

INTERNATIONAL JOURNAL OF LEPROSY

OFFICIAL ORGAN OF THE INTERNATIONAL LEPROSY ASSOCIATION
PUBLISHED WITH THE AID OF THE
LEONARD WOOD MEMORIAL

Publication Office: 1200 - 18th St., N.W., Washington, D. C.

VOLUME 36, NUMBER 4(PART 1)

OCTOBER-DECEMBER, 1968

EDITORIALS

Editorials are written by members of the Editorial Board, and occasionally by guest editorial writers at the invitation of the Editor, and opinions expressed are those of the writers.

Leprosy Control in Some Regions of South America¹

Appraisal of the present state of forces set up to eradicate leprosy in South America, does not vary in its difficulties from the problems that arise in other countries on the basis of data quite unlike with respect to technic and collection and the temporary importance that diverse and successive governments of the countries studied give to the problem of leprosy. Important differences exist between those countries, on the one hand, that apply dynamic measures in sustained, or more or less sporadic form, with well organized field work, and countries, on the other hand, where operations are static, and prevalence is estimated through simple reporting of new cases to control organizations of the antileprosy campaign, without amplifying epidemiologic investigation or establishing good control of contacts.

From information that we have obtained recently (May-June 1968) from authorities currently in charge of the control of leprosy, and taken as final in comparison with

data compiled and published by the Seminar for the Control of Leprosy held in Belo Horizonte, Brazil in July 1958, we shall try to furnish a panorama of the progress of leprosy control in the last ten years in Argentina, Bolivia, Brazil, Ecuador, Paraguay, Uruguay, and Venezuela. Chile has an insignificant number of cases of leprosy and has not been consulted.²

As of the present date we have not yet received replies from the public health authorities of Colombia and Peru. The Guianas and Surinam have not been included in the study.

Examination of comparative data gives us a primary view of the variations in prevalence of leprosy.

In 1958 *Argentina* had 10,321 leprosy patients in a population of 20,057,700 inhabitants, i.e., a prevalence of 0.51/1,000. In December 1967, among 23,205,000 in-

²In the Isla de Pascua, Chilean territory in Polynesia, there is a closed community of 1,200 inhabitants with 48 leprosy patients. It will not be considered in the present study, although the national government maintains some control and treatment with the aid of its naval forces.

¹Guest editorial: Received for publication 24 June 1968.

habitants, the registered cases totalled 13,387, i.e., a prevalence of 0.58/1,000.

In *Bolivia* there were 885 patients in 1956. At present 1,058 are registered, corresponding with a prevalence of 0.23/1,000.

In *Brazil* the corresponding figures in 1957 are contradictory in two respects in the report from Belo Horizonte. In one of them it is noted that there were 121,314 patients, with a prevalence of 2.02/1,000, while in another part of the report reference is made to 86,520 patients, and a prevalence of 1.47/1,000. In December 1966 there were 104,362 cases on the active register, i.e., a prevalence of 1.24/1,000.

In 1955 in *Ecuador*, among 3,439,000 inhabitants, only 150 patients were registered, i.e., a prevalence of 0.04/1,000. The active dynamic campaign that has taken place in that country in recent years has raised the figure to 1,582, with a general prevalence of 0.30/1,000 and a lepromatous rate of 0.14/1,000.

In *Paraguay* 2,506 patients were known in 1958, with a prevalence of 1.43/1,000. In December 1967 the number of registered patients reached 5,682, with the high prevalence of 2.68/1,000 and a lepromatous rate of 1.9/1,000.

In *Venezuela* the report of Belo Horizonte recorded 10,405 patients, i.e., a prevalence of 1.65/1,000. Present figures are 13,682 patients and a prevalence of 1.52/1,000.

In *Uruguay* 228 patients were registered in 1958. At present there are 400.

From the data given above it will be noted that an increase has occurred in some countries, while the number has remained stationary in others and diminished in the remainder.

The increase in the figures for prevalence in Argentina and Ecuador, for example, can be attributed to dynamic campaigns that have made possible the discovery of new cases. In Ecuador, in particular, it is improbable that such a great increase is due to the endemic itself. Therefore, the increment is to be praised from a public health point of view, representing active preoccupation of the authorities in the detection of cases.

