

## WAYS FOR THE PRACTICAL ELIMINATION OF LEPROSY IN THE ROSTOV OBLAST<sup>1</sup>

BY P. S. GREBENNIKOV

Although the epidemiology of leprosy is as yet insufficiently studied, and although leprologists still do not have at their disposal highly specific and quickly effective medical remedies, our leprosy organization can nevertheless achieve in the very near future the practical elimination of this disease. Experience shows that considerable success can be achieved by systematically carrying out thorough prophylactic measures in areas where leprosy is prevalent. A great part in this is played by active immuno-prophylaxis of the disease.

All the efforts of leprologists should be directed to the search for new and better methods and means of waging the fight against leprosy, and to the application of modern scientific information and the experience of the foremost leprosy institutions, both Soviet and foreign.

Unfortunately little has been published in modern literature about the problems of organizing the fight against leprosy and of its practical elimination. Among foreign leprologists only L. Rogers, in 1955, has presented a "Plan for decreasing the incidence of disease and for its final eradication in British possessions." But all the measures he proposes boil down to the isolation of the highly contagious patients, who in his opinion amount to not more than 20 per cent, and to the treatment of persons who have had contact with these patients. N. M. Baluyev, in an article entitled "Plan for the fight against leprosy and new prophylactic methods" (1946), sees the possibility of eliminating leprosy by the setting up of leprosy prophylaxis centers, which however have not justified themselves in practice. T. N. Velichko, in papers on the system of dispensary treatment of patients and its organizational structure (1957) has described measures which were already firmly established in daily practice in leprosy institutions.

The question of the practical elimination of leprosy in the Russian Federation (RSFSR) has already come to a head. One must now indicate concrete ways and means for the realization of this aim, incorporate them in a plan for the future, and stipulate a definite time limit. In our opinion, the leprosaria of the North Caucasus and Zagorsk

---

<sup>1</sup>Translation, supplied by Dr. J. Ross Innes, of an article from *Collected Works in Leprology and Dermatology (Sbornik Nauchnykh Rabot po Leprologii i Dermatologii)* No. 12. Rostov University Press, 1959, pp. 81-85. Information as to the location of the author is not available.

In supplying the translations of this and the other reprinted article in this issue, Dr. Ross Innes stated that he had checked all of the articles on leprosy in the recent issue of the periodical concerned and chose for translation the two which seemed most informative about activities with respect to leprosy control in Russia.—EDITOR.

Leprosy Clinic can achieve the practical elimination of leprosy in their areas in 15-20 years.

The Rostov leprosarium, from the first days of its existence entering into business-like contact with local health authorities, and with their help having established daily epidemiologic control over the foci of leprosy in its area, has in 10 years (1947-1956) halved, in absolute figures, the yearly total of new patients, and in relative figures (in relation to the number of people examined) has achieved a tenfold reduction. It has reduced from 73 to 42 per cent the proportion of individuals suffering from the lepromatous type among new patients, and halved (from 4.7 to 2.3 years) the average period from the beginning of the disease to the registration of the patient. The percentage of patients with a disease history of less than a year rose during this period from 18 to 35 per cent.

As a result of successful treatment, the number of patients under dispensary care reached 127, or 44 per cent of the general total of patients in Rostov oblast.<sup>2</sup> This has made the Rostov leprosarium a leprosy institution of a new type—a leprosarium-dispensary. The statistics allow one to suppose that the practical elimination of leprosy in Rostov oblast can be achieved in the next 15 years. Leprosy is not the first infectious disease the elimination of which is on the agenda. Soviet medicine has great and convincing experience in the elimination of many infectious diseases, including bubonic plague, cholera, smallpox, and typhoid fever.

The incidence of leprosy can also be considerably lowered, and then eliminated altogether. Proof of this is furnished by the experience of the Latvian and Estonian Republics, and of European countries—Norway, Iceland, and others—which have rid themselves of leprosy only as a result of the complete isolation of patients and thorough control of infective foci. In pre-revolutionary times the campaign against leprosy in the Baltic States was conducted in a more organized and consistent way than in the rest of Imperial Russia, and therefore the spread of the disease stopped earlier, and now it is near to being completely eliminated. The first successes of the Rostov leprosarium, achieved during ten years of work, also convince us of the correctness of the method of the complete isolation of the patients and the thorough control of infective foci. The distribution of small foci in pockets in Rostov oblast is conducive to the success of the antileprosy campaign; in the oblast 90 per cent of the small foci are concentrated in 8 of the 64 regions.

Taking this into account, the leprosarium is conducting particularly intensive work in the Azov and 7 other unfortunate regions, and is carrying out a general examination of all populated localities where cases

<sup>2</sup>“Oblast” is an administrative unit. In this instance the population is just under 3 million.—J.R.I.

of the disease have ever been registered. Over ten years, the average annual number of patients re-registered has decreased by at least four times. The elimination of leprosy in Rostov oblast is also facilitated by a firmly-established leprosy service: a combination of the resources of the leprosarium and those of the local health authority and their network of oblast, town, regional and district medical-prophylactic institutions. In this service the leprosarium plays the part of a center of organization and methods. Together with oblast medical institutions it exercises direction and control over the measures to be taken to combat leprosy. All this work is drawn up and directed within the framework of annual, concrete, and complex plans.

The solution of the leprosy problem is also helped by the location of the leprosarium in such a great administrative and scientific center as Rostov-on-Don. This makes it possible to enlist the active cooperation of many clinics and theoretic research departments of the Rostov Medical Institute and to acquaint the Institute's students, and students of intermediate medical schools, with the clinical treatment of leprosy. The proximity of the oblast medical institutions—the health department, the skin and venereal diseases dispensary, and others—make it possible for the leprosarium to solve, quickly and effectively, questions of organization and methods arising in the course of work.

