

News and Notes

LEPROSY WORKERS HONOURED

In the Birthday Honours List, Her Majesty Queen Elizabeth has admitted two distinguished leprosy workers to the Order of the British Empire. Dr B. David Molesworth, now the Director of LEPROA's Control Scheme in Malawi, and Dr Harold Wheate, formerly Leprosy Adviser to the Government of Tanzania and now on the staff of A L E R T (Addis Ababa), both become Officers of the Order (O.B.E.). *Leprosy Review* extends its warm congratulations to both Dr Molesworth and Dr Wheate.

LEPROSY IN THE WORLD

The figures given in the *Weekly Epidemiological Record*, published by the World Health Organization (*Wkly epidem. Rec.*, 1973, 48, 49-53), are based mainly on replies received to a questionnaire circulated to governments.

The total number of registered cases of leprosy in 124 countries is 2,887,481, which represents an increase of about half-a-million over the figures from the same countries in 1965. It is encouraging to note that in some of the few areas where effective long-term programmes for leprosy treatment/control are in operation, the incidence of new cases appears to be declining slightly or at least is remaining constant.

As is the case in most European countries, the proportion of patients with promatous leprosy (the L/T ratio) is high in those European countries with an endemic leprosy problem—30% in Greece, 60% in Spain, and 72% in Portugal. Lack of uniformity in classification and inadequate case-finding, however, make comparisons in the L/T ratio between different countries invalid and misleading.

The numbers of "inactive cases" (544,719) and those "released from control" (368,789) show an encouraging increase that reflects the effectiveness of the measures adopted, but the numbers of known sufferers from leprosy who fail to continue with regular treatment, or who are "lost from control", are disturbingly high, even in countries with good leprosy programmes. Statistics concerning the presence and degree of disability are difficult to evaluate. Where the proportion of disabled patients is high, case-finding may be poor or facilities for treatment rudimentary.

Whereas in villages or small foci prevalence rates of 82 per 1000 have been reported, the maximum rates for larger foci (such as communes and districts) do not exceed 50 per 1000—a conclusion that will come as a surprise to those who have done regular whole-population surveys in areas in Tamil Nadu, West Bengal, Zaïre, Northern Nigeria and elsewhere.

The total number of cases of leprosy in the world, notwithstanding the increase in population, has probably not greatly changed in the years between 1965 and 1970.

THE WORK OF THE WORLD HEALTH ORGANIZATION IN 1972

The Annual Report of the Director-General of the World Health Organization for 1972 (Official Records No. 205) includes a very adequate summary (pp. 23-27) of the leprosy projects assisted or sponsored by WHO in various countries; and of the leprosy treatment/control programmes where the WHO contribution in technical guidance and advice, as well as in staff, drugs and transport, is proving of critical value.

Mention is made of the gradual integration of leprosy-control series into the basic health services in some countries, and the much-appreciated financial contribution of certain voluntary agencies to the Special Account for the Leprosy Programme. Co-operation between WHO and ELEP is reported to have been strengthened during the year.

In Central America (p. 24), the accent has been on the prevention of disabilities due to leprosy. In South-East Asia, WHO had assisted the leprosy campaign in such countries as Burma, Nepal, Sri Lanka and Thailand by providing the services of expert advisers, who have assisted in the gradual integration of leprosy into the general health services. Much still remains to be done in Ethiopia and the Sudan.

UNICEF continues to supply drugs to projects in a number of countries.

Epidemiological research in the field (p. 25)—microbiological research in the laboratory using modern technical resources and epidemiometric models, and animal inoculation (the mouse footpads, the armadillo) and the investigation of such problems as drug-resistance, growth requirements of *Myco. leprae* and its culture on soft agar and other media, and experimental transmission—are all being actively encouraged by WHO. Evidence is becoming available to suggest that the well-known form of *Myco. leprae* may be but a phase in the life-cycle of the organism.

The work on infusions of normal allogenic leucocytes from healthy donors into patients with lepromatous leprosy is referred to (p. 26), and the dramatic remissions observed in all patients so treated. Studies in the antigenic structure of *Myco. leprae* and attempts to develop a polyvalent vaccine come in for brief review.

