

## LEPROSY NEWS

*Information concerning institutions, organizations, and individuals connected with leprosy work, scientific or other meetings, legislative enactments and other matters of interest.*

### THE INTERNATIONAL CONGRESS FOR THE PROTECTION AND SOCIAL REHABILITATION OF THE "LEPER"

The Sovereign Military Order of Malta held in Rome, April 16-18, 1956, an International Congress for the Defense and Social Rehabilitation of the "Leper." This congress was organized at the suggestion of M. Raoul Follereau, known throughout the world for his great efforts for the social rehabilitation of persons with leprosy. As observer of the International Leprosy Association at the congress, I present the following report.

Since the trend nowadays is for self-criticism, I humbly admit that, personally, I did not expect that the congress would be a success. It is a fact that to organize an international congress is a very difficult matter, and this was the first time that the Order of Malta had undertaken so responsible a task. Furthermore, the social rehabilitation of the victims of leprosy is a difficult subject to deal with, and one might fear that the resolutions and recommendations of the congress would not obtain unanimous approval, or that nothing new and useful would come of it. However, it is with pleasure that I can say that the congress was a great success. The Order of Malta, its organizing committee, and especially Professor Bendandi, the secretary general, merit the fullest congratulations.

Represented in the congress were the World Health Organization, the International Leprosy Association, and 51 countries, there being 250 delegates the great majority of whom were members of our Association. Certain well-documented reports and numerous other communications were presented, and the discussions were usually both interesting and lively.

The resolutions and recommendations were prepared by a committee composed of Dr. Arétas (France), Prof. Bendandi (Italy), Dr. Doull (United States), Raoul Follereau (France), Prof. Gay Prieto (Spain), Dr. Muir (United Kingdom), Rev. Fr. Perlini (Japan), and Dr. Rodriguez (Philippines). These recommendations, the text of which follows, were unanimously approved by the congress.

The International Congress for the Defense and Social Rehabilitation of the "Leper," meeting in Rome on April 16-18, 1956, on the initiative of the Sovereign Military Order of Malta, comprising 250 delegates from 51 nations; considering that leprosy is a disease of relatively low contagiousity and amenable to treatment,

#### *Resolves:*

1. (a) That patients with this affection should be treated as are those suffering from any other disease (tuberculosis, for example) without discrimination, and that in consequence all special laws and regulations should be abolished.

(b) That in countries where leprosy constitutes a social problem, a carefully planned propaganda campaign should be undertaken to promote public understanding of the true nature of leprosy in order to abolish the superstitions and prejudices associated with that disease.

2. (a) That measures should be taken for early discovery and treatment of cases. Patients should be allowed to stay at home provided that the state of the disease does not constitute a danger to their associates. This is a moral and humanitarian matter of the greatest importance.

(b) That in countries with limited medical and economic resources but high endemicity, the mass treatment campaign is the best measure of prophylaxis, since it permits reaching a considerable number of the cases and thus stopping the spread of the disease.

(c) That hospitalization should be limited to those whose conditions requires special medical or surgical treatment; and that, as with any other disease, that measure be limited to the time required for such treatment.

(d) That children should be protected from infection by all known biological means. Removal to the care of relatives or to preventoria should be resorted to only when absolutely necessary, this in order to save them from the harmful stigmatization which results from such measures.

(e) That governments be encouraged to give to the seriously disabled and incurable patients the moral, social and medical aid which they need for their protection and rehabilitation, enlisting the cooperation of various governmental departments such as social welfare, agriculture, and education, and using all of the possibilities of re-education and surgical or physiotherapeutic repair. These measures will have beneficial psychological effects of the greatest importance on both the patients and the public.

The Congress expresses its thanks to the Sovereign Military Order of Malta for having brought together, on an international level, devoted scientific and welfare workers who have as their common objective victory over leprosy.

The Congress was opened on April 15 by a preliminary meeting in the magnificent palace of the Order of Malta. On the morning of the 16th, His Holiness, Pope Pius XII gave a private audience to the delegates, during which he gave, in French, a discourse in which he anticipated the resolutions which were later adopted by the Congress. (The text of the speech follows this report.)

The delegates were welcomed by Professor Paolucci, high health consultant of the Order of Malta; by Professor Rebechini, the mayor of Rome; by a representative of the minister of foreign affairs; and by Professor Bendandi, the secretary general of the congress, whereupon the meeting was declared opened by Baron Apor, deputy chancellor of the Order of Malta.

The work sessions, which were attended with much interest and assiduity, were held in the very modern C. I. D. A. auditorium in which the secretariat, an exposition hall, and a refreshment parlor were also located. Numerous brilliant receptions enabled the delegates to become acquainted with the high dignitaries and chevaliers of the Order of Malta. The least successful feature of the congress was the simultaneous translation, which was supposed to be in the German, English, Spanish, French and Italian languages. However, we ourselves know the difficulties that have been met in this matter in our own congresses.

The following address was sent by the congress to His Holiness, Pope Pius XII:

The International Congress for the Defense and Social Rehabilitation of the "Lepers," meeting in Rome on April 16, 17 and 18, 1956, on the initiative of the Sovereign Military Order of Malta, attended by 250 delegates from 51 nations,

Wishes to convey to His Holiness, Pius XII, the homage of its deep gratitude for the highly informative speech which he delivered at the opening session, and for the great encouragement he thus gave to the work for the defense and social rehabilitation of the "lepers."

