

**ACWORTH LEPROSY HOSPITAL SOCIETY FOR RESEARCH,
REHABILITATION AND EDUCATION IN LEPROSY, WADALA,
BOMBAY-400 031**

Proceedings of the Seventh "Workshop on Leprosy".

The Seventh "Workshop on Leprosy" was held on 7 March, 1979, under the auspices of this Society at the Acworth Leprosy Hospital, Wadala, Bombay-400 031. Dr N. H. Antia, Trustee of the Foundation for Medical Research was the chairman. The following reports were presented.

1. *Prevalence of Leprosy among In patients in General Hospitals—
A Preliminary Survey in Bombay*

R. Ganapati, C. R. Revankar, S. S. Pandya, and M. Y. Acharekar.

It is our experience that a significant proportion of the adult population is not available for examination during leprosy surveys. It is in this group that a high prevalence of leprosy and a high percentage of infectious cases are found. A screening programme of 11,505 adult patients in large general and TB hospitals was undertaken. This revealed 102 leprosy cases with a prevalence rate of 8.9 per 1000. Ten were smear positive (prevalence of smear positive cases was 0.9 per 1000). One of these (ESIS hospital) showed the highest prevalence rate of 26.5 per 1000. No grade III (WHO grading) deformity patients were detected. This study indicates that such surveys provide a quick and convenient method of screening adult populations for leprosy.

Dr Antia—How many cases were known to the hospital doctors?

What was their attitude?

Dr Ganapati—None of them. 78 cases out of 102 were untreated. An assessment of knowledge about leprosy of hospital staff was attempted; but it could not be carried out because of resistance from hospital administrators.

Mr Lahiri— Is it possible to examine the adults at their place of work?

Dr Ganapati— The existing employment rules prevent us from conducting such surveys in factories because a person found to have leprosy (particularly of the infectious type) is likely to lose his job.

2. *Leprosy in Preschool Age—A Preliminary Report*

C. R. Revankar, P. R. Dewarkar, Moolchand Singh and R. Ganapati.

In this report, figures from two urban field projects and from clinics were analysed to determine the clinical epidemiological features of leprosy among preschool age group (1–5 years).

The examination of 4235 preschool children in the slums revealed 20 with leprosy (prevalence of 4.7 per 1000), the overall prevalence rate in the population of these slums being 19 per 1000.

A separate analysis of 511 cases from various clinics revealed that 5 were smear positive cases. 19% cases belonged to N?L type (BT to BL type). One child was typed as having lepromatous leprosy. The remaining had indeterminate or tuberculoid types of disease.

232 (45%) children were derived from multiple case families; 126 (25%) had an infectious case in the family. It is highly probable therefore that intrafamilial infection is very important in preschool children in endemic areas.

3. *Leprosy case detection through health education.*

V. V. Dongre, R. Ganapati, C. R. Revankar and K. R. Bankar.

The “total” population surveys are never total since as indicated above, the male adult population is incompletely covered even after repeated visits. An attempt was therefore made to enlarge case detection rate by repeated health education programmes, in the area under study in two strata of society from high and low socio-economic groups. In the low socio-economic slum population of 20,000, repeated health education revealed 120 leprosy cases (prevalence rate 6 per 1000) with 13 smear positive cases.

Dr. Antia—Have you done any comparison regarding cost-effectiveness in health education programmes and total population surveys as was done in the Pogiri and Aska projects?

Dr Dongre—This study is in progress and total population survey is still to be carried out and thus cost effectiveness of this project is not yet analysed.

4. *Dapsone injection therapy:*

K. K. Koticha, P. S. Juwatkar, and M. H. Shah.

It is now common knowledge that only a small percentage of patients attending leprosy treatment centres regularly, actually consume their dapsone tablets with any degree of regularity. To ensure therapeutic dapsone concentration in the tissues, a parenteral dapsone preparation was used. Twenty-four

lepomatous cases who had not shown improvement even after 4 years of treatment were selected for this trial. The trial is continuing with 375 mg/5 ml/injection giving a level equivalent to 50 mg DDS/day/orally. This was repeated after 7th day. Urine was collected at zero hour and 7th day just before the next injection.

5. *Multiple drug therapy.*

K. K. Koticha *et al.*

Untreated (confirmed by urine examination for DDS) lepomatous patients from the Acworth Leprosy Hospital OPD were examined clinically and bacteriologically and divided into four groups for this trial. Skin biopsies were sent both for mouse foot pad inoculation and *in vitro* study of viability by uptake of labelled DOPA and thymidine.

Group I— Rifamycin 1500 mg daily in 3 divided doses for 2 days followed by injection DADDS every month.

Group II— Rifamycin 600 mg single dose for 15 days followed by injection DADDS monthly.

Group III—Injection DADDS monthly.

Group IV—Injection DADDS monthly and oral 50 mg daily.

Group V— Rifamycin 600 mg daily for one month and injection DDS every month.

6. *Correlative histological in vitro electro-physiological studies in leprosy and other acrodystrophic neuropathies.*

S. S. Pandya, R. G. Chulawala and D. K. Manghani.

Electrophysiological and histological findings in sural nerve biopsies in 6 patients with plantar ulcers of non-leprous etiology are compared and contrasted with those in different types of leprosy. In nerves from the former group, there were marked abnormalities in the myelinated fibres—large and small, which appear to be important in the etiopathogenesis of plantar ulceration. The unmyelinated fibre activity was relatively unimpaired. In the leprosy nerves, on the other hand, both myelinated and unmyelinated fibre potentials were commonly altered and these abnormalities were not specific for the type of disease.

7. *Serum lysozyme in leprosy—a preliminary report.*

S. S. Naik and S. Gurnani.

Lysozyme enzyme (muramidase) is of considerable interest for its antimicrobial activity.

Serum lysozyme has been found elevated in conditions characterized histologically by epithelioid cells e.g. tuberculosis and Crohn's disease. This preliminary report of 94 serum samples from leprosy patients showed that serum lysozyme values were elevated in the following order ENL/Lepromatous/Intermediate / Tuberculoid / untreated / treated with DDS, when compared with normal controls.