

Leprosy and the Community

LEPRA CHILDREN'S FUND

Ever since 1936, Lepra has appreciated that leprosy treatment can be most effective when given regularly to those unfortunate children who suffer from the disease. Today, it is still our policy to encourage the early diagnosis and regular treatment of children and this we do by giving small per capita grants in respect of all those children who are receiving treatment for their leprosy. In 1977, £42,000 was spent in this way and 30,000 children living in 12 different countries benefited as a result of grants from this fund.

Lepra now recognizes the need to give combined therapy, at least in the initial stages, to multi-bacilliferous cases and in such cases, the first year's per capita grant is increased by £5.

Currently the per capita grant for the first 100 children in any African control scheme is £5 and for India £4. In order to obtain a grant, it is necessary for those in charge of leprosy control work to send a list of the children's names up to the age of 18 years, with particulars of their sex, age, type of leprosy and progress, certified by the Medical Officer in Charge to the effect that the children listed are receiving treatment for active leprosy and are likely to require a further year's treatment.

A brief statement is also required to show how the previous year's grant has been spent. The money can be used for anything which will facilitate the early diagnosis and regular treatment of child sufferers. It can include fuel for vehicles, staff salaries, extra drugs and even school books or clothes in certain cases.

Copies of the instructions and the necessary application forms can be obtained from the Director of Lepra at Fairfax House, Causton Road, Colchester, Essex CO1 1PU, England. It is earnestly hoped that all those working in the field who are treating children and need a little more financial help will ask for it. Money is available but unless it is asked for, it cannot be used for this most important aspect of leprosy work, the early diagnosis and regular treatment of children suffering from leprosy.

G. F. HARRIS

LEPROSY RELIEF ASSOCIATION "EMMAUS-SWITZERLAND"

In February 1956 following the very cold weather experienced in Switzerland and inspired by the events which marked the founding of the movement Emmaus in France, several circles were formed in Switzerland to aid the isolated and the families affected by the hard winter and lack of means to heat their homes. From that time on, organized associations were founded in

Geneva, Berne, Zurich, Basle and the Jura with the motto "Serve first those who suffer most". These associations are on the one hand groups of "*Friends of Emmaus*" and on the other "*Communities of rag-pickers*".

The "Friends of Emmaus" are volunteers who hold normal jobs. They undertake to help the more unfortunate, according to the local needs. At the same time, they try to eliminate the causes of hardship and to make the public authorities as well as the population aware of existing problems.

In 1959 a few members of the "Friends of Emmaus-Berne" were moved by the fate of leprosy victims, who, to their way of thinking, belonged to "those who suffer most" in the sense of the Emmaus motto. They therefore decided, in virtue of the same principle, to obtain for these leprosy victims the means of overcoming their physical and moral suffering. On the other hand, they decided to try and awaken the conscience of both the Swiss public and the public of the endemic countries to the painful problems of these victims. The same year a National committee for relief to leprosy victims was founded within the Swiss Emmaus Federation and in 1967 a group, which remained attached to this Federation but at the same time autonomous, was founded. This group was created because of the ever increasing and important tasks which arise from the immeasurable needs of some 15 million leprosy victims.

The first operational steps of "Aid to Leprosy Victims" were already taken in 1960 thanks to the first campaign organized in January in favour of the leprosy victims and which brought in 350,000 Swiss francs. A ward for leprosy patients was equipped at the new hospital in Vellore (India). A young Swiss volunteer went to Cameroon to determine what type of aid might be given and at the same time to work in improving the leprosarium in Nden.

Every year since 1960 the campaign in favour of leprosy victims goes out by means of a propaganda leaflet to every family in 15 Swiss cantons (about 5 million people). This leaflet informs the public not only of the ways of fighting against leprosy, but even gives particulars and exact figures about the assistance granted. The Swiss Emmaus Leprosy Relief Work in fact estimates that only knowledge of the technical assistance and human problems together with maximum efficiency can bring a real solution to those very often too numerous sufferers in our world who sometimes find themselves living beside our overbearing wealth. It is in this sense that Swiss Emmaus Leprosy Relief Work publishes a little pamphlet entitled "More happiness for leprosy victims" and even consults the public on certain problems (aid to disabled leprosy victims and to ex-patients).