The speech of His Holiness is of world-wide significance, and the congress is convinced that it will contribute in a decisive manner to making known the true problem of leprosy.

Following the congress there was held, on the 19th of April, a preparatory meeting for the formation of an International Catholic Center for the Protection of Persons with Leprosy, at the Palace of Malta. The provisional committee consisted of Dr. Agricola (Brazil), Baron Apor (Italy), Prof. Basombrio (Argentina), Prof. Bendandi (Italy), Dr. Blanc (French Cameroons), Dr. Chaussinand (France), Dr. Contreras (Spain), Miss Dechauer (United States), R. Follereau (France), Prof. Gay Prieto (Spain), Prof. Girolami (Italy), Prof. Kimmig (Germany), Rev. Fr. Lavagnino (Holy See), Melzi d'Eril (Italy), Rev. Fr. Perlini (Japan), Dr. Rodriguez (Philippines), Dr. Salazar (Italy), and Prof. Salazar Leite (Portugal). The text of the project for the formation of this center is supplied.

—R. CHAUSSINAND

#### DISCOURSE OF THE HOLY FATHER

We cordially extend Our welcome to you, gentlemen, and are happy to receive you on the occasion of the International Congress for the Defense and Social Rehabilitation of Leprosy Patients. You can have no doubt of the keen interest which We have in the beneficent work you have already accomplished and which you wish to continue with even greater effectiveness. Our gratitude goes also to the Sovereign Military Order of Malta, which, in keeping with its charitable traditions for assistance to the sick, has undertaken this particularly important task.

Unfortunately, there are still many countries where this disease is rampant and its victims are numerous. There are over five million hansenians in the world today, of which only 400,000 are under treatment. However, medicine now has at its disposal proven remedies which are capable of checking the progress of the disease, and even of restoring health to those who can be treated in time. This Congress, which has assembled scientists and sociologists from forty countries, seems to Us particularly opportune; by pooling your knowledge and your experience you will be able to give new impetus to, and extend further, the fight against leprosy.

When one speaks of leprosy, one fact should first of all be stressed, namely, the radical change in its treatment which has taken place since 1941. That was when the first attempts were made to treat it with the sulfones (promin, sulphetrone, diasone), which proved to be much more efficacious than the chaulmoogra oil which had been used until then; but their high cost made it difficult to apply them to large numbers of patients. Significant progress was made in 1948 when the sulfone derivatives were replaced by the mother sulfone, an easily-used drug which can be employed on a large scale among the poor and less-advanced populations.

It can therefore be said today that leprosy is no longer incurable, even if we are still poorly equipped to deal with its painful manifestations and even if relapses are still possible in a certain number of cases. How can we sufficiently emphasize the importance of this achievement, especially when we recall the horror that leprosy used to inspire, and still inspires? Its antiquity (for does it not date back to pre-historic times?); the literature that has leprosy for its theme; the spectacular character of the deformities it causes when it reaches an advanced stage; the measures of social defense it gave rise to in the course of the centuries, particularly segregation, cruel and of debatable usefulness—all these things contributed and still contribute even today to maintain an almost instinctive aversion against which strong measures must be taken.

It should be pointed out first, that if leprosy is contagious it is less so than tuberculosis and does not spread easily; only 3 to 6 per cent of persons living in contact with hansenians contract the infection. This low proportion is due to the fact that certain patients do not discharge the germs, or do so only in small numbers, and also to the fact that the bacillus is largely transmitted through the skin. It is sufficient to observe the fundamental rules of hygiene to avoid, in large measure, the danger of contagion. It may be noted how seldom doctors or members of their families who live in close proximity to places of hospitalization have contracted the disease. There is, therefore, no reason to adopt against leprosy measures more severe than those employed for other contagious diseases; and [adoption of this point of view] would eliminate one of the principal causes of the dissemination of the disease, the hiding of cases. Patients treated with liberality will no longer fear the doctor as if he were a policeman, and they will come of their own accord to ask for treatment instead of hiding—instead of being permanent sources of contagion for their environment and condemning themselves to the worst consequences of the disease. The elimination of current prejudices and of coercive measures is, therefore, a condition for the success of the antileprosy campaign, and you have abundant reason for making evident the reality of things as they appear today. Everything gives reason to believe that the methods of tuberculosis prophylaxis which have been tried in Europe, based on early detection and treatment of cases, will give the same results when applied to leprosy.

A serious difficulty, however, still delays the progress of medicine in this field: numerous problems concerning the epidemiology of leprosy have yet to be solved. The bacillus of Hansen has proved difficult to study. It only affects naturally the human organism, and, in spite of the work of many scientists over more than a half century, nobody has yet succeeded in cultivating it in the laboratory; nor has it been possible to infect animals and produce in them a transmissible disease. There is also a lack of epidemiological investigations which would shed light on the biological, climatic, racial and social factors which play a role in the spread of the disease. Such work would obviously require an expensive scientific set-up and those countries where leprosy is most prevalent are unable to provide it. From the simple point of view of research, here is a considerable task of primary importance.