The report provides encouraging evidence of a widespread interest in leprosy research and of fruitful co-operation between experts in various fields. In the course of the year 1972, no fewer than 41 institutes in 23 countries participated in 56 different research projects under the aegis of WHO.

It is stated (p. 40), that the risk of ocular complications in leprosy has been diminished by better methods of treatment. In Africa (p. 183), the function of WHO is mainly advisory, since leprosy control is in general carried out with assistance from other sources. The ambulatory treatment of leprosy patients is being emphasized in the Americas (p. 187) with the hope of avoiding unnecessary institutionalization. In the Western Pacific Region (p. 205), scarce funds are still being directed to maintaining patients in outmoded leprosaria.

The very useful meeting of investigators on immunological problems in leprosy research at New Delhi in December, 1972, is mentioned (p. 92). The meeting recommended the organization of a trial to determine the usefulness of transfer factor in increasing cellular immunity in lepromatous leprosy, and suggested promising areas of research into the immunology of leprosy and various collaborative investigations.

The detailed list of recommended research projects makes impressive and

imaginative reading: Burma (p. 245), Colombia (p. 226), Ecuador (p. 229), India (p. 246), Nepal (p. 249), Korea (p. 280), Sri Lanka (p. 250), and Sudan (p. 271), with special reference to the BCG trial in Burma (p. 285).

Altogether, a very useful document.

WORLD HEALTH ORGANIZATION—REPORT OF THE 25TH ASSEMBLY, 1972

This bulky volume of 635 quarto pages contains the reports of proceedings at the 25th World Health Assembly, held in Geneva from 9 to 26 May, 1972. The items of particular interest to readers of *Leprosy Review*, occurring in speeches of delegates, are summarized below.

Sierra Leone (p. 64). "Leprosy is well under control".

Nepal (p. 80). Pilot projects for the control of leprosy and tuberculosis will be improved on the basis of recommendations made by experts provided by WHO.

Mali (p. 97) confessed that the battle against leprosy was not yet won.

Chad (p. 104) optimistically proclaimed that leprosy control was undoubtedly well under way: the number of patients under treatment had declined from 50,175 to 27,791 in 10 years, and 21,975 had been discharged, "disease arrested". Much-appreciated help had been received from UNICEF.

The Republic of Congo (p. 105) had to report that the number of leprosy sufferers was still very large and that communicable diseases in general were still rife.

In Korea (p. 107), measures will be taken to decrease the incidence of leprosy, with mitigation of its economic consequences.

Peru (p. 120) promises an intensification of the programme for the control of endemic diseases, including leprosy, as does the Cameroon Republic (p. 123).

Malta (p. 129) acknowledges the help received from the Order of Malta in the control and eradication of the remaining foci of leprosy in the island.

Gabon (p. 134) hopes that the day is not far distant when a means will be found, perhaps a vaccine, of eradicating leprosy.

Niger (p. 138) reports success in its leprosy campaign. Half of the registered 18,000 cases have been treated, of whom 3000 have been placed on observation after adequate treatment.

Sri Lanka (p. 142) reported no change in the incidence rate of leprosy, which stands at 0.5 per 1000.

In Malaysia (p. 168) the leprosy control programme is being integrated with the existing health services.

Guinea (p. 170) confessed to a continuing concern about the leprosy problem. There are 69,794 known sufferers in the country.

In Paraguay (p. 177), the prevalence of leprosy is 2 per 1000, and the incidence 11.4 per 100,000. Help has been received from the German Leprosy Relief Association, and also from the Government of Japan.

The Regional Director of WHO for Africa admitted (p. 394) that leprosy programmes in some countries had not received priority in WHO assistance because sources "outside the Organization" (i.e. voluntary agencies) were already providing funds for leprosy. In order to avoid overlapping, and in the interests of the proper deployment of the limited resources available to WHO, a certain selection had to be made.

In view of its importance, and its relevance to the leprosy situation in many countries, which must be viewed in the context of the general health services, the following release from the World Health Organization is published *in extenso*.

