildings, situated ten miles from the capital city.

Espirito Santo.—Central in the country, this preventorium has a capacity of 120 children. It is ten miles distant from Victoria, the capital.

Santa Catarina.—In the south is one with a capacity of 150 children, consisting of six buildings. It is located five miles from Florianopolis, the capital of the state.

In order that the discipline may be efficient, and also to avoid the mixing of younger children with adolescents, the principal has been adopted that these institutions should consist of isolated buildings with connecting porches, according to the plan followed at Carville, Louisiana. On rainy days or in very hot weather these porches give play-space for the children. Plenty of room is left for new buildings, and the construction can be done in installments without affecting the general harmony of the plan. From the educational point of view it is desirable that home-residences should be built where twenty or thirty children can live under the direct care of a competent couple, thus enjoying the social environment of a family.

There are, of course, difficulties in executing these plans, which have given such good results in other countries and of which we have a good model in the "Instituto John Pinheiro" in Belo Horizonte, Minas Gerais. Our Federation has tried to orient its afiliated societies in planning their work in accord with the national needs. It is recommended that for the preventoria large areas of arable land be selected, where water and lighting systems are available.

THE PREVENTORIA IN OPERATION

Technical aspects.—If "the preventorium is an indispensable factor in the combat against leprosy," as affirms the Brazilian authority, Dr. Ernani Agricola, that will depend upon the efficiency of the institution as regards prophylaxis. Therefore, even when

it is directed by a private beneficent organization, the technical part must be under the direction of the specialists of the health department of the government.

Children who have been exposed to contagion are carefully examined before they are admitted. They have specially prepared record cards, on which are registered the names of the parents or kindred who are leprous, the clinical types of the disease in them, and, if the mother is a leper, any abnormalities during pregnancy. Thus it is possible to register future observations regarding the child with reference to the degree of contagiousness of its source.

In the efficient and constant medical care that is given to the infant is found the reason for the nursery. No child that has been removed at birth from all contact with sick parents has acquired the disease. Professor Büngeler, of the medical school in São Paulo, has made anatomical and pathological studies of forty children who were removed from association with leprous parents and who died soon thereafter from various causes, their ages being from that of a few days to four years. They were found to be free from any sign of leprosy, since no lesion and no bacilli were found in the lymph nodes, the liver or other organs.

With the leprologist, therefore, lies the chief responsibility for the efficiency of the preventorium. It is under his direction that the diagnosis is made. A child with suspicious manifestations is sent to the observation building or to the leprosarium. Dr. Nelson de Souza Campos, one of our notable leprologists, says:

During its first three years in the preventorium the child should be examined every month. There are cases in which the examination should be made every week.

Among 500 children who came to the Santa Terezinha preventorium, in a period of ten years, 62 became leprous. Two-thirds of that number did so at some time during the first two years they were there, most of the rest in the third year; exceptions are four who showed no signs of leprosy until the fourth year.

Some of our leprologists do not favor prophylactic treatment with chaulmoogra. They believe that a more effective plan is to stimulate nutrition and build up the general resistance by good food, hygienic and sanitary habits, and exercise. When necessary, extra vitamins and calcium may be supplied.

Thus we hope for the rehabilitation of the child of the leper. Removed from its original environment, where there was a lack of hygiene and inadequate nutrition, as also the danger from possible reinfections from sources that the sanitary authorities had not as yet discovered, the child is saved from becoming a leper and passing the disease on to others. Under the care of the physicians who watch the child's development and defend him from other diseases, even where there is a predisposition for leprosy the child may, with careful diet, and hygiene, pass safely the years of childhood and adolescence—years in which he is most apt to develop the disease.

Social aspects.—The purpose of the preventorium is not merely to rehabilitate the child of the leper physically, mentally and spiritually, but also socially. Children of all ages come to the institution. There is the infant who was born in the leper colony, and the baby who was taken from the mother's arms when she was obliged to go to the leprosarium. Some are children or adolescents who have been in contact with their leprous parents for years. Relatives refuse to accept them in their homes. Schools and orphanages likewise close the doors against them, giving as an excuse that there is no more room. If there is no preventorium, such children are left in the most cruel abandonment.

It is not, however, merely because these children may become victims of leprosy and need medical care that we ought to make provision for them, but also in order that their parents may be more reconciled to remain in the leprosarium. And, as Professor Eduardo Rabello has said:

For complete protection it is necessary that this care be given to the children until the termination of the period of greatest susceptibility—from birth until about the twentieth year.

Since prophylaxis makes this requirement, it is necessary that the preventorium be equipped to give to the child not only medical and moral attention, but also some vocational training and education so that he may be able to earn his living when he goes out from the institution.

It may be said that to keep a child in a preventorium until he is of age is very expensive. In that connection two facts may be noted: First, from the point of view of expense it is as cheap to maintain a child or adolescent in a preventorium as in any other sort of institution—orphanage, farm-school, or home for delinquents. As an abandoned child he would have to go to one of these places. Parenthetically, there are interned in the preventoria only children who, when the parents go to the leprosarium, would be homeless. Those who have relatives, and can have medical observation, may stay in private homes. Second, the larger boys will be taught a trade in the farm school or the vocational school which is a part of every model preventorium. There will be found land for agri-

culture, truck-farming, chicken-raising, bee-culture, etc. The majority of the children come from rural districts; their fathers were small planters who, when they became lepers, could no longer obtain from the land enough to support their families. Their children, on leaving a preventorium can return to the small farm. With the technical preparation they received at the farm school they will be valuable citizens for the development of rural districts.

If an institution that exists on private beneficence, with the help of subsidies from the government, cannot become altogether self-supporting it can, at least, diminish the expenses. Serious efforts, therefore, should be made to promote such activities as gardening and fruit-growing, which will help in maintenance and furnish for the interned children the necessary elements of well-balanced diet. Help toward maintenance will also be found in chicken-raising and bee-culture and in cattle-raising. If the farmers will give cows to the societies, the children will find practical work that gives immediate results.

The various kinds of work-shops of the vocational school also help to supply, at least expense, the needs of the boys and girls, as well as to give to them occupations in which they can later earn their living in any part of the country. The girls, oriented by the housekeepers who in general are patient Sisters of Charity, can after the termination of a school course learn various domestic arts, some specializing in cooking, sewing, domestic work, or even type-writing, while others will become helpers in the nursery and in other departments. Former girl internes of the oldest and best organized preventorium in Brazil are today happy wives, and some are mothers of healthy children. Some are employed in the government service, or as trained nurses and housekeepers.

The success in reintegrating these personalities into the community will depend much upon the devotion and loyalty and the persistence of those to whom is confided the direction of these institutions. Generally, of course, the direction is with the local Society for the Aid to Lepers. Receiving the child at birth, or soon thereafter, the preventorium will take care of his education and development until, as an adult with good health and skill to earn a living, he returns to practical living in society. Prophylactically and socially, through the child has been taken the most certain step toward the eradication of leprosy from the nation—checking it at its source.