The amount taken from collections has increased (more than 3 million francs in 1977); influence has strengthened; there are now over 100 beneficiary centres and some 500,000 patients received some form of aid last year. The *Swiss Emmaus Leprosy Relief Work* thinks however that money, although indispensable, should not enter into the matter when confronted with the human aspects of the problem. Its aims, in spite of being based on a mass campaign to reach out to the greatest possible number of sick, consist in caring for each leprosy victim according to his particular worries and difficulties, in giving him work and offering him a normal place in society. Furthermore the facts about leprosy as a disease should be taught in the endemic countries. Leprosy should be the object of controlled research and be integrated little by little into the

national health infrastructure. To attain these goals, the Swiss Emmaus Leprosy Relief Work without distinction of race, creed, caste or colour, helps all those who are willing to apply these principles i.e. private institutions, missions, governments and international organizations.

WHO SPECIAL PROGRAMME FOR RESEARCH AND TRAINING IN TROPICAL DISEASES: NEWSLETTER 10 JANUARY 1978, GENEVA, TDR/NL/78.1

This Newsletter records the following developments in the field of leprosy:

27 NEW RESEARCH PROJECTS APPROVED

The Steering Committee of the Scientific Working Group on the Immunology of Leprosy (IMMLEP) approved 27 new research proposals of a total 40 applications received, at its fifth meeting in Geneva, 9–11 June 1977. Eight proposals were not approved and five deferred until the next meeting which is to be held 1–3 February 1978.

The committee noted the continuing increase in supply of *M. leprae* with expansion of the armadillo farms in London and Caracas and the establishment of new facilities in Paraguay. Other possibilities for increase of production are also being explored. The IMMLEP farm, which had about 70 armadillos in 1975, will probably increase its stock to approximately 250 nine-banded armadillos by 1978. The *M. leprae* bank (London) reported that as of 1 June 1977 their stock of infected *M. leprae* material was about 5 kg of infected tissues, 300 mg of purified bacteria and 30 mg of skin test antigens. Protocols have been prepared for storage of *M. leprae* on liquid nitrogen and transportation on wet ice.

The Steering Committee agreed that there should be further study of a method for *M. leprae* purification and fractionation to evaluate the effect of using proteolytic enzymes in the purification procedures. The finding of disseminated mycobacterial infection in wild armadillos has been confirmed, but further research is required to establish its significance. Some areas, as for example Florida, appear to be infection-free.

It was agreed that serological methods in leprosy should be reviewed at the next SWG meeting, 19–22 June 1978, and considered for incorporation in the IMMLEP programme.

The Committee defined the following steps as prerequisite to beginning sensitization studies in humans:

- measurement of the sensitivity to irradiation of *M. leprae* and *M. lepraemurium*;
- sterility tests;
- acute toxicity tests;
- limulus endotoxin assay;
- toxicity studies in primates;
- potency test for sensitization (this is being established in guinea pigs).

All these studies are to be carried out with *M. leprae* purified from armadillo tissues. Production of *M. leprae* to be used in humans should be undertaken in licensed premises.

Participants in the Steering Committee meeting were:

Dr. B. Bloom, Albert Einstein College of Medicine, *New York, N.Y.*, United States of America.

Dr J. Convit, Instituto Nacional de Dermatologia, *Caracas, Venezuela*.

Dr T. Godal, Radium Hospital, *Oslo, Norway* (Chairman).

Dr R. J. W. Rees, National Institute for Medical Research, *London, United Kingdom*.

Dr H. Sansarricq, World Health Organization, *Geneva, Switzerland* (Secretary).

Dr G. Torrigiani, World Health Organization, *Geneva, Switzerland*.

Dr J. Walter, World Health Organization, *Geneva, Switzerland*.

SEVEN APPLICATIONS APPROVED BY THELEP SC

The Steering Committee of the Scientific Working Group (SWG) on the Chemotherapy of Leprosy (THELEP) held its second meeting in Geneva, 7–9 November 1977. The proposed strategic plan for THELEP is now in the final stage of preparation.

Of thirteen grant applications reviewed by the Committee, two were approved in the area of drug development (total U.S. \$ 30,000), two for field studies of dapsone resistance (total U.S. \$ 12,300) and three for laboratory studies (total U.S. \$ 44,500).

The Committee reviewed the status of clinical trials of drugs with a view to resolving a number of issues related to the Standard Protocol which had been left open at the last SWG meeting. The THELEP Coordinator reported on his site visit to Chingleput, including the state of readiness of the clinical trials there. Several pharmaceutical companies have offered to donate supplies of rifampicin for use in the first two years of these trials.

Three members of the Committee will meet with two outside experts for three days in Geneva in early February 1978 to draft protocols for surveys of dapsone resistance. These protocols will be distributed to Steering Committee members for review before the next Committee meeting, at which they will be discussed and perhaps finalized.

