# WORLD HEALTH ORGANIZATION



# ORGANISATION MONDIALE DE LA SANTÉ

SECOND MEETING ON STRATEGY OF LEPROSY CONTROL

EM/SND.MTG.STR.LEP.CNT./5.2

Mogadishu, 30 October - 5 November 1982

19 October 1982

Agenda Item 5

AN EPIDEMIOLOGICAL STUDY IN GHARBIA

GOVERNORATE

bу

Dr R. Mohareb \*

<sup>\*</sup>Director, Leprosy Department, Ministry of
Health, Cairo, Egypt

# DERMATOLOGICAL SURVEY FOR DETECTION AND TREATMENT OF SKIN AFFECTIONS IN GHARBIA GOVERNORATE, EGYPT

#### 1. INTRODUCTION

The idea of the project originated at a meeting in the Regional Office in Alexandria during a discussion of the problem of Leprosy in Egypt. It was obvious that our data about prevalence are far from being accurate. Our health problems are so numerous that Leprosy is considered of second priority. The Ministry of Health has to deal with Bilharziasis, Infective Diseases, Fevers, Tuberculosis, Malaria, Eye Diseases, etc. It was made clear that the World Health Organization (WHO) was ready to assist in financing an epidemiological study of the disease in Egypt.

Gharbia Governorate was selected for the following reasons:

- 1. Relatively high incidence of Leprosy in some of its villages. Registered cases are 1,224 while its population is 2,400,000.
- 2. It is 100 Kilometers from Cairo with good facilities for transportation.
- 3. Health Services are available and include school health centers, Maternity and Child Welfare centers, General Hospitals and Rural Health Centers, University Hospital with good facilities.

#### 2. SCHEME OF ACTION

Although the project is basically a survey for Leprosy, it was not labelled as such, for fear of serious repercussions. It was therefore called a survey for identification and treatment of skin diseases. Reassessment of the original project revealed that implementing it on a provincial scale was too ambitious a goal. From the operational, manpower and financial standpoints, the original project was beyond

available resources Thus Mahalet Marhoum was selected as the starting area for action. It is a small village with 25,000 inhabitants and a health center.

# 2.1 Purpose of the project

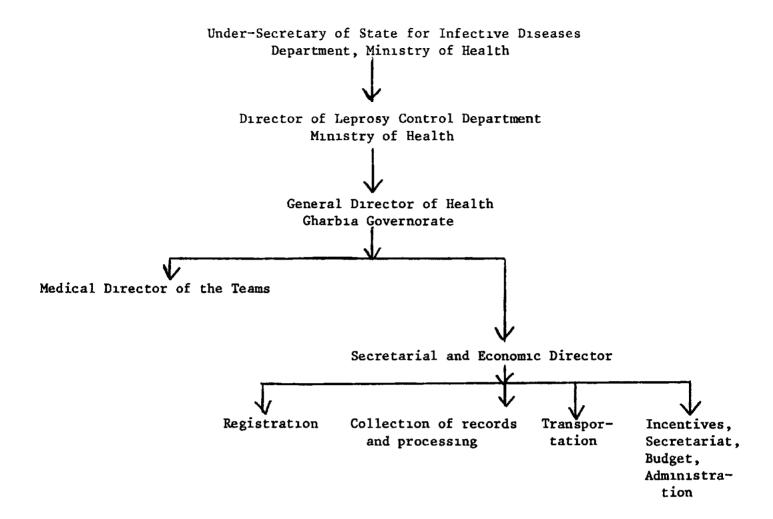
- 1. It is mainly to determine and evaluate the size of the problem of Leprosy, active case finding, classification, mapping and treatment of all cases discovered.
- 2. Discovering, recording and treating all skin diseases occurring in the area of the survey.
- 3. A socio-economic study is planned to evaluate the role played by environmental and cultural factors on the prevalence and type of the disease as well as other skin diseases, discovered during the survey.

# 2.2 Manpower

All personnel were recruited from among Gharbia public health workers and include the following:

- 14 dermatologists
- 2 pharmacists
- 10 laboratory workers
- 10 nurses
- 10 social workers
- 10 secretarial workers

The organization of the project is represented in the following organizational chart:



The project's Advisory Board includes professors from Cairo University, Gharbia University and specialists from the Ministry of Health.

Fixed team: comprises one of each of the following:

- 1. Dermatologist with special training in leprosy
- 2. Social worker
- 3. Nurse
- 4. Laboratory technician
- 5. Clerk
- 6. Orderly.

It is equipped with a small dispensary and a laboratory for bacteriological examination.

<u>Hobile team</u>: is formed in the same way as the fixed team; additionally, it is equipped with a Toyota Landcruiser and a driver

# 2.3 Training

Training sessions have been conducted for both medical and paramedical personnel, (10 days for medical and 14 days for paramedical). The courses were completed at the end of December 1981. A campaign for health education was carried out to create awareness among the population of the area to be screened.

# 2.4 Site

The project started on 1 January 1982 at Mahalet Marhoom, which is a village with a population of 25,000 and which is known to have the highest incidence of Leprosy in Gharbia Governorate. Then, the project shifted to Shendelat, a nearby village with a population of about 6,000.