TWENTY-SIXTH WORLD HEALTH ASSEMBLY— WIDESPREAD DISSATISFACTION ABOUT HEALTH SERVICES

Health services in many countries reveal a situation which should be of real concern. There appears to be widespread dissatisfaction of populations about their health services in many countries, rich and poor. This alarm is sounded in an organizational study of WHO's Executive Board on methods of promoting the development of basic health services. The study, which is before the World Health Assembly, states "in many countries the health services are not keeping pace with the changing populations either in quantity or in quality. It is likely that they are getting worse". Even if it is said that the health services are improving, the study considers that "a major crisis is on the point of developing and that it must be faced at once, as it could result in a reaction that could be both destructive and costly".

After considering the WHO study, the World Health Assembly in Committee stressed that: "Every Member State should develop a health service that is both accessible and acceptable to the total population, suited to its needs, and to the socio-economic conditions of the country." In certain countries there hardly exist any basic health services, but even in rich countries with developed services these are often not accessible to large sections of the public. Other causes of dissatisfaction can be summarized as follows: (a) failure to meet the expectations of the population; (b) inability of the health services to deliver a level of national coverage adequate to meet the stated demands and changing needs; (c) a wide gap (which is not closing) in health status between countries, and between different groups within countries; (d) rapidly rising costs without a visible and meaningful improvement in service; (e) a feeling of helplessness on the part of the consumer, who feels (rightly or wrongly) that the health services and personnel within them are progressing along an uncontrollable path of their own which may be satisfying to the health professions but which is not what is most wanted by the consumer.

The study goes on to list likely reasons for some of these occurrences: (a) there are insufficient health service funds in many countries, although the proportion of the national income spent on health services may often be similar in the wealthy and in the less wealthy countries; (b) many countries have an inadequate coverage of the population by state-supported health services; (c) people should be able to afford to use the services, and the services should provide a level of health care which people consider proper to use. A pattern is emerging of less or least utilization of health services in areas that have the least sufficient services; (d) there is a shortage of trained staff at all levels; but countries that have insufficient staff show the greatest maldistribution within the country, and appear to have the highest professional emigration rate.

Most of these factors are correctable and all deserve detailed attention. When applied to health services, existing techniques of planning, operational research and management may help decision making, but health service questions should be expressions of the national will, rather than of abstract mathematical considerations.

The Assembly Committee recommended that WHO should: (1) concentrate upon specific programmes that will assist countries in developing their health-care systems for their entire populations, special emphasis being placed on meeting the needs of those populations which have clearly insufficient health services; (2) so design its programmes as to encourage Member States to develop a strong national will to undertake intensive action, WHO resources being made available especially to such Member States as have this will; and (3) further develop management methods suited to health service needs and assist countries in developing a national capability of applying these methods.

The study was discussed in Committee B of the Assembly whose Chairman is Dr A. W. Al-Mufti (Iraq), the Vice-Chairman Dr jur. J. de Coninck (Belgium), and the Rapporteur Dr P. Mikem (Togo).

LEPRA ESSAY COMPETITION

To encourage the study of leprosy by Oxford medical students, the British Leprosy Relief Association (LEPRA) inaugurated an Essay Competition in 1972, offering a prize of £100 to the successful entrant. The subject, "The pathogenesis of human leprosy", attracted 7 entries.

This year, 9 scripts were submitted on the subject "The transmission of human leprosy". The general standard was very high, but one entry was outstandingly good. At the Annual General Meeting of LEPRA held in London on 7 June, 1973, Lord Boyd (the President of LEPRA) presented to Miss Celia Moss of St Anne's College, Oxford, a cheque for £100. In 1972, Miss Moss had had the advantage of spending some weeks at LEPRA's project in Malawi.

Leprosy Review offers its congratulations to Miss Moss, and thanks the other entrants for their interest in leprosy.

A L E R T, 1972

The Annual Report for 1972 of the All-Africa Leprosy and Rehabilitation Training Centre records a year of increasing activity and steady progress, despite staff shortages. During the year 80 trainees from outside Ethiopia and 111 Ethiopians followed full-time courses. The postgraduate course in Clinical Leprology was much appreciated by the 24 doctors who attended, most of whom had had little previous experience of leprosy. A 4-months' course for rural area supervisors was organized for 31 students. A highly successful joint seminar on Cellular Immunity and Resistance to Leishmaniasis, Leprosy and Tuberculosis in the Tropics was organized in association with the Armauer Hansen Research Institute. No fewer than 52 participants came for the 1-week seminar. An internationally renowned panel conducted the sessions and gave lectures.