In regard to testing chemotherapeutic regimens on a mass scale the Committee decided it should follow closely the results of the Burma rifampicin trial (a WHO/SEARO sponsored activity), but for the present should take no action to initiate new trials of mass chemotherapy elsewhere.

The Committee decided to defer further activity on chemotherapy trials in non-lepromatous leprosy.

Discussion of the area of drug development produced agreement on the following points, amongst others:

(1) the data base was too small to permit development of a set of criteria based on structure-activity relationships, with which to select existing compounds for screening against *M. leprae*;

(2) fewer than 100 compounds per year could be screened against *M. leprae* with the mouse foot pad system, considering the available capacity of existing laboratories;

(3) no non-*M. leprae* screen appears to predict activity against *M. leprae*;

(4) THELEP should consider promoting the development of improved screening procedures based on *M. leprae* or components of *M. leprae* (enzymes);

(5) THELEP should consider the support of its own armadillos to provide a supply of *M. leprae* and components for the new screening procedures.

It was agreed that a sub-committee should meet with a few experts in drug development to plan and schedule new THELEP-sponsored efforts in drug development in time to report to the next meeting of the Steering Committee, which is scheduled to be held in Geneva, 24 – 26 April 1978.

A broad programme of training and institutional strengthening activities of both IMMLEP and THELEP is envisaged. A committee charged with planning this programme will meet in Geneva for two days at the end of January 1978. A Standardization Workshop will also be held in September 1978 which will be open to participants from outside THELEP.

Steering Committee members participating in the meeting were:

Dr J. Levy, Department of Comparative Medicine, Hebrew University-Hadassah Medical School, *Jerusalem*, Israel (Chairman).

Dr E. de Maar, WHO, *Geneva*, Switzerland.

Dr N. E. Morrison, Department of Pathobiology, Johns Hopkins University, *Baltimore*, Maryland, United States of America.

Dr R. J. W. Rees, National Institute for Medical Research, *London*, United Kingdom.

Dr H. Sansarricq, WHO, *Geneva*, Switzerland (Secretary).

Dr C. C. Shepard, Center for Disease Control, *Atlanta*, Georgia, United States of America.

Dr J. Walter, WHO, *Geneva*, Switzerland.

Dr M. F. R. Waters, National Institute for Medical Research, *London*, United Kingdom.

ILEP

At the recent (13–16 April 1978) meetings of the Medical Commission and General Assembly of ILEP, held in Würzburg, W. Germany, the representatives of the Member-Organizations studied with interest and a certain satisfaction the Reports of Professor M. F. Lechat (currently chairman of the Medical Commission) and Monsieur Pierre van den Wijngaert, the Secretary General.

ILEP is now well established as the co-ordinating body for a score of national and international voluntary agencies concerned with leprosy. Its members are responsible for disbursing the considerable sum of nearly 17 million \$U.S., which they raised in 1977 and using this money — on the advice of the guidelines laid down by the Medical Commission — to the greatest benefit of leprosy sufferers throughout the world. Over 6% of the total grants made is spent on various research projects.

Some healthy disquiet was expressed at these meetings that in spite of tremendous efforts, ILEP members are still reaching only 1 in every 10 leprosy sufferers in the world, and that the virtually static situation is now complicated by the twin problems of dapsone-resistance and persister leprosy organisms.

The participants, representing the various Member-Organizations of ILEP, were urged to study the pros and cons of integrating their leprosy activities into government programmes for comprehensive primary health care, and to encourage joint schemes wherever possible — co-operative efforts for tackling other diseases than leprosy, and joint efforts between various voluntary agencies.

The membership of the Medical Commission for the next 3 years was determined by the election of 12 doctors. Four former members of the Commission were with acclamation accorded the title of Honorary Members in recognition of their outstanding service over the years; these are: Drs Gilbert and Wegener, Professor Janssens and General Richet.

Professor M. F. Lechat emphasized in his Annual Report the increasing importance that should be given to the medical components of leprosy programmes sponsored by voluntary agencies. He stressed in particular the training of medical auxiliaries, the need to take advantage of the best advice, and to combine medical competence with compassionate care. The Medical Commission has shown itself very active in encouraging and participating in joint meetings with other bodies in various countries, and in striving to raise the standards of patient care in the diverse projects aided by Member-Organizations of ILEP.

