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An Approach to Urban Leprosy Control

The Greater Madras Leprosy Treatment and Health Education Scheme (Greamaltes) Sponsored by the German Leprosy Relief Association

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Introduction

Gremaltes is in tune with the National Leprosy Control Programme. The designers of this have categorized the Indian population into two groups—the rural and the urban population—and have prescribed two different methods to cover these two different groups. While the rural population is to be covered by the S.E.T. pattern (Survey, Education and Treatment) with leprosy control units and S.E.T. centres, the urban population is expected to be covered by Health Education.

It is against this background the Greater Madras Leprosy Treatment and Health Education Scheme ventured to take up the urban work with slight modifications, additions and improvements on the basic scheme. According to the census figures the population of Madras City comes to three million. Gremaltes visualized an attack on the leprosy problem from three angles:

(1) Slums, with an approximate 30% of the total population, with intensive mass survey.
(2) School children, who constitute another 25 % of the total population, with a yearly skin check-up.
(3) The rest of the population, with Health Education.

A flashback of the history of the slums in Madras reveals a steady increase in the number of slums side by side with the development of the city. The slums which were only 189 in 1933 shot up to 306 in 1953 and 548 in 1961. From 1961 onwards the State Housing Board took over the re-housing attempts from the Corporation and now the Slum Clearance Board is in the field. Their attempts are showing fruitful results and their work is laudable. The 1971 census still shows about 600 slums, in which live approximately 700,000 people of the city population. Naturally, the bad housing, overcrowding, ignorance, poverty and unhygienic conditions form a breeding place for a host of infectious diseases, leprosy being no exception. Inferential evidence suggests a high prevalence of leprosy in the slums, but the greatest obstacle to leprosy control is that the patients who are living in the slums have to go to hospital for treatment. It is a fact from experience that slum dwellers never care to avail themselves of the treatment facilities of a nearby hospital, because of factors like long distance, loss

of a day's work, etc. For a successful campaign of leprosy treatment in the slum areas, the medicines have to be taken to the slums and treatment provided then and there, with health education in leprosy carried out simultaneously with treatment. This intensive double faceted programme of treatment and health education will make people of the slums leprosy conscious. If this consciousness is developed among the people of the slums, cases of leprosy will come voluntarily for treatment. Elsewhere, population leprosy survey of the city will not be feasible for practical reasons, but through intensive Health Education it is hoped to bring out the major number of old and new cases for treatment.

Organization Set-up

The objective of the project, as explained earlier, is to control leprosy in the city of Madras in the most efficient way. In order to achieve this, case finding methods have been planned so as to detect the maximum number of cases as early as possible. Special stress is laid upon case holding. Maximum benefit is derived from the use of trained Paramedical Workers to replace medical personnel. Procedures in the project are standardized, and recording and reporting are limited to what is essential for supervision, periodical evaluation and assessment.

Structurally, the project is divided into peripheral field units, supervised, coordinated and controlled by the Headquarters.

Area of operation

The project envisages the overall coverage of the Madras City population with the three tier programme of Slum Survey, School Survey and Health Education within a period of 6 years. For organizational and operational efficiency, the city was divided into North and South. Then realizing the density of the slums we selected North Madras, comprising 63 Municipal divisions, having an approximate population of 16 lakhs (1.6 million) as our initial area of operation.

Field units

The initial project area of North Madras was divided into five convenient zones, each zone having an approximately equal population. Zones are divided into control units manned by two trained paramedical workers, one being the senior. Wherever local circumstances make it necessary the size of the control unit is adjusted to the local geographical conditions, leprosy prevalence, and population density.

Each paramedical worker living in the area of the unit is responsible for case finding among the population of the area, and for treatment, follow-up and further management of the cases detected.

Clinics

The clinics are held once a week but treatment is given to each patient for a period of 2 to 4 weeks. No treatment for other common diseases is given but patients needing it are referred to a general hospital. In the clinic the worker is supervised by the Medical Officer and the senior staff members who visit the clinic regularly from the Headquarters. Utmost importance is given to the maintenance of a satisfactory attendance rate. The worker, who must always maintain good relationships with the patients, contacts the absentees, and stresses the need for regular and systematic treatment.

Headquarters

Planning, supervision and evaluation of the campaign are done at the Headquarters. A well established laboratory for diagnostic investigations is under the guidance of a well trained laboratory technician.