A gratifying feature of the year's work was the liaison established with Professor General J. Languillon of the Institut de Léprologie Appliquée in Dakar. The General shares in the postgraduate course for doctors, and plans to visit Addis Ababa again for the same purpose in 1974.

The pattern of training and service is now becoming established, and the Board of Directors, aided by substantial financial help from a variety of sponsoring agencies and full co-operation from the Imperial Ethiopian Government, can now plan for the tasks ahead.

PROGRESS AT A L E R T

The 7th Annual General Meeting of Members of A L E R T this year was preceded on 8 March by a Workshop on Rehabilitation, chaired by Professor Paul Brand. It was generally agreed—after a discussion opened by Dr Ernest Fritschi in which many Board Members and staff joined—that A L E R T has assumed responsibility for leprosy patients, which includes concern for their rehabilitation and employment as well as their medical care. In the future, A L E R T should undertake the training of suitable candidates in the field of rehabilitation so that, in the context of African countries, the problems presented by disabled and unemployed patients whose disability is attributable to leprosy and other deforming conditions might be realistically and energetically tackled.

The provision of sheltered workshops, industrial projects, resettlement farms, and the organization of training units were huge problems, largely unmet up till now. Such costly projects could not be undertaken by A L E R T itself, whose rôle would probably be to train supervisory staff for various African countries, but pilot projects might well be developed to explore possible solutions. It was suggested that some form of Rehabilitation Agency might contribute to the integration of the efforts that may tend to be haphazard and fragmentary and hence less than optimally effectual.

Courses for Rural Area Supervisors, Rehabilitation Technicians and Nurses have attracted many participants, and in-service facilities for doctors and others with different interests have been provided.

Dr John Pearson, Dr Harold Wheate and Miss Ellen Kelly have been welcomed as new members of the staff. They will be devoting much of their time to teaching African nationals, who will in their turn, it is hoped, commit themselves to teaching their fellow-countrymen on their return home.

THE CHANGING PICTURE AT VALBONNE, FRANCE

Because of the decrease in the number of leprosy patients needing in-patient care for long periods, the population of this residential leprosarium in the south of France is declining. The authorities have guaranteed that any leprosy sufferer now in residence and needing in-patient treatment will be able to have it at Valbonne, and for as long as he needs it.

In order to do this and to ensure the necessary financing, it is proposed to open at Valbonne a service for the social rehabilitation of psychiatric patients. This new departure will fulfil a need and ensure utilization of the physical facilities available, as well as helping Valbonne financially. Such patients, numbering 25 at first and eventually rising to 80 or even 100, will stay for at least a year, and will be encouraged to participate in the activities of the Centre—agricultural and horticultural, building and construction, carpentry, etc. The ample area of 125 acres (50 ha) at present under cultivation will afford opportunities for the rehabilitation of another class of patients who have for long suffered from the social stigma and prejudice of society. Some new construction and much adaptation of old buildings will be needed before the plan is fully operative.

Metropolitan France is well served with facilities for the care of leprosy sufferers, and in Paris, Marseilles and Bordeaux, medical treatment and reconstructive surgery are available, and pathological investigations are proceeding.

The *Association de Léprologues de Langue Française* is actively concerned as a body and through its members with the problems of leprosy, both in France itself and in the French-speaking countries of the world.

PROGRESS IN DAKAR

The Second Meeting of the Scientific Advisory Board of the *Institut de Léprologie Appliquée* met at the offices of the Institute in Dakar on 13 April, 1973. Several representative personalities from Europe managed to be present despite the claims of the *Journées Médicales de Dakar*.

The Institute, under its dynamic Director, General J. Languillon, has made a good start, concentrating on exploratory surveys, evaluation of the existing leprosy control programme, and training of auxiliaries and medical students. Tentative proposals were announced for a series of lecture-demonstrations (in French) for doctors, similar to the courses given mainly in English at A L E R T, Addis Ababa.