The following is the Press Report of the XII General assembly of ILEP:

XIIth GENERAL ASSEMBLY OF ILEP

Würzburg. 22 voluntary agencies from 20 countries, Members of the International Federation of Anti-Leprosy Associations met in Würzburg 13–16 April for their 12th General Assembly. This international conference started with the meetings of the Medical Commission and of panels who dealt with the social aspects and training in leprosy, International Year of the Child, proclaimed by the United Nations for the year 1979, and health education. The General Assembly, during the meetings held on Saturday and Sunday, invested as President for the period 1978–1980 Mr Askew, International General Secretary of the Leprosy Mission (London) and choose as his successor for the period 1980–1982 Mr Thomassen, President of the Nederlandse Stichting Voor Leprabestrijding (Amsterdam).

On proposal of the Medical Commission, whose Members were renewed, the General Assembly nominated as Honorary Members of the Medical Commission: Dr Gilbert (Geneva), Dr Wegener (Würzburg), Général Richet (Dakar) and Prof. Janssens (Antwerpen).

It was decided to transfer the Co-ordinating Bureau of ILEP to Paris.

Following the reports of the General Secretary, of the Medical Commission and of the panels, the budget for 1978–1980 was fixed. A working Group was created for implementing combined leprosy-tuberculosis campaigns, and it was decided to continue the enquiry undertaken by one of the Member-Organizations "Les Amis du Père Damien" in cooperation with Prof. Lechat, on the leprosy situation in the world in order to devise a global strategy.

The next Working Sessions will be held: the first one in Oslo next June and the second one in Carville (U.S.A.) in November on the occasion of the

International Congress at Mexico. The next General Assembly will be held in 1980 — the General Assemblies are held every two years — in London.

The report of the General Secretary pointed out that last year the Member-Organizations of ILEP have supported up to an amount of 24.5 million U.S. dollars 700 projects in 74 countries. In the report of the Medical Commission it was recommended that, due to the increasing emergence of sulfone resistance, priority be given to combined treatment in some cases and that new drugs be made available.

A delegate of the Ministry of Health from Togo, together with a representative of the World Health Organization attended the meetings.

During a reception offered by the Mayor of Würzburg and the Minister-President of Bavaria, full appreciation of the work undertaken by the Member-Organizations in the field of leprosy was expressed.

The delegates of the Member-Organizations attended an oecumenical service on the occasion of the conference.

(Press Release approved by the General Assembly of Würzburg.)

FIFTH WORKSHOP ON LEPROSY; ACWORTH LEPROSY HOSPITAL SOCIETY FOR RESEARCH, REHABILITATION AND EDUCATION IN LEPROSY, WADALA, BOMBAY –31, HELD ON 23 NOVEMBER 1977

The Proceedings summarize 5 papers:

- (1) R. Ganapati and R. G. Chulawala. "Diagnosis of Early Leprosy with Reference to Histopathological Features".
- (2) D. K. Dastur, G. L. Porwal and J. S. Shah, "Very Early Non-lepromatous Leprosy — Histochemistry and Electron Microscopy of Nerves".
- (3) D. K. Dastur, S. M. Daver, G. L. Porwal and C. R. Revankar. "Long Treated Lepromatous Leprosy — Histochemistry and Electron Microscopy of Muscles and Histochemistry of Nerves".
- (4) C. V. Bapat. "Evolution of Culture Media for Cultivation of *M. leprae* 'in vitro'".
- (5) K. S. Pradhan, M. B. Bhide and C. V. Bapat. "Use of ICRC Bacilli as Vaccine against *M. leprae* in Mouse Foot Pad".

Paper 1 deals with a subject which is still of practical importance to those who see large numbers of patients in an endemic area, namely the extent to which skin biopsy is helpful in the diagnosis of leprosy (or other diseases), where the only manifestation of disease is a skin macule, often small in size. Dr D. J. Harman at the Leprosy Study Centre in London, has during the past few years reviewed a considerable number of biopsies from patients in various parts of the world labelled clinically as "indeterminate", and concluded that a histopathological diagnosis can be made in most of them (leprosy or not leprosy, and if the former, a classification), provided that the material is well-taken and examined in detail. It would be interesting to receive the comments of Drs Ganapati and Chulawala on their own material from India in view of this finding. The summary of *Paper 2* says that "the study showed turnover of

Schwann cells", another subject of continuing interest in view of the fact that most authorities regard their turnover in the normal state as nil, or exceedingly low once myelination has taken place. In the discussion of Papers 2 and 3, Dr S. S. Pandya referred provocatively to our inability to do something which may seem basic, if not simple, in the study of nerves, namely to distinguish motor and sensory fibres in a fascicle. (In fact, it cannot be done, and the lysosomal studies in myelinated and unmyelinated fibres, reported in these papers, did not shed new light.)

A. C. McDOUGALL