Statistics

Records and reporting are simplified. The basis of the statistics is the individual treatment card, supported by the following records: contact survey cards, school survey forms and bacteriological report forms. Workers finalize their individual reports and present the same to the senior worker in the headquarters each week. Senior workers consolidate the report of the project.

Physiotherapy unit

A physiotherapy technician visits the clinics at regular intervals and assesses the disabilities and deformities of the patients. The patients are educated in general about the care of anaesthetic limbs. The technician also contacts the patients individually and gives advice to them. Patients who need special physiotherapy treatment are referred to Dayasadan Centre. Arrangements are being made to refer patients for surgical treatment to Christian Medical College Hospital, Vellore.

Laboratory

A laboratory technician visits the peripheral clinics and takes smears for diagnostic purposes from all infectious cases, and also cases with doubtful classification. Smears taken in the field are brought to laboratory for bacteriological investigation and the results are recorded in a book and in the bacteriological report form, which once again is transcribed by the zonal worker on to the treatment card. Smears are taken twice a year for infectious cases. Since the pressure of work is increasing, arrangements are being made that in future leprosy auxiliary workers will take the smear and send it to the headquarters laboratory.

Methodology and Accomplishments

The principles of leprosy control campaigns are laid down in the reports of the meetings of World Health Organization Expert Committee on Leprosy. They were also clearly expressed at the International Leprosy Congress at Tokyo 1958, e.g. "from the epidemiological point of view it is more advantageous to reduce infectiousness in many patients than to eliminate infectiousness in few". The first development is the recognition of out-patient treatment clinics as the principal centre for attack on leprosy. Therefore in India according to the generally accepted Survey, Education and Treatment (S.E.T.) pattern, first priority is given to treatment facilities, and is immediately accompanied by an intensive educational campaign, gradually increasing by intensive surveys. Furthermore, the programme is aimed at using the most efficient ways of case finding and achieving maximum case holding.

Case Finding

Case finding mainly relies on health education, the examination of school children, contact surveys and mass surveys of selected areas. Locally, these four

methods have been made the standard methods of case detection. On the starting of a clinic in the zonal area after careful reconnaisance of the area and collection of demographic data, an intensive education campaign is launched with film shows and group meetings with leaders of the slums, describing the main symptoms of leprosy and announcing the availability of the treatment. The paramedical worker following this visits slums in his area and talks to prominent leaders and elders. The personal contacts of the worker during his survey visits spread the message further. In this way the great majority of persons learn to recognize the symptoms and will come forward voluntarily for examination and treatment. Experience shows that patients motivated and coming voluntarily for registration are more regular for treatment than cases detected by other methods. Since the start of the project up till the end of August 1973, out of 4360 known cases 1370 (32%) cases have come voluntarily. This is an indication that there is an increase in leprosy consciousness among the population. Whenever the worker visits the area for survey, or for contacting absentees, people do come in large numbers and request him to examine them. At the beginning of the project, workers observed that all persons who reported voluntarily were suffering from leprosy, but now in old unit areas out of ten such persons, only two were suffering from leprosy. Here is another indication as to the awareness of leprosy in the population.

Mass Survey

Intensive house to house examination of slum areas has been carried out. Out of 183,471 population enumerated, 153,615 have been examined with an examination rate of 83%, and 2900 cases detected with a leprosy rate of 19 per thousand.

School Survey

The school population is an easily accessible part of the population, examination of which can be done in a short time without major difficulties. Periodic visits to the schools by the workers and other staff members provide the opportunity to educate both students and the teachers about leprosy. In general, excellent co-operation is given by the school authorities.

Out of 59,362 children on School rolls, 47,933 have been examined and 812 cases detected, with a leprosy rate of 17 per thousand. It is a matter of great interest to note that all detected cases in the schools were suffering from early forms of leprosy.

Contact Survey

All the healthy contacts of registered patients are recorded in contact survey cards, kept under surveillance, and examined periodically once a year. 7400 contacts are under observation.

Case Holding

In all treatment campaigns in which long term treatment is necessary, case holding is of the utmost importance. Failure in this, makes the investment in the case finding worthless.

Right from the day cases are detected and registered for treatment a very good friendly relationship is maintained by the worker with the patients. Whenever the patients are absent, workers contact them in their houses and explain to them the necessity of regular and systematic treatment. Even so, it is not unusual for a patient after a few months of treatment to become an absentee. This is mainly because patients are disappointed over the lack of quick results, or else after one or two years when the obvious symptoms are disappea 'ng, they neglect treatment.