As for measures of direct action, it seems to be fundamental that, in each of the countries concerned, there should be provided a specialized staff trained by the most competent scientists. The campaign should then be organized in the most-affected places. Well-equipped dispensaries, stationary or mobile according to circumstances, should constitute the vanguard to locate and to treat in time the patients with benign forms of the disease, while infectious cases should be placed in sanatoria where they would be assured of all necessary care without curtailing their freedom.

As long as there was no really effective remedy, the care of hansenians required heroic dedication on the part of those who devoted themselves to this mission. How many members of religious orders, men and women, did not hesitate to enter leprosaria from which all hope seemed to have been banished, and in their turn fell



victims of the same scourge! Now, leprosy therapy is similar to that of any other chronic disease. Applied with discernment and accompanied by systematic supervision to prevent and remedy accidents, the treatment always gives appreciable results. What better incentive for the generous souls who devote themselves to this task with even more ardor today than in the past!

Along with the healing of bodies and the difficult problems which that involves, it is necessary to face the psychological and social difficulties, particularly those connected with the hospitalization of the contagious cases who, because of the slow evolution of the disease, will be kept away from their families and occupations for years. Separated as he is from society, does not the patient then have a more urgent need for moral and spiritual aid, for understanding and encouragement? Especially when there is no longer any hope of cure, should he not maintain reasons to live and suffer which human doctrines are unable to give him? Precisely because leprosy requires prolonged treatment, because it sometimes produces distressing deformities and disabilities, and also because it still inspires unjustified repulsion and fear, the patient needs all his spiritual resources. He wants to understand the meaning of the ordeal to which he has been subjected, and to bear it not with cold stoicism or blind resignation but with generous courage, the secret of which lies only in a sound religious faith.

As for you, gentlemen, it is your ambition to bring to this fight against leprosy all your energies, all the resources of your minds and your hearts. Let well-directed propaganda make known to the public at large the means which medicine has at its disposal today to carry on this fight, and its true nature, and also the urgent need for more energetic and extensive action. Today, as in the past, Catholic missions are devoting themselves whole-heartedly to this task, either directly by maintaining medical, dispensary and hospital services, or indirectly through scientific research and the most diverse kinds of social assistance.

When he returns to ordinary life, the hansenian who is recovering encounters difficulties of readjustment, and sometimes his body bears the stigmata of the suffering he has endured. Consequently, there remains an important task in the field of social assistance, and also in repairing the sequelae of the disease by means of plastic surgery and orthopedics. Undoubtedly there is here a question of organization and technique, but still more a matter of human sympathy and sincere love. Here again we want to believe that Catholics who have been trained in the school of a master, one who teaches charity as his first precept, will vie with one another in ingenuity and fervor, possibly through an "International Catholic Committee," to ease the sufferings of their afflicted brothers and to give them more serenity and inward happiness.

A very significant episode in the Bible illustrates, by the cure of a man stricken with leprosy, the wonderful roundabout ways in which Divine Providence attracts men to the truth. Naamen, the Syrian, who did not know the true God, comes to the prophet Elisha and begs to be cured. Reluctantly obeying the prophet's instructions he bathes in the Jordan, recovers his health, and recognizes that "there is no God in all the earth, if it be not the God of Israel" (4 Kings 5, 15). Divine intervention is not limited to the healing of the body; it penetrates more deeply, into the soul, delivering it from error and showing the road leading to the light. When Jesus on his travels met men stricken with leprosy he could not remain deaf to their supplications. "Lord, if thou wilt, thou canst heal me," said one of them (Matthew 8, 2). Jesus, putting forth his hand, touched him and "immediately his leprosy was healed" (Matthew 8, 3).

We, too, gentlemen, hope that this same cry, repeated still today by millions of men, will arouse a great response of compassion. Let us utilize to the utmost, to suppress one of mankind's particularly distressing scourges, the wonderful conquests of modern science; but let us with even more solicitude remember the immortal souls

seeking after truth and the life everlasting. Like those with leprosy of whom the Gospel speaks, they aspire to meet Jesus, the only Savior, through the charity of men of today who go out to proclaim his name and become sincere witnesses of his power and love.

In invoking the favors of Heaven upon you, and upon all who are consecrated to the service of sufferers from leprosy, to the best of their abilities and affections, We wish you the greatest success in your efforts and in testimony wholeheartedly extend to you Our paternal Apostolic Benediction.

PROJECT FOR AN INTERNATIONAL CATHOLIC CENTER FOR THE  
PROTECTION OF THE PERSONS WITH LEPROSY

The undersigned, members of the Congress for the Defense and Rehabilitation of Persons with Leprosy convened by the Sovereign Military Order of Malta, heeding the suggestions of the Holy Father which concerns the need of an international organization to cooperate with Christian spirit in the welfare of persons with leprosy throughout the world and thus extend the functions of the Church, an institution actually unsurpassed by any in the number of patients it has cared for; taking into account the praiseworthy initiative of the Order, the organizer of the congress, and of its expressed desire to assist the aforementioned organization; and, lastly, desiring to cooperate especially in the meritorious work in this matter of the Congregación de Propaganda Fide.