#### 3. SCREENING

# 3.1 Case Detection

All inhabitants of the village were visited according to mapping and to registration records prepared beforehand. Suspected Leprosy cases were referred to the fixed unit to have complete medical and bacteriological examination. Cases of skin diseases were examined, registered and treated by the mobile team. A social study is carried out and a detailed sheet is filled in.

### 3.2 Case Recording

Detailed Case Record Forms were designed with the assistance of the Department of Statistics of the Ministry of Health and with the OMSLEP Form in mind. A simplified Case Record Form was developed for skin diseases.

# 3.3 Case follow-up

Leprosy patients are seen every week to receive medication. Besides, a formal evaluation of progress is undertaken after 6, 12, 18 and 24 months from the date of detection of the case and recorded on the Case Record Forms. After the second year of the survey, follow-up and treatment will be conducted by the local leprosy clinics. Case records and follow-up forms have already been coded and are regularly sent to be computerized by the Ministry of Health Department concerned.

# 3.4 Drug Treatment

The regimen applied is as follows:

### (a) Multibacillary

Rifampicin 600 mg/day for six months followed by Rifampicin 600 mg

per month for 24 months, plus Clofazimine 300 mg monthly + daily 50 mg plus

Dapsone 100 mgm daily for 2 years.

### (b) Paucibacillary

Rifampicin 600 mg daily for 6 weeks plus Dapsone 100 mg/day for 6 months.

#### 4. CONTRIBUTORS

The WHO Regional Office in Alexandria was the first contributor to this project, both technically and financially and US\$ 25,000 were allocated for 2 Toyota cars, microscopes and other equipment.

The Father Damien Foundation participated by donating US\$ 20,000 Ciba-Geigy and Lepetit supplied the Rifampicin and Lamprene and were both of great help during all stages of the project. Ciba-Geigy prepared all printed material, and L.E. 5,000 were also provided by both companies Caritas, Egypt, contributed by helping in training and acting as the Executing Agency of the Damien Foundation. It is understood that all activities of the project are carried out by local and central governmental health workers and making use of the provincial health centers.

#### 5. FINANCIAL CONSIDERATIONS

The monthly expenditure of the project is about L.E. 3,000. With the assistance of WHO, Ciba-Geigy and Lepetit, and the contribution from the Gharbia Health Directorate, the project will be financed until end 1983.

#### 6. PRELIMINARY RESULTS

From January to September 1982, the results of screening of the population in both Mahalet Marhoom and Shendelat villages are shown in the following table

Total population of 2 villages	31986
Number examined	22897
Drop-outs	9089
Detected Leprosy Cases	97
Prevalence	4.27%
Detected dermatological cases	692

# Classification of Detected Leprosy Cases

Prevalence	4.27 per thousand
TOTAL	97 Cases
Lepromatous	14 Cases
Borderline	77 Cases
Tuberculoid	5 Cases
Undetermined	1 Case

#### 7. DISCUSSION

For the first time, a complete survey is carried out with the purpose of screening all the population in a locality for leprosy and skin diseases. The prevalence of 4.27% is quite high, as it was believed not to exceed 1 - 2 % in any area in Egypt.

A problem which faced the teams was the high percentage of people absent from their homes (about 9089 persons) so the visits had to be repeated and the fixed team still remains in Mahalet Marhoom for the purpose of following the treatment of detected cases, as well as locating as many as possible of the persons absent from their residence at the time of previous visits by the mobile teams.

The computer analysis of the results is expected to yield valuable information on Leprosy and skin diseases in the areas surveyed.

The second phase of the project is the screening of two villages having the same number of population and the same standard of living, but not known as endemic foci for leprosy.

The purposes of this second phase are two-fold:

 to verify if the results obtained in Mahalet Marhoom and Shendelat apply equally to other areas of Gharbia Governorate or otherwise (significance of the difference between the two areas); 2 to identify the prevalence of leprosy in an area selected at random where endemic leprosy is not reported

The experience gained during this project will be of great value in the future implementation of similar but more simplified epidemiological studies in the different Governorates of Egypt.

# SKIN DISEASES DETECTED AMONG 22897 PERSONS IN MAHALET MARHOOM AND SHENDELAT VILLAGES FROM JANUARY TO SEPTEMBER 1982

Disease	<u>No</u>	Disease	No
Impetigo	120	Intertrigo	7
Acne vulgarıs	19	Vitiligo	2 <b>6</b>
Warts	6	Chickenpox	10
Herpes Simplex	2	Allergic reactions	13
Scables	70	Monilia	2
Psoriasis	19	Alopecia ariata	8
Lichen planus	11	Pellagra	1
Ring worm scalp	26	P.R.P.	1
T. circinata	41	Dry Seborrhea	2
T. versicolor	46	Pediculosis	3
Pityriasis	56	Ichthyosis	1
P. rosea	19	Onychomycosis	1
Urticaria	59	Neurodermatitis	20
Eczematous dermatitis	71	Lupus erythematous	5
Cellulitis	1	Erythema multiformis	4
Tinea crurıs	10	Miscellaneous	16

Total : 692