Taking into account the above, we think that the elimination of leprosy in Rostov oblast can be achieved in the following ways:

1. By work in the small foci. This includes 100 per cent examination (clinical, bacteriologic, and immunologic) of people who have had contact with leprosy patients and are on the records of the leprosarium. All those reacting negatively to lepromin (Mitsuda) must achieve positive reactivity with the aid of Stefansky lepromin, BCG vaccine, and other measures. This is an important feature in the active prevention of leprosy.

2. By carrying out large-scale preventive examinations of the population in accordance with the long-term plan. These examinations should be carried out, in the main, by local medical workers acquainted with the clinical treatment of leprosy with the organizational and consultative help of the leprosarium. The methods of carrying out mass examinations should be constantly improved.

3. By subsequent implementation in the area of continuous epidemiologic control—measures against willful absenteeism on the part of the patients, control over the movements of those who have been in contact with patients and those receiving dispensary treatment, efficient organization of outpatient treatment, and so on.

4. By taking appropriate epidemiologic measures in the leprosarium, with separate accommodation for patients with active and dormant forms of the disease.

5. By complex, varied, and strictly individualized treatment of the

patients. It is also an important disciplinary factor, since the patient's hope for a successful recovery and a quick return home makes him take his stay in the leprosarium seriously.

6. By carrying out educational work in hygiene among the population in places where leprosy is prevalent, and also among patients. The population at large, if correctly informed about the problems of the fight against leprosy, can be of invaluable service to the leprosarium in its work in the foci of infection. Conscientiousness on the part of patients can make completely unnecessary such measures as isolation, high fences, checking-in booths at entrances, a guard system, etc.

7. By close cooperation with other Soviet leprosaria, by constant liaison and mutual exchange of information on problems connected with the movement of patients and those who have been in contact with them.

8. By the development of scientific research work in the treatment and prevention of leprosy, in particular the study of the methods put forward by lecturer A. A. Maksimova (1956) for changing lepromin-negative persons among leprosy contacts into lepromin-positive reactors by vaccination with Stefansky lepromin (suspension of the bacilli of rat leprosy).

9. The decisive factors in the elimination of leprosy in Rostov oblast are the conditions of Soviet reality common to all areas of the USSR: the increased material, political, and cultural standard of living of the population. Leprosy is not a very contagious infection, so that, of the great number of people having contact with patients, only a few contract the disease. The fate of an infected person depends to a large extent on the conditions in which he lives. Continuous improvement in material and cultural standards of living, a matter to which the Communist Party and the Soviet Government pay daily and urgent attention, is the guarantee of success in the campaign against leprosy in our country.

We have noted only the principal ways in which we reckon to achieve the practical elimination of leprosy in Rostov oblast. We do not say that leprosy will be absolutely eliminated in Rostov oblast in 15 years. If, at the end of this period, one or two cases still appear sometimes, instead of the annual average of 25 as during the period 1947-1951, then we shall consider that our aim has been achieved and our expenditure of effort and money justified.

Set out below are the basic points in the long-term plan for the practical elimination of leprosy in Rostov oblast.

1. Regular and thorough examination of the small foci of infection with an obligatory 100 per cent examination of contacts.

2. To carry out in the 1958-1960 period additional epidemiologic examinations of the small foci of leprosy with unexposed sources of infection in the regions where leprosy is most prevalent (Azov, Nek-

linovskiy, Taganrog, Tselinsk, Martynovsk, Konstantinovsk, Semikarakorsk, Aleksandrovsk, Veselovsk). To achieve the complete registration of people who have been in contact with leprosy cases in all small foci of the area. With this aim in view, to make a careful study of each new small focus, with the help of regional and town hygiene-epidemiologic centers according to a specially worked-out program.

3. To carry out in 1958-1960 and in 1963-1965 repeated bacteriologic examinations of leprosy contacts.

4. To complete a check of lepromin reactions among leprosy contacts in 1959, and no later than 1960 to make all lepromin-negative cases lepromin-positive.

5. In the near future to complete the BCG vaccination and revaccination of all leprosy contacts among children and juveniles on the records of the leprosarium, and in the future to vaccinate with BCG all new lots of children who have had contact with the disease as the cases arise. With the help of tuberculosis institutions to carry out general vaccination and revaccination of children in the Azov, Neklinovskiy, Tagaganrog, Tselinsk and Martynovsk regions.

6. By 1960 to have carried out single examinations of all inhabitants of those places in Rostov oblast where cases of leprosy have been registered, without regard to their number or the length of the disease history. To carry out, once every two to three years, repeated examinations in those places where there are epidemiologic indications for this to be done.

7. To exercise persistent medical control over leprosy contacts leaving Rostov oblast, at the same time attempting to ensure that similar control is exercised by other leprosaria. This will prevent the possible transfer of infection into Rostov oblast from other areas.

8. Continuously to improve the organization and methods of the direction of work, to help the specialized and general medical network, controlling its activities in carrying out current epidemiologic control.

9. By means of 5-day seminars at the leprosarium, to acquaint all doctors entering Rostov oblast medical establishments with the clinical treatment and diagnosis of leprosy.

10. To publish, in a large edition, a practical textbook for medical workers on the clinical treatment of leprosy, its diagnosis, and the organization of the campaign against it; also a popular brochure or leaflet on leprosy for people living in endemic areas.