The total number of patients has risen in

all countries. In some the number has paralleled the increase in population while the prevalence has remained stationary.

The potential for the diffusion of the endemic in South America appears important. The majority of countries have reported an elevated prevalence of lepromatous cases. In general terms we can say that 50 per cent of the registered cases are lepromatous.

According to the same recent sources a good proportion of the registered cases are under control and sulfone treatment. In Argentina 6,122 out of 13,387, in Bolivia 700 out of 1,050, and in Brazil 80,281 out of 104,362, are reported as under control. In Ecuador 1,409 out of 1,582 are under control, a figure representing the highest proportion of all the countries. In Venezuela the figure is 8,083 out of 13,862. In Paraguay 64.8 per cent of the patients were under control in 1966. In Uruguay the 400 registered cases will be under treatment and control.

The great task incident to the control and treatment of patients, viz., the examination of contacts and the field projects, rely on quite unequal professional establishments, and/or paramedical personnel in the official sector, according as these are dependencies of central governments or provincial or municipal organizations. In Argentina the three dispensaries and five sanatoria are staffed with 61 physicians. In the dynamic campaigns there are 13 assigned leprologists. Bolivia has only two physician-leprologists, two public health physicians, 15 paramedical personnel, two convalescent centers, and one sanatorium. Brazil, which has 117 leprosy dispensaries and 36 sanatoria, has an ample supply of specialists. The federal government arranges for 214 leprologists and 398 public health custodians. We have not obtained references, however, to those that integrate the medical bodies of the federal provinces. Ecuador has six regional dispensaries, and three leprosy sanatoria. Eleven official and three nonofficial leprologists are registered. Paraguay has two specialized hospitals, and 13 official leprologists work in their leprosy sections. Venezuela, with 18 services in sanitary dermatology which

include leprosy among their principal responsibilities, and two leprosy sanatoria, has 33 official leprologists and 257 trained paramedical workers; the majority of these operate in the field.

Uruguay has a single center for isolation, and only one leprologist in charge of the section. Ambulatory patients are treated in general hospitals.

The present tendency in the control of leprosy in South America follows classic patterns, but with a frank trend to shift patients to dispensaries nominally designated as Dispensaries of Sanitary Dermatology, Dermatologic Centers, etc., where, among other regional dermatoses registered and treated, actually an intensive search for cases of leprosy is carried out by specialists. In other situations field units or polyvalent mobile units, concerned with the registration of all the endemic pathology of the region, are supplied with one dermatoleprologist. The sanatoria remain destined in general only for the internment of cases of unusual social responsibility, or indigence, and acute lepromatous cases too disfiguring for general hospitals, or for rehabilitation. Compulsory isolation has been abandoned in almost all countries; instead there is skillful persuasion leading to the sanatorium those who constitute a public menace because of their unwillingness to follow elementary prophylactic rules. In spite of this, it is a fact that a significant number of lepromatous patients are not under control.

On the other hand strict control is not always exercised over the customs and practices of those lepromatous patients supposedly most responsible, for whom the public health authority authorizes ambulatory treatment. In the great urban conglomerations like Buenos Aires, Rio de Janeiro, São Paulo, Caracas, etc., control is perforce limited to provision of free drugs in dispensary centers, and making pertinent clinical and bacteriologic analyses every two or three months, without knowledge of the real activity of the patient in his community. In view of the impossibility of turning to stricter measures of sanatorium or domiciliary isolation, after general acceptance of the liberal recommendations of

Belo Horizonte in 1958, major emphasis in prophylaxis has been placed on observation and preventive measures for contacts. Some countries have extended the mere examination of contacts to communities, ethnic groups or obligatory groupings, easy to examine, such as, for example, citizens of military age complying with medical requirements for entrance in the Army (it is to be noted that military service is obligatory in various countries of South America). In Venezuela, where the prevalence of leprosy has dropped slightly, 2,068,059 persons were examined, between 1953 and 1966, in dermatologic censuses designed to find cases of leprosy, besides 757,161 dermatologic examinations for certification of health.

In the field of prophylaxis some countries carry out BCG vaccination with enthusiasm. Thus, Venezuela vaccinates periodically with BCG a population 0-15 years old in leprosy-prevalent areas, by means of auxiliary medical personnel who visit the sick periodically. This vaccination is carried out with or without previous PPD test, according to the character of the area. In other countries the vaccination does not follow such rigid standards, and is practiced irregularly.