In-patient Treatment Factilities

After launching the project in the city, and when the number of patients started increasing, we faced the problem of finding a place where patients who require specialized intensive hospital care could be admitted and treated. Dayasadan, the beggar home run by the North Indian Business Community came to our rescue. Dayasadan is situated in the centre of the city and the authorities placed at our disposal a ward with ten beds for hospitalizing patients from the project area. With the permission of the management of Dayasadan we have put up one more ward with ten beds and so at present we have 20 beds in Dayasadan for patients from the project areas.

Medical Aid to Care Homes

In Dayasadan there are 100 beggar leprosy patients, who are fed and looked after by the management. Medical care of these inmates is undertaken by the medical team of "Gremaltes". Medical care is also given to the 250 leprosy inmates of Pope John's Colony at Madhavaram, as well as to the trainees of Gabriel Rehabilitation Centre.

Health Education and In-project Training

Health education in leprosy, as all workers know, is divided into two branches—education of the patients and education of the public. In "Gremaltes", the work of educating the patients is shared by the paramedical workers and the physiotherapist. Educating the public, forms an important ingredient in the Gremaltes recipe, since the coverage of half of the city population rests in publicity. Moreover, in the modern concept of leprosy control work, the stress is shifted from the medical aspect to the social aspect and the leprosy problem is generally conceived now more as a social problem than a medical problem. Hence a transformation of the old concepts, entertained by society, has to be achieved through a planned educational scheme. Gremaltes being a novel project, was able to introduce a novelty in health education, deviating a bit from conventional health education methods. In order to produce the maximum impact on the public, we resolved to resort to the two most powerful media in publicity—the film and the radio. Arrangements are complete to produce a short advertisement—like film strip and put on the Air a continuous "lepra publicity".

Resorting to modern mass communication media does not mean a complete departure from ordinary methods of health education. We have all along been utilizing the usual methods of health education.

Prior to school survey, the school teachers are given a lecture on leprosy, adding a request that the information should be passed on to their students. A

class on leprosy to the teacher-trainees has formed a regular course every year in every Teacher Training College in the city. This also will enable the younger generation to form a different cult about leprosy. A lecture class on leprosy by the Gremaltes staff to the students of all the three social work teaching institutions has almost formed a part of their syllabus.

An orientation course for 250 doctors in Madras City was organized and arrangements exist for further such courses. It has become a routine for every batch of the Youth Service Corps Volunteers of the Tamil Nadu Government, undergoing training in the Madras School of Social Work, to attend demonstration classes and discussion classes in leprosy. So far 6 batches, 50 in each batch, have attended. Besides, the Youth Corps Volunteers, placed in leprosy institutions, get a preliminary training in our project. Five such teams have come to us so far. Apart from this, the Madras School of Social Work also deputes its regular students for field training. Other Social Workers attached to different welfare organizations are sent to us for short-term training in leprosy.

Conclusion

While presenting this preliminary report with pride and pleasure, we, in all humility acknowledge the loopholes in our work. We are always ready to benefit from advice and experience. Constructive criticism will always be welcomed with a smiling face and a plastic mind. Our request is only to perceive the whole work as a maiden experiment in urban leprosy control work.

Appendix

Figures at a glance up to the end of August 1973

Present Project Area:	North Madras
Total population:	16 Lakhs
Slum population:	5 Lakhs 31%
School children:	4 Lakhs 25%
Other population:	7 Lakhs 44%

Statistics up to the end of August 1973

Total population enumerated		244,488
From slum population	183,471	
From school children	59,362	
From self-reported population	1,655	
Total population examined		203,203
From slum population	153,615	
From school children	47,933	
From self-reported population	1,655	

	L	N	N?L	Total
Total no. of cases detected up to the end of this report	120	2751	119	2990
Through slum survey cases	115	1978	85	2178
Through school survey cases	5	773	34	812
Total no. of cases voluntarily reported	228	1033	109	1370
Total no. of known cases recorded up to	348	3784	228	4360
Deletions from known cases up to August	57	337	37	431

Total no. of known cases on roll at the end	291	3447	191	3929
No. of cases registered for treatment up to the end of this report	321	2849	200	3370
Deletion from regd. cases up to August	56	291	34	381
Total no. on roll at the end of report	265	2558	166	2989
Attendance for the month of August 1973	Lepromatous	78%	All	62%
Unregd. cases in the slum cases	24	687	14	725
Unregd. cases in the school cases	2	202	11	215
Total no. of unregd. cases up to the end of this report	26	889	25	940
Total no. of healthy contacts under observation				7400