*Resolve* to propose to the said Order the formation of an association in accordance with the following provisions:

*First:* Under the high patronage of the Sovereign Military Order of Malta there is formed an International Catholic Committee for the Welfare of the Person with Leprosy.

*Second:* The purpose of the Committee is to work with Christian spirit and full humanitarian solidarity for the welfare of leprosy patients from the moral, social and medical points of view; for the defense of their rights; for the care of their families; and for the reintegration into society of the cured patients and those who have the benign forms of the disease.

*Third:* The Committee shall seek the aid of an ecclesiastical advisor.

*Fourth:* The seat of the Committee shall be in the city of Rome, in a place to be provided by the Order of Malta.

*Fifth:* The association shall consist of: (a) associate members, (b) expert members, and (c) a permanent Secretariat.

*Sixth:* The associate members comprise signatures of this present Act. Thereafter, the Secretariat shall designate as associate members, physician leprologists and nonprofessional persons and institutions interested in leprosy work who are in conformity with the present statute, and who have applied for membership. Applications for membership shall be forwarded to the Secretariat through an expert member.

*Seventh:* The associate members shall work for the purpose of this institution, particularly the aims set forth in Article 2. The expert members shall acquaint themselves with the current needs and problems in the areas in which they work, as regards the medical, material, social and moral problems with respect to the care of persons with leprosy, and they shall lend to the Committee all the aid within their power.

*Eighth:* The expert members shall be associates who are so designated in accordance with these statutes, not to exceed ten in number. For this designation it is required that they be leprologist physicians of recognized experience and com-

petence, and that they be prominently identified with the objectives set forth in Article 2, and that they must come from different regions of the world.

*Ninth:* The expert members shall serve for five years and may be re-elected, provided that the terms of four members appointed at this meeting shall be six, seven, eight and nine years, the individuals concerned to be determined by lot. Re-election shall apply only to one-half of the members.

*Tenth:* Appointed for the first time as expert members are: Drs.....

*Eleventh:* Six months before the expiration of the term of an expert member the Secretariat shall notify the other experts, requiring them to nominate a substitute, one who belongs to or comes from the same region as his predecessor, or from another region not represented, or from a recognized center of leprosy research. The election shall be by a majority of votes, and to this end the Secretariat shall, if necessary, inform the expert members of the votes cast and call for further votations with respect to the same candidates. The same procedure shall be followed in cases of death, disability, or resignation of an expert.

*Twelfth:* The functions of the expert members shall be: (a) to advise the Secretariat whenever that is required; (b) to refer to the Secretariat the technical, economic, social or moral problems which come to their knowledge, and particularly those which may be proposed to them by associate members; (c) to collaborate, and to seek collaboration, in the activities of the Committee; and (d) to act on the questions which may be presented to them by associate members and to endeavor within their means to solve the problems which the latter present to them.

*Thirteenth:* The permanent Secretariat shall be composed of three persons appointed by the Order of Malta for a term of five years; and one of them, elected by a majority of votes, shall act as chairman. The same majority of votes shall decide questions which may come before them.

*Fourteenth:* The permanent Secretariat shall have the duty and the authority to perform all acts of whatever nature which it may consider advisable for the fulfillment of the purposes of the Committee. The Secretariat shall represent the Committee, jointly with the expert members when these are present; it shall approve all legal contracts and judicial acts which it considers advisable; it shall endeavor to obtain and supply medicaments and other commodities for persons with leprosy, their families, and other persons made needy because of leprosy; it shall put out the publications of the Committee; it shall maintain relations with the Secretariat of leprosy of the Congregación de Propaganda Fide, with the purpose of helping it; and it shall likewise maintain relations with international and national organizations and institutions engaged in antileprosy and welfare activities, cooperating in their work and endeavoring to assure that these organizations shall conform to Christian norms. The Secretariat shall seek the advice of the experts in all things in their competence, especially in technical questions.

*Fifteenth:* The present resolution shall take effect immediately upon approval by the Sovereign Military Order of Malta. The expert members designated in Article 10 shall be authorized to accept modifications which the said Order may consider desirable, within the essence and substance of this act. In the future the expert members shall be authorized to introduce, by majority vote, in agreement with the said Order, such amendments as may be found necessary within the said limits.

[No names appear in Article 10 of the Spanish version of which this is a translation, nor has it been learned whether or not the Order of Malta has approved these proposals.—EDITOR.]

## ANTILEPROSY WORK IN NORTHERN NIGERIA

Much of the available information about antileprosy activities in Nigeria pertains to its southern sections, particularly the Eastern Region.<sup>1</sup> The missions which have been there for many years started the leprosy work, and they still carry on a good deal of it, but the government has long since taken over-all charge of the campaign throughout the country. Relatively little has been written about the Northern Region.

The extent of the problem in Nigeria as a whole is evident from the following passage from a recent report to the Executive Board of UNICEF, the figures provided by the Nigerian government.

"The goal of 195,000 patients under treatment by 1956 would bring treatment to 22 per cent of the estimated 900,000 leprosy cases in Nigeria (500,000 in the Northern Region and 200,000 each in the East and West). As frequently happens when treatment facilities are increased, more cases come to light. [At the end of 1953] the number of leprosy cases was estimated at 500,000."

