

## Reports.

AN ACCOUNT OF THE MEDICAL WORK FOR 1929 OF THE  
MISSION TO LEPERS' HOSPITAL, PURULIA, INDIA.

**M**ANY improvements have taken place this year ; the chief ones being :—

### *Enlargement of the Laboratory.*

1. This has been doubled in size, and is being still further enlarged, making it possible to deal efficiently with the rapidly increasing number of patients. A binocular microscope has been added to the equipment of the laboratory.

2. A hospital ward has been built for the accommodation of cases of active phthisis. This enables us to keep these cases separate from the others.

3. Three new wards have been built, and two others are in course of construction, each to accommodate twelve patients. Of these one has been set aside for cases of suspected or latent tuberculosis.

4. A mortuary was opened early in the year. This will give us the facility to do post-mortem research as soon as time allows of it being taken up.

5. Two dressing stations (male and female) now allow ulcer cases to be attended to apart from the hospital.

6. A second English nursing sister has been added to the staff for the work of supervising the special treatment.

*Medical work as a whole* has gone on as usual.

A larger number of major operations have been performed (twelve) chiefly amputations, trachiotomies and operations for cataract. The minor operations, 346 in number, are mainly amputations of fingers and toes and incisions of abscesses (chiefly due to necrosing bone tissue.)

Of the diseases which commonly prevent the improvement of lepers, and which often help the leprosy to get a further hold, tuberculosis, malaria, and hookworm have been found to play an important part here. With increased facilities it is becoming possible to deal with these more thoroughly.

The death rate has proved slightly higher than that for last year, but is still markedly lower than that of any other year preceding. The chief causes of death were pulmonary tuberculosis, dysenteries, diarrhœas, and gangrenous ulceration of feet with consequent absorption of toxins. Of the 53 deaths occurring, only 13 were among treated cases.

Twenty-four deaths occurred in cases admitted in an almost moribund condition.

*Special Leprosy Work.*

There has been a marked increase in the number of out-patients, last year's figures being more than doubled. Many of the patients are females, and even children are now being brought.

Throughout this year injections have been given once weekly instead of twice as formerly, following the example of some notable leper asylums. This has proved advantageous in more than one way :—

- (a) Patients tolerate larger doses.
- (b) Longer time is given for complete absorption of oil.
- (c) There is time for more individual attention to patients.

The total number of injections given this year was 27,476.

During the year the following laboratory examinations were done :—

- Kahn test, 421.
- Erythrocyte sedimentation test, 1,311.
- Bacteriological examinations, 75.
- Examination of fœces for hookworm, 336.
- Examination of blood for malaria, 48.
- Miscellaneous examinations, 7.

*Experimental and Research Work.*

Creosoted hydnocarpus oil is still the routine treatment. Experimental and research work has been restricted owing to lack of staff, but some new remedies have been tried.

(1) Alepol and sodium gynocardate (Aqueous solution) have been injected subcutaneously in selected cases.

30 were given alepol.

20 were given sodium gynocardate.

The results obtained were not superior to those obtained with hydnocarpus oil, and when given in a strength sufficient to be effective were more painful than the oil.

(2) Ethyl ester of hydnocarpus oil combined with 4 per cent. doubly distilled creosote is being tried in selected cases. It is intended to continue this until sufficient data have been collected to show its value as compared with our routine treatment.

(3) During the past  $1\frac{3}{4}$  years an experiment has been carried out with the treatment of children up to 8 years old by daily inunction of (a) ethyl ester of hydnocarpus oil and  $\frac{1}{4}$  per cent. iodine.

- (b) Hydnocarpus oil and  $\frac{1}{4}$  per cent. iodine. As a result, it has been found out that,
  - (i) Oil is of little or no value as sole form of treatment.
  - (ii) Ester inunction on children over 5 years is not sufficient as sole form of treatment.
  - (iii) Ester inunction on children *under* 5 years is an adequate means of rendering them symptom free. The dosage is one drachm.

It is proposed to adopt this latter as a routine treatment for children under 5. A brief summary of the experiment is appended.

Ester inunction experiment.		
Children treated totalled 19.		
Ages from 9 months to 8 years.		
Symptom free.	5	} 19
Improved.	7	
Unchanged (all over 5 years).	6	
Relapsed after cessation of treatment, 8 years old.	1	

(4) An experiment is being carried out under the direction of DR. E. MUIR (of the School of Tropical Medicine, Calcutta). Thyroid extract is being administered orally in conjunction with injection of hydnocarpus oil. This experiment is still in progress. In order to regulate the dosage, observations are being made on the rate of sedimentation of the erythrocytes.

Thanks are due to all those who have so kindly helped to make possible the advances recorded this year. Particularly are they due to H. E. Sir Hugh Stephenson, Governor of this Province, whose gift enabled us to extend our laboratory ; and to Mr. Berthoud, the Commissioner of Chota Nagpur, for our new microscope.

The following table gives briefly the results of treatment for the year under review.

RESULTS OF TREATMENT FOR 1929.

	Total under treatment	Different types under treatment.					Results.					
		A1	A2	B1	B2	B3	Symptom free.	* Much improved.	Improved.	Same.	Worse.	Died.
In-patients ..	588	82	181	34	186	105	8	76	348	131	12	13
Out-patients	476	138	92	109	111	29	6	68	247	139	16	—
<b>Total ..</b>	<b>1,064</b>	<b>220</b>	<b>273</b>	<b>143</b>	<b>297</b>	<b>131</b>	<b>14</b>	<b>144</b>	<b>595</b>	<b>270</b>	<b>28</b>	<b>13</b>

## REMARKS.

× These patients have remained bacteriologically negative for a year, and have been free from all active symptoms.

• Several patients in this column might have been included in the symptom free groups had they not taken their discharge or left before the prescribed observation period had expired.

+ These figures consist chiefly of patients who have been attending for a short time, and so have not begun to show improvement worth noting. Several of the patients in this column and in the "worse" column have been handicapped by being the victims of other chronic diseases also.

(We are indebted to the Mission to Lepers for permission to publish this report.—EDITOR).