The existing 26 beds in the clinic will shortly be augmented by another 24, intended for patients requiring reconstructive surgery for deformities and surgical treatment of the acute neurological complications of leprosy.

INDIA—BACKGROUND TO LEPROSY

The Union Ministry of Health of the Government of India is making far-reaching proposals for redressing the imbalance between towns and rural areas in the matter of availability of medical services. Eighty-two per cent of the population in the villages have access to only one-third of the qualified doctors. Since 1952, an integrated comprehensive scheme for the establishment of a Primary Health Centre in each community block (now containing between 125,000 and 250,000 people) has been slowly implemented, but the rapid growth of population has outstripped the original plans. Long distances, difficult terrain and lack of public transport have increased the disadvantages experienced by people living away from the Health Centres. Some 5131 Primary Health Centres had been established by the end of 1971—a figure not much below the target—but a rudimentary medical service is available to only about one-third of the rural population.

The Central Government, conscious of the growing demand and the growing need, and impressed by the success of the “feldsher” programme in the U.S.S.R. and the “bare-foot doctors” in the People’s Republic of China, proposes to recruit enormous numbers of “Rural Medical Practitioners”, giving them 16 weeks of training in Indian medicine and Homoeopathy before sending them out to the villages to engage in “programmes relating to health, hygiene, nutrition and also sanitation”. Each such practitioner would serve a rural population of about 2000 persons living in 3 or 4 villages. Pilot projects are proposed before nationwide coverage is attempted.

The proposals have encountered the determined opposition of the Indian Medical Association, which has made a detailed and informed criticism of the fundamental assumptions of the plan to utilize the services of partly-trained auxiliaries who would have to combine loyalty to traditional healing with the practice of scientific medicine.

Leprosy workers engaged in the Survey-Education-Treatment programme in India, and those working in rural areas in other countries, will watch these moves in India with much interest. It remains to be seen whether the leprosy patient will receive a better deal from the proposed Rural Medical Practitioner than he is at present getting from an admittedly inadequate conventional medical service.

The first State to consider a Bill for registering these practitioners is Kerala.

The Bill has been referred to a select Committee of the State Legislature. It is expected that following the definite directive of the Central Government, other States will shortly follow suit.

MADAGASCAR

For some years the leprosy situation in Madagascar has been a matter of concern to voluntary agencies and to the government. Despite the expenditure of considerable sums of money and the efforts of many devoted workers, little lasting impression has been made on the total prevalence of leprosy.

In June, 1972, the Medical Commission of ELEP recommended that a small team should investigate the leprosy situation and advise. Two distinguished Frenchmen—Monsieur J. Masselot (the former Inspector-General of Overseas Territories) and Monsieur P. Ricolfi (an experienced civil engineer)—have recently published their report on an exhaustive and detailed examination of the leprosy programme in Madagascar. The prospects are not very reassuring.

In a population of some 7 million, the number suffering from leprosy would probably reach 70,000. Since the total population is increasing at the rate of 2½% per year (i.e. doubling in less than 30 years), case-finding at the present rate will not result in total coverage for several decades.

Meanwhile, the number of patients newly recorded for treatment each year represents a diminishing proportion of those diagnosed as suffering from leprosy and needing treatment. Furthermore, the number of patients who have attained clinical quiescence as a result of treatment also shows a progressive diminution year by year, and the proportion of patients under treatment who attend regularly is slowly falling and is now about 70%. The percentage of lepromatous (or “multibacillary”) leprosy, according to the official statistics, would be from 25 to 30%.

The authors of the report give a very full appraisal of their visits to all the centres organized by the voluntary agencies concerned—*Emmaus Suisse*, *Les Amis du Père Damien*, *l'Ordre de Malte*, *DAHW*—and make firm recommendations regarding the re-orientation of the work in conjunction with the government policy and plans.