Northern Nigeria, a large Muslim district which is practically a different country, was a relatively closed area until fairly recently.<sup>2</sup> There has been an account [THE JOURNAL 21 (1953) 93] of how finally, in 1936, the Sudan Interior Mission represented by Dr. Albert D. Helser was granted permission to go in there provided they would build one leprosy colony for every five other mission stations. By 1952, as shown in a tabulation by Bland several "settlements" and other places had been established by various missions. Because of the Muslim fatalism toward disease and lack of fear of leprosy contagion (Bland), there was lacking—according to Cochrane [*Leprosy Review* 24 (1953) 33-51], who traveled about the region in 1952—an important feature of the set-up that existed in the southern regions, i. e., the system of voluntary local segregation villages. No such voluntary village existed at the time of his visit, and Dr. C. M. Ross, who at that time had only recently entered the government service to supervise the leprosy work in the region, thought it would be some years before such centers could be established. Cochrane made no mention of outpatient clinics.

Since then, we are informed by Dr. Ross, the policy has been to develop a system of outpatient clinics as treatment centers with or without segregation facilities, and there are now more than 400 of them.

The high prevalence of the disease, the dense population with scarcity of farm land, the lack of funds to subsidize patients unable to support themselves by farming, and insufficient supervision to make segregation efficient, made segregation for all open cases impossible. The advantageous features of the revised policy, which advocates outpatient treatment for all types of leprosy when segregation is impracticable,

<sup>1</sup> BLAND, R. H. THE JOURNAL 20 (1952) 175; DAVEY, T. F. Mem. VI Congr. Internac. Leprol., 1953; Madrid, 1954, p. 1216; GARRETT, A. S., Lep. Rev. 27 (1956) 54 (this last a report of five years mass treatment with DDS).

<sup>2</sup> The people of this region have been spoken of by a recent observer as being Muslim—"as far as is possible for so effervescent a people to follow the rules of so ascetic a religion."



have been the possibility of determining accurately the prevalence of leprosy by survey, a strong desire for treatment on the part of the patients, cooperation from them and local authorities in regular attendance and the provision of supervisory staff, and the presentation of early cases and children at outpatient clinics.

In November 1955 Mr. S. M. Keeny, director of the Asia Regional Office of UNICEF, visited Kaduna, the capital of Northern Nigeria, partly to observe as an interested layman the method of treating leprosy in the field work, for which UNICEF was supplying the DDS used. We are permitted to quote from that report, which is informal and full of local color.<sup>3</sup>

In the rural health work, generally, it was learned, the foreign staff was one-third below strength, and trained local staff still more scarce; literacy, even in Arabic, is low. "The one public health programme that seemed to be advancing without qualification was leprosy," the prevalence of which was estimated to be 500,000 cases in North Nigeria alone, with 16 million population (3%). There were at the time three full-time leprosy control officers, who are especially trained laymen responsible for the immediate management and clinical supervision of the work. Dr. Ross, "the force behind the campaign" and the only medical officer, was away at the time.

[The whole basis of leprosy work in the Northern Region is that of joint action of the government and all other agencies concerned. Consequently, the government control staff has necessarily been small; but arrangements have been made for two more leprosy control officers and another medical officer to assist Dr. Ross. The scheme of organization consists, at the top level, of a Regional Leprosy Advisory Board which represents all interest—the government, missions, and voluntary agencies. Each province has its Provincial Leprosy Committee, again representative of all interests, which meets regularly and reviews the activities of the Leprosy Control Service in that province. The travel expenses of all members are met by the government, and also those of voluntary agency workers who visit clinics. The grants-in-aid to the leprosaria have not been decreased because of the increase of the government service; on the contrary, the fact that UNICEF has been supplying the sulfone has released money for the building up of provincial settlements.—D. J. M. Mack.]

The first leprosy institution visited by Mr. Keeny was a mission settlement (the name not recalled).

"When we arrived, about 75 [patients] living at the Mission were sitting in five black rows rubbing one another's backs with chaulmoogra oil to a rousing tune, which we learned was a Hausa translation of the hymn 'There'll be no sorrow *There*.' There wasn't much here either. . . . Miss Lewcey explained that the chaulmoogra oil rubbed on was 'just an extra' to the treatment with sulphones from UNICEF. It might do the leprosy good and, even if it didn't, it was fine for the skin; besides, the exercise was good for the fingers, which tend to become claw-like if they are not used actively."

<sup>3</sup> Mr. Keeny's report of his brief visit was not intended to be a definitive study of the situation. Shortly after it was issued Dr. D. J. M. MacKenzie wrote to Mr. Keeny supplying certain data the essential features of which have been incorporated in this note. The draft of the note was sent to Dr. Ross, and he has supplied further information, which has been incorporated.

About one-fourth of the patients in the colony were discharged each year, the visitor was told. The score was not so good with the thousand or so attending "branch centres"; that would depend on the regularity with which they come for their medicine.

