reactions. In these, finer particles are suspended, frequently in a somewhat turbid medium. The particles cannot be distinguished until the tube is examined individually, usually by slanting. (d) One plus reactions. In these, still finer particles are suspended in a somewhat turbid medium. (e) Doubtful reactions. In these, extremely fine particles, just within the visible range, are suspended in a somewhat turbid medium. (f) Negative reactions. In these, the medium is transparent, opalescent and free from visible particles. In the rack, negative reactions are readily distinguished from weakly positive reactions by the fact that the latter appear turbid.

The Early Treatment of Leprosy.
H. F. Hoffmann.

From personal experience in the leper home at Havana I am convinced that in chaulmoogra oil we have a specific treatment for leprosy. The derivatives of the oil can now be given in large doses intravenously with little difficulty, and from my own experimental evidence I feel sure that the curative value of the medicaments will be increased when modifications of the active substances of the oil are used, especially if treatment is combined with other substances such as gold or antimony.

It was only a comparatively short time ago when the opinion, which is as old as humanity, that leprosy was incurable, was universally held. This view in some places has not yet changed despite the completely altered situation. My own personal opinion is that leprosy can be cured and we should endeavour to cure as many cases as possible. In civilised countries, at any rate, the leper problem is more of a hygienic one than the social one it formerly was, and is still to a large extent in primitive countries.

Because of the incurability of the disease rather than its infectivity the system of compulsory segregation was resorted to in the past. This statement is made because, in my opinion, the most severe isolation is not sufficient to control the disease for the reason that under such a system the least infective burnt-out cases are isolated and the more dangerous early cases remain at liberty.

As a result of the recent advances, segregation no longer
remains the only measure against leprosy. Under normal sanitary conditions the control of leprosy should pass completely to the health authorities who should lay emphasis on the early diagnosis and treatment. Wherever a neglected case is found the health authorities should institute investigations to discover the reason why the case was concealed in order that such situations may be avoided in the future. Special measures should be taken for the immediate care of all early cases. It should be remembered that many of the mutilated hopeless cases that fill the leper homes have had their infection for many years before they became a public scandal or danger.

In countries where it is feasible a systematic examination of all contacts of each known leper should be undertaken. In this way, the early case would be discovered on the first appearance of clinical signs, which, in the absence of a reliable serological test, is the only method of detection. Examination of all contacts should be repeated periodically for a number of years so that the first signs will be discovered.

In my own opinion the result of treatment in the early case is most satisfactory and is to all intents and purposes a cure. Even though in the later stages one cannot get rid of all bacilli in the body, yet, the danger of infection can be largely overcome.

Personally I consider one of the most serious obstacles in the persuasion of the early cases to come for treatment is the system of segregating early cases with the late hopelessly deformed ones. The leper home proper should be confined to advanced cases, for no person with the initial signs of leprosy, which in the beginning he considers only a skin disease, will ever undergo treatment in such a place if he can avoid it. In addition it is unnecessary to isolate such a case for life when, if properly treated, he should be cured in one to two years.

The modern leper clinic which is in existence in a few countries, must be entirely different from the asylum. In passing I must pay a tribute to those noble souls who dedicate their lives to the care of lepers in such institutions. If any progress towards the control of leprosy is to be made it is necessary completely to separate the leper home from the modern leper clinic; both have their own problems but they must be independent of each other.

The advanced cases who do not need, or want, specific treatment, or who are a public danger or nuisance should be isolated in the leper home, where they will find the necessary care and control. The least developed a country, and
the greater the number of uneducated persons, the greater will be the need for the old isolation hospital as a social, charitable and protective institution. With the progress of modern civilisation and the growth of an intelligent public the control of leprosy should be based on hygienic methods, of which early treatment is the most important.

The treatment is so simple that any medical practitioner can give it. In the public interest however, free treatment should be given in specially organised, easily accessible clinics. Smaller centres, perhaps attached to the public hospitals, should be distributed over the whole country for the treatment of ambulatory cases. These should be under the direction of the local health officers.

Completely equipped leper clinics should be established in the capital town or other convenient centres, where cases can be admitted. This central clinic should be equipped as a modern hospital with all necessary material. It should also be a centre for research on leprosy and should be directed by whole time research workers. The whole future of the leprosy problem depends on research, and the leper clinic is the most suitable place where such work can be undertaken. In the central clinic there should be facilities for teaching the health officers, private practitioners and others in diagnosis, treatment and prevention of the disease.

A complete system can thus be organised and a frontal attack made against leprosy, and this must result ultimately in the elimination of the infectious cases and with it the endemicity of the disease, as there is no other source of infection known to exist but the leper with open leprosy.

Much work is still necessary in order to find the most reliable methods of diagnosis and the ideal form of treatment, especially in the initial stages of the disease. The majority of early cases ought to be found by systematic examination of the families of manifest lepers. The practical realisation of the modern campaign against leprosy depends on the organisation of special leper clinics and dispensaries. The old leper home should be exclusively for the care and control of the abandoned cases, and will gradually disappear as a country progresses towards more hygienic and civilised conditions.