GANDHI MEMORIAL LEPROSY FOUNDATION—ANNUAL REPORT, 1971-72

The Foundation's 22nd Annual Report provides an interesting survey of its activities. After more than 10 years of investigation of the use of dapsone in different parts of India, the Foundation became convinced in 1955 that dapsone could “control leprosy”. It therefore embarked upon the application of control measures in 4 areas. To date, 4326 patients have received treatment for leprosy, of whom 114 were diagnosed in 1971-72. As the result of different methods of attack adopted in different areas, it is concluded that there is no effective replacement for the time-honoured “survey-education-treatment” programme officially recognized by the Indian Government.

More recently, the Foundation has added health education to its activities, concentrating initially on doctors and teachers and then extending its work to schools and villages. In 1971-72, some 1946 doctors were among the 4343 community leaders who were brought into contact with the health education units, and 335 doctors in 10 batches followed some course of instruction in

leprosy. Since there are over 80,000 doctors working in Indian States where endemic leprosy is a problem, the Foundation arranged an orientation programme for Professors of Medical Colleges, and hopes that State Governments will co-operate in releasing these influential teachers for 3-day orientation courses in leprosy.

ELEP AND LEPROSY RESEARCH

In the year 1972 Members of the Federation of European Leprosy Associations (ELEP) contributed from their general funds about 440,000 dollars (U.S.) for leprosy research. This very respectable sum was mostly devoted to projects approved by the Medical Commission of ELEP or a Member Organization, but a proportion was used by the World Health Organization for its programme on the culture of *Myc. leprae*, or through its special leprosy fund.

When the research activities of other voluntary agencies throughout the world are taken into account, together with those of governments and foundations, and also the tremendous up-surge in interest in departments not hitherto concerned with leprosy, it will be concluded that the volume of research in leprosy is truly impressive.

ELEP IN ROME

During the meetings of the Medical Commission and the General Assembly of ELEP held in Rome from 6 to 8 April, 1973, participants were invited to 2 functions that took them away from their deliberations on world-wide problems of leprosy.

The first was on Friday, 6 April, when His Holiness the Pope gave an audience to representatives of Member Organizations and their ladies. After His Holiness had welcomed them in a warm tribute to those engaged in one way or another in the struggle against leprosy in the world, His Excellency the Ambassador B at de Fischer, President of ELEP for the year, replied suitably before presenting 5 representatives, including 2 members of the Medical Commission, Doctors L. P. Aujoulat and S. G. Browne.

The second occasion was a Reception given the following day by His Most Eminent Highness, the Prince and Grand Master of the Order of Malta, in the Palace of the Knights of Malta, historic headquarters of the Order in the centre of Rome. At this ceremony, Dr S. G. Browne, President of ELEP's Medical Commission, received the Cross of Commander "*pro merito melitensi*" for his services to the cause of leprosy.

During the year 1972, the Member Associations of ELEP were responsible for collecting over 7,700,000 dollars (U.S.), which was used to help 586 centres treating over 900,000 leprosy patients.

THE ARMADILLO

Dr Eleanor Storrs and her colleagues at the Gulf South Research Institute, Louisiana, are vigorously pursuing several promising research projects using the armadillo.

Reports of the susceptibility of this animal to infection with *Mycobacterium ulcerans* are now confirmed. The organism grows slowly on artificial myco-

bacterial media, and apparently grows best at a temperature of 32°-33° C. The successful inoculation of 2 armadillos (out of 4) with *Myco. ulcerans* opens the way to investigations that should not only identify the substances that cause the severe tissue damage seen in Buruli ulcer, but should indicate the direction to be pursued in chemotherapeutic studies.

Reports of the discovery of *Myco. leprae* in the central nervous system (cerebrum, cerebellum, spinal cord and meninges) of armadillos inoculated intravenously with a suspension of the organisms, suggest that the choroid plexus barrier may be traversed in an animal more susceptible than man to leprosy infection. Recent isolated findings in the experimental mouse infected through its footpads points the way to a more widespread infection in the armadillo. Perhaps the histopathologists will now stain and painstakingly examine serial sections of brain tissue from human patients dying after long-standing lepromatous leprosy.

The German Leprosy Relief Association (Deutsches Aussätzigen-Hilfswerk E. V.) has recently made a welcome grant of 3000 U.S. dollars to support the work at Indian Camp, Louisiana.