A subject much debated is that of integrating leprosy with other diseases not necessarily infectious, in the services of general hospitals. This trend, which conciliates some leprologists, based, as it is, on the presumed infrequent contagiousness of leprosy, does not find equal support everywhere. In Brazil internment is permitted, and also the treatment of leprosy patients in general hospitals, "provided it is of transitory character and subject to the judgment of competent health authorities" (*sic*). This internment is limited, however, by virtue of the existence of specialty hospitals. In the Argentine, internment of lepromatous patients in general hospitals does not take place, with some exceptions. Certain experiments have been made in the province of Chaco. In Bolivia patients will be admitted in general hospitals. In Ecuador this internment is looked upon as "precarious" (*sic*). In Paraguay, Uruguay, and Venezuela it does not appear to be practiced.

The progress of leprologic investigation, including subsidies and fellowships for investigators, with the creation of centers of investigation, etc. has little or no official support in Argentina, Ecuador, Uruguay and Paraguay. The official leprologists are not supplied in some countries with sufficient financial support to attend international meetings, and only attend in a restricted way on invitation by, and at the expense of, organizations dependent on the World Health Organization. In Brazil, in contrast, the Institute of Leprology of the National Leprosy Service (it now has a new official designation; see *THE JOURNAL* 36 (1968) 231. *Editor*) has 19 medical investigators; there are, besides, centers for study and leprologic investigation in the States of São Paulo and Paraná. The Institute of Leprology provides 12 fellowships annually for students in the final years of the courses of medicine and the biologic sciences. Venezuela has an excellent center of leprologic investigation, which, among other achievements has brought out important studies on electron microscopy.

Some countries, like Argentina, Ecuador and Venezuela, under the auspices of the Pan American Sanitary Office, have brought together the field chiefs in an itinerant seminar that took place in Caracas, Quito, and Buenos Aires in 1967, with the purpose of examining and comparing respective programs of control.

In July 1968 the same countries met again to bring discussion of their problems up to date, with emphasis on results obtained as a consequence of the administrative-public health methodology established in the Cuernavaca seminar of 1962.

We might finally summarize the present position holding for most of the countries reviewed:

1. Obligatory treatment of patients. Sulphones are furnished without cost in all the countries consulted, provided, for the most part, by UNICEF. Treatment is carried out preferentially in ambulatory facilities in urban centers, but also in rural dispensaries and in patients' homes.

2. Strict observation over contacts. Vaccination with BCG is not uniformly practiced.

3. Maintenance of internment for special cases, without resort, as far as possible, to compulsion.

4. Reasonable distribution of dispensaries in endemic areas, with a dynamic program in the area of control, which includes the employment of auxiliary physicians who visit the area periodically, distribute drugs, maintain observation of contacts, and eventually send suspected cases to dispensaries in charge of a leprologist, who, in turn, can send them to the large urban specialty centers or sanatoria for internment.³—E. D. L. JONQUIERS

³The information cited above was obtained through the courtesy of the following health authorities: **Argentina:** Dr. Carlos Maria Brusco, Director, Dirección de Lucha Dermatologica, Ayacucho 1477, Buenos Aires; **Bolivia:** Dr. Luis Gamarra G., Director, División de Enfermedades Transmisibles, La Paz; **Brazil:** Dr. Wandick del Favero, Director, Serviço Nacional de Lepra, Rua São Cristovão 1298, Rio de Janeiro; **Ecuador:** Dr. Edmundo Blum Gutierrez, Jefe, Servicio Nacional de Lepra, Dirección Nacional de Salud, Guayaquil; **Paraguay:** Dr. Luis Battilana, Vice Director, Departamento de Epidemiología y Zoonosis, Ministerio de Salud Pública y Bienestar Social, Calle Brasil esquina Pettirossi, Asunción; **Venezuela:** Dr. Jacinto Convit, Jefe, División de Dermatología Sanitaria, Ministerio de Sanidad y Asistencia Social, Edificio Catuche, Luneta a Mercedes, Caracas; **Uruguay:** Dr. Victor Rosen, Director, Instituto de Leprología, Ministerio de Salud Pública, Calle Larrañaga 1380, Montevideo.