The next visit was to a rural clinic at Rurunku, about 25 miles from Kaduna, on the weekly treatment day. The clinic place, a temporary one provided—as is obligatory under the system—by the villagers themselves, was a thatched, one-room hut wholly open on one side, built at a meeting of paths, two nearby shade trees serving as waiting places. "Later there would be a 'permanent' building with mud walls and maybe three rooms: one for treatments, one for examination, and a waiting room for the women with babies."

"The clinic was to open at twelve, but we arrived at 10:30 to allow time for checking the attendance register with the individual cards kept by Dr. Ross at his office to be annotated each time he visits the clinic to study the progress of the patients.

"Ordinarily the weekly clinic is run by a Nigerian young man, with two years of high school education. He is called, without irony, Mallam—'the learned one'; he is one of a very few thousand who have reached high school at all. Besides, he has had a special training course of three months. Relatively, he *is* learned; and, with his bicycle, fountain pen, wrist watch, dark glasses, and registers, he makes a brave figure among the villagers.

"The first villagers to arrive were those [women and girls] who had had something to sell. . . .to the crowd that was gathering. Under the men's tree the barber, who turns up at all such gatherings, was at work. . . . Then came the musicians—two of them, with their long drums of wood with hide stretched over the ends, played with a curved wooden stick and the flat of the left hand. They took their places on the ground under a third shade tree. . . .

"By this time the crowd had gathered, coming along sandy paths. . . . from the villages hidden behind the elephant grass, which grows here thick and eight feet tall. We were told they walked up to seven miles, but not much more; for the clinic refuses to take those from further away lest they be absent too often and thus lose the benefits of regular treatment. If they do take them, it is temporarily until a new station can be started near their homes."

The musicians began to play, the crowd grouped around them, and after some hesitation because of the presence of a foreigner a young girl of nine or ten was pushed to the center and danced. Other girls followed in turn, each trying to do credit to her village. The party continued—the musicians slowing down occasionally until someone contributed a shilling—and "went on to greater heights with bigger and bigger girls dancing at the centre," their bosoms at first chastely draped. "Every one of the dancers had leprosy!"

"Promptly at noon came the call for treatment to begin [and] the drummers softened their strokes lest the people miss hearing their names." The women were called first, as they had to get back home for domestic duties. The Chief's assistant called each one by name and village, and the register was checked to see the doctor's recommendation for dosage.

The treatment began with one pill a week, the dose slowly increased

under supervision. The patient, being handed her pills, "tossed them into her mouth and washed them down with a gourdful of water from a calabashful brought from the nearest village by volunteer girls who dress for the occasion with at least one string of 'gold' beads."

[The dosage employed in these clinics is given in some detail in a Letter to the Editor (this issue).—C. M. R.]

As the patients went by, at a rate of four or five a minute unless the *mallam* stopped them to inquire about an absentee, the control officer, consulting the doctor's recommendation, would occasionally call out, "Soon to be discharged," and that would be translated to the patient concerned. The visitor was astonished to note that sometimes the patient's face did not light up at the news: discharge would end a weekly social event that had become a custom and was enjoyed! After the giving out of the medicine came the registering of new cases, each of them introduced by a regular patient from the same village, and finally the giving out of the discharge certificates that were due.

There had been about 150 attendances at that clinic, with only a dozen absences. About the latter, when an infectious patient absents himself the *mallam* sends word to him to come regularly, and if that is not effective the *mallam* goes to his village (on a day when one of his three clinics is not meeting) and brings pressure to bear through the village headman. Most of the patients, it is said, come regularly; the clinics are held weekly on local market days.

[In the majority of villages where outpatient clinics are held at the Local Authority Dispensary it has been found that market day is the one when there is best attendance. Market day is the social event of the week, and to combine marketing and treatment saves for many a day of journeying.]

[About 300 patients had registered at this particular clinic, and more than 100 early tuberculoid cases had been discharged after almost three years treatment. It is not likely that the number of patients here will increase greatly, as the number of discharges equals the number of new admissions. A survey made in December 1953 showed that practically all the leprosy patients within the Turunku district were attending the clinic, and certainly all of the lepromatous cases.

[It should be mentioned that, because this clinic had been in operation for three years, Mr. Keeny did not see the depressed, sickly, ulcer-infected group of patients that he would have seen there years earlier. This change, happily, is now common in this region; we take much satisfaction in the fact that in many districts our patients are no longer a dejected, sickly crowd but resemble any group of patients attending a hospital outpatient department or a bush dispensary.—C. M. R.]

An older clinic was visited at Gaden Gaya, where the building was more substantial; otherwise the picture was much the same as at Turunku. The usual paper work preceded the giving out of the medicine, and registration of new cases was done afterward. One small girl was so frightened she had to be dragged in, but only because she had never seen a white man before. The attendance was more than 500, but that was an unusually bad week because there was a 20% absentism—a headache for the local chief.

Several mission centers were visited, to get the point of view of those who have been running leprosaria. They have many competent people strategically situated throughout the North, whose activities include the supervision of perhaps one-half of the treatment centers. Among other things it is said that,

"To a doctor who has given the best years of his life to treating stubborn cases, with drugs and surgery, the new approach is likely to seem superficial and optimistic, especially if he understands the intention to be to do nothing but issue pills to outpatients. . . . Also, he is likely to emphasize the danger of severe reactions to the drug, although we were unable to get evidence that anybody had died from the relatively low doses given. Further, he may point out that serious cases may continue to have live bacilli for as much as five or six years, although it is disputed whether they continue to be a serious danger for so long."

