LEPROSY CONTROL IN NORTHERN NIGERIA

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In 1952 experiments were made in the Katsina and Zaria Provinces of the Northern Region in acquiring necessary information for leprosy control policy suitable to the region. In the Igabi district of the Zaria Province, a pilot scheme of out-patient clinics attached to the Sleeping Sickness Dispensary, Riga Chickun, was arranged to determine certain facts:

1. The response of the general population to treatment made available in their own district, and within easy reach of the villages.

2. The high incidence of leprosy in the district.

3. A scheme of dosage suitable for out-patient treatment that would enable a dispensary attendant to dispense routine treatment under minimum supervision from a Medical Officer.

There was evidence that leprosy was highly endemic in the Northern Region; the majority of leprosy patients segregated in Settlements and Segregation Villages were of a severe lepromatous type, and each village had its own quota of burnt-out cases. Problems relating to treatment were observed in several settlements, e.g. patients suffering from progressive leprosy fever, who did not seem to tolerate DDS well. Most of the Settlements had adopted a standard scheme of treatment suggested by a meeting arranged by the British Empire Leprosy Relief Association of leprosy workers in London on 17th September, 1951. In these schemes twice weekly treatment was recommended as routine treatment, and there was little distinction made in the treatment of mild tuberculoid and severe lepromatous cases.

The district of Igabi had a population of approximately 30,000 people, and could be kept under close medical supervision during the experiment. The District Head was first approached and the details of the scheme explained to him, he was most co-operative and invited the patients to attend the Riga Chukin Dispensary for examination and treatment. The response was slow at first, and then quickly hundreds of patients appeared; many of them had walked ten miles or more from different parts of the district. New clinics were therefore opened throughout the district, and in a short time six clinics were established.

In less than one year's time it was found that in five of the

largest villages at which clinics were held patients attended as follows:

Village	Total population	Leprosy patients attending clinics	Response incidence
Riga Chukin ...	2,449	113	4.6
Rikoko	928	71	7.6
T. Sabuwa	773	53	6.8
Igabi	2,769	134	4.8
T. Safuwa	814	43	4.9

During the first six months very few lepromatous cases were seen, and some concern was felt at their absence; as the clinics became popular they came forward and it was most interesting to notice their relationship to the tuberculoid cases, and especially to compounds and families in which were several leprosy children.

Treatment was given by mouth once weekly. Tablets of 100 mg. DDS were used. As there had been no complication in the treatment of tuberculoid cases by DDS, the dosage was given as follows: one tablet weekly for six weeks, followed by an increase of one tablet every four weeks until four tablets had been given. Tuberculoid cases who were fit and responded well were after a period given five tablets and then six tablets weekly as a maximum dose. Children under 12 years were given half this dosage.

Lepromatous cases, especially L3 with throat and eye involment, were carefully treated; they were given an initial dose of half a tablet for six weeks, and then if there was no sign of reaction or leprosy fever they were increased to one tablet and kept on this dose for a further six weeks. The majority of lepromatous cases were then increased to two tablets for a further six weeks, and after that period their dose was increased by one tablet every six weeks until a maximum dose of four tablets was given. Several lepromatous cases could not tolerate more than one tablet, and one very severe lepromatous boy had to be reduced to half a tablet. Cases such as these responded well to small doses of half a tablet of DDS and their dosage was not increased until they showed signs of improvement and felt better.

It was found in the early stages of treatment of these severe lepromatous cases that half a tablet was effective and that a rapid increase of dosage gave rise to erythema nodosum, noisy breathing, swollen hands and feet, a general toxic feverish appearance and possibly some eye complications. However it was also found that after 18 months of careful treatment L3 cases could tolerate doses of four tablets weekly, and in two years' time doses compared to those given to tuberculoid cases.

During 1953 and 1954 three areas with a total population of 5,704 were surveyed and 390 cases of leprosy were found. These areas included three large villages and their surrounding districts of scattered hamlets.

Interesting features of the survey were:—

Leprosy children aged 1-14 years found	168
Young adults aged 15-14 years found	86
Adults, 25 years and over found	126
Lepromatous cases found by survey	42

An encouraging feature was that no new highly infective lepromatous cases were found who had not registered for treatment at the clinic.

In 1955 approximately 540 patients were discharged after two years 9 months treatment. Forty per cent of these were children who had been admitted with one or two tuberculoid patches which had completely resolved before discharge. No lepromatous cases were discharged.

It was demonstrated by this experiment that patients in the Northern Region will attend for treament regularly if treatment is made available to them in their own districts. An accurate incidence of 68.4 per thousand population was discovered. It was found that all cases of leprosy could be treated successfully by a careful use of DDS, and that weekly doses of 50 mg. could be given with good results in leprosy cases showing signs of persistent leprosy fever.

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