The people of Northern Nigeria, it is indicated, are getting treatment-conscious, for the number of patients has increased in five years from 6,500 to 60,000. The cost of the drug, as supplied, was less than one-half cent per patient per week, or—on the basis of three years average treatment, plus a margin—only a dollar to cure a case. (The great majority, according to all reports, are tuberculoid.)

[There is a great deal to the outpatient treatment and the new approach described which is not superficial—more than is to be seen on the surface. Surveys played a part in finding the prevalence of leprosy in the districts surrounding the clinics, and in assessing the response of the patient population to the treatment provided. For the first eighteen months of the treatment careful and constant supervision was given by a nursing sister, with frequent visits from a medical officer and leprosy control officer. Experimental schemes of dosage were tried, and suitable schedules were evolved for general routine treatment (as related in the Letter to the Editor, referred to).—C. M. R.]

#### MASS TREATMENT WITH DDS BY INJECTION IN THE FRENCH AFRICAN FEDERATIONS<sup>1</sup>

Medical authorities in the territories of French West Africa and French Equatorial Africa have for several years been introducing the use of intramuscular injections of DDS, suspended in media designed to delay the absorption of the drug in order to reduce the number of injections per month necessary for the treatment of patients. Thus DDS treatment could be extended on a large scale to patients in the countryside who could not be contacted in ordinary outpatient clinics or at home with the frequency necessary to render oral administration effective.

Following a request on behalf of French Equatorial Africa for international assistance from WHO and UNICEF to extend this type of activity in that federation, the WHO Regional Office for Africa in November 1954 convened at Leopoldville an informal meeting of leprologists and

<sup>1</sup> This note is based on a report by Dr. Mario Giaquinto, head of the Section of Endemo-epidemic diseases at WHO headquarters in Geneva, as approved by that office.—EDITOR.



public health administrators of various African countries who were present there on the occasion of the WHO Regional Committee meeting. This informal meeting was held to review, with WHO medical officers of that Regional Office and of Headquarters at Geneva, available information about this method of therapy and to discuss the expediency of extending it. Following that meeting, the WHO medical officer responsible for the coordination of leprosy control activities at WHO Headquarters visited the Institut Marchoux (formerly the Central Institute of Leprology) in Bamako, French West Africa, to collect information on the results obtained and experience gained from the use of the injection method in that country. We have pleasure in summarizing the high-lights of the information collected.

After a preliminary study by Schneider and Mlle Rayroux in Paris in 1949, Laviron and associates at Bamako began experiments in 1950 to determine what vehicle might be used in practical work. The decision was based on the results of frequent estimations of the sulfone concentration in the blood and elimination in the urine, the purpose being to find a suspension medium that would give reasonably uniform blood concentration curves over a reasonably long period of time. The records at Bamako contain large numbers of individual case charts with these data. Chaulmoogra ethyl esters proved to be the best vehicle tested, giving on the whole fairly uniform and prolonged sulfonemia curves over two-week periods with a dose of 1.25 gm. of DDS in 5 cc. of the esters; in contrast, arachis (peanut) oil allowed the release of the DDS relatively rapidly, with high blood levels in the first few days and unsatisfactorily low levels thereafter.

Clinical trials were first made at the leprosy hospital connected with the Institut Marchoux, and then in 1952 the treatment was extended to field conditions. In that year a total of 1,224 patients were so treated in French West Africa; in 1953 the number was 5,799 (about 90,000 injections), and by mid-1954 it was 20,462 (over 210,000 injections). The results of this work have convinced the workers of the value of this *retard* preparation of DDS, injected every 15 days, as regards both therapeutic efficacy and practical applicability for mass treatment campaigns. Plans were being made for extending this treatment more widely, especially in French Equatorial Africa. In fact, it was stated at the Leopoldville meeting that about 47,000 patients had been put under it at that time.

Experiments with new preparations were still under way at Bamako. Among other things tried was the 0.02 per cent agar-saline (*eau gélosée*) vehicle proposed and used by Floch, which was said at the time to be promising.

One question discussed was the danger of reactions to, or other ill effects from, the injection treatment. Experience during the experimental and pilot trial periods had shown that there was no real danger on that score. Such effects, it was stated, seem to be some seven times less frequent than with oral treatment, which is regarded as suitable only for patients under close supervision. This is because of the slower and more uniform absorption of the injected suspension, without the abrupt peaks that occur with oral treatment. In consequence, there is no need to administer iron, although patients in obviously bad condition were not considered eligible. The medical staff and the people themselves were satisfied with the results being obtained, the latter accepting the treatment with enthusiasm. Increasing numbers of patients were coming forward voluntarily. Laviron is quoted as saying, at the Léopoldville meeting:

Les indigènes adorent les piqûres. Ils se lassent des comprimés. C'est là un argument qui compte.

Dr. Giaquinto's report contains information about the leprosy control system in the French African Federations.

The Institut Marchoux is a federal organization for leprosy research, consisting of laboratories and a leprosy hospital and village. It is attached to the Service General d'Hygiène Mobile et Prophylaxie (SGHMP), which is charged with the antileprosy campaign in the field. One of the centers of the service is located near the Institut. The latter not only controls the antileprosy campaign carried on by SGHMP, but also supplies technical advice and supervision of the antileprosy activities of all other units under the local Direction of Public Health. The Institut receives regular reports on special forms and by telegraph as required, analyses the data received, and gives technical advice.

The territories covered by SGHMP, in which there are about 8,000,000 inhabitants, are divided into sectors which are the tactical units for the control of endemic diseases generally. There are 25 principal sectors, and 16 accessory sectors with lesser activities, all of which are concerned with leprosy among other things. There are 29 European and 35 African doctors in charge of the campaign, with mobile teams which visit an average of 3,000,000 persons annually in continuous surveys for the endemic diseases covered by the Service, detecting cases and giving mass treatment. From 1946 to 1952 there were found 121,000 persons with leprosy, and in 1954 there were 145,000 cases registered, including those found by the other services of the General Direction of Health.

#### A LEPROMIN PRODUCTION CENTER IN PARIS

Following a recommendation of the Société de Pathologie exotique, the director of health of the Ministry of Overseas France sent a circular to all of the health services of the territories concerned, announcing that the leprosy laboratory of the Institut Pasteur in Paris was prepared to make a standardized lepromin for all countries of the French Union. Apparently this announcement included a suggestion that tissue for the purpose be sent in, for Chaussinand (see p. 239) has reported that a large number of lepromatous nodules had been received from numerous overseas territories, from the Antilles to Indo-China. Certain foreign countries have also indicated a desire to participate in this lepromin "pool."

For the sending of nodules, it is recommended that the surfaces of heavily bacillated nodules, preferably in untreated cases, be carefully cleaned with alcohol (without iodine or mercurochrome); and that after removal they be sealed in glass tubes, or in special flasks to be supplied, and autoclaved at 120°C for 15 minutes. Alternatively the containers, thoroughly immersed, may be boiled in water for 1½ hours. Properly packed, they are then to be sent by surface mail to the Institut Pasteur. [Nothing is said of subcutaneous nodules, which are often especially good material for the purpose, or of the fact that flaccid earlobes are liable to be especially poor material.]

The leprosy laboratory will prepare the lepromin according to the classical method as modified by Wade<sup>1</sup> and send it out to the different participating centers in quantities proportionate to the weights of the nodules received. It will be put up in ampules of two sizes, containing 2 and 10 doses; rubber-stoppered bottles (*i. e.*, "serum bottles")

<sup>1</sup> WHO Expert Committee on Leprosy, First Report. WHO Tech. Rep. Ser. 71, 1953, 23-24.

will not be used because of the danger of contaminating the contents through repeated punctures to withdraw the content.

#### LEPROSY AND THE WHO BOARD

The Executive Board of the World Health Organization, in one of its regular meetings held in Geneva last January, dealt with an agenda of some sixty items. The most important items, according to the *WHO Chronicle*, were the WHO program and budget for 1957, and the resumption of active membership by the U. S. S. R. Among the other matters particularly mentioned was "increasing efforts to control leprosy." On that subject the *Chronicle* reported:

##### LARGE-SCALE LEPROSY-CONTROL CAMPAIGNS

"The control of leprosy as a public health measure—both as regards new control methods and treatment—has reached a stage where considerable progress can now be made," declared one member of the Executive Board. Since 1950, WHO has been concerned with the problem of leprosy. A committee of experts convened in 1952 drew attention to the efficacy of the sulfones in the treatment of this disease and to the need for a new approach in its control:

"The more effective modern treatment giving better chances of recovery calls for a reconsideration of existing practices regarding compulsory isolation. While the rule of isolation of infectious cases may still be retained, the method of applying the rule may be modified so that the patient may be attracted to come forward earlier for treatment. . . .

"The change would bring the practice regarding leprosy more into line with that used in tuberculosis, a much more infectious and more often fatal disease, and contribute to the disappearance of the unreasoning horror attached to leprosy."<sup>1</sup>

In recent years WHO has published information on the legislation on leprosy which is in force in different countries, provided expert advice and consultant services to nine countries, and participated in control campaigns in seven others.

It is estimated that there are 10 to 12 million persons suffering from leprosy in the world. The number of patients seeking care has increased in recent years, thanks to the encouraging results of more humane and more effective treatment. For example, in French Equatorial Africa, plans are being made to treat, with WHO aid, 125,000 patients in 1956, as compared with 80,000 in 1955; in Nigeria, the number is expected to be 195,000, as against 80,000 in 1954.

The Board emphasized that much remains to be done, and it recommended to the Health Assembly that the regional directors be encouraged to step up leprosy-control efforts and to undertake new programmes.<sup>2</sup>

<sup>1</sup>WHO Expert Committee on Leprosy, First Report. WHO Tech. Rep. Ser. 71, 1953, 9-10.

<sup>2</sup>A press release on this subject, put out during the time of the Board meeting, has been supplied by Dr. José N. Rodríguez, who attended. The foregoing statement contains the main features covered by the other.—EDITOR.