Lepr. Rev. (1972) **42**, 223-226

Book Reviews

WHO Expert Committee on Leprosy: Fourth Report. WHO Techn. Rep. Ser. No. 459, Geneva, 1970. 31 pp. Price 30p; U.S. $1.00, Sw. fr. 3. (Sales agent for U.K.: H.M. Stationery Office.)

This report will be read and pondered with interest in ministries of health in many countries and by leprosy workers the world over. Like previous reports, it attempts to assess the present situation in regard to leprosy, to appraise progress, and to provide useful data for planning control measures.

The number of patients diagnosed and registered during the past quinquennium (500,000) is about half the expected total. This is one of the figures submitted with "many reservations", and reflects the incomplete nature of the returns from countries where leprosy is most prevalent. [The statement that "even in areas of very high endemicity . . . it is unlikely that the prevalence rate will exceed 50 per thousand" is open to challenge, and is refuted by findings from several "areas" in Africa and Asia.] It is concluded that "the prevalence now remains at approximately the same level" in 1970 as in 1965 [which would suggest, in view of the increasing population, that the total number of patients is greater].

The Committee is of the opinion that, because of the risk of relapse of patients with lepromatous leprosy, and the proportion of such patients harbouring bacilli, it is necessary to ensure by regular treatment that at least 75% of patients with multibacillary disease must be rendered bacteriologically negative if a reduction in incidence is to be achieved. The point is made that dependence on auxiliary staff opens the way to either under- or over-diagnosis of leprosy under field conditions.

In the matter of therapy, the Committee (with perhaps undue caution) asserts that there is no "established alternative" drug to dapsone when intolerance to that drug occurs. The Committee recommends that where treatment is given into the patients' hands, reports should indicate "regularity of attendance" rather than "regularity of treatment".

Unexceptionable comments are made on the training of auxiliary staff and on health education. The observation is made that, although 5 years have elapsed since the Third Expert Committee Report was published, some countries still have not developed a suitable system for collecting and reporting the necessary statistics regarding leprosy. The modified criteria for "released from control" are appended *in extenso*: "A leprosy patient without any sign of clinical activity and with negative bacteriological findings should be considered as an 'inactive' case. Once inactivity is achieved, ***regular treatment*** should be continued for varying periods of time before the patient is 'released from control' (r.f.c.). These periods should be 1½ years for tuberculoid leprosy, 3 years for indeterminate, and *at least* 10 years for lepromatous and borderline cases. Since data on relapses after r.f.c. are scarce, it is advisable and important to continue the follow-up of lepromatous cases but without treatment; some leprologists consider that this should be done for life."

The section on research provides a useful summary of recent and projected work. One important observation refers to the Morphological Index, and reads as follows: "Because of its limits of sensitivity, however, it is not a suitable procedure for distinguishing the infectious from the non-infectious patient, even when performed under optimal conditions by highly experienced investigators." (This assertion will be received with mixed feelings by field workers and by public health administrators, who were hoping that the experimental evidence concerning viability of *Myco. leprae* could be utilized in positive recommendations of control measures.)

Recommendations for future research into the cultivation of the causative organism, into drugs and immunology indicate the lines of future investigations. The vexed question of the value of BCG vaccination in the prevention of leprosy is adequately summarized, and the conclusion is reached that it is premature to recommend the widespread use of BCG vaccination for this purpose. The standardization of lepromin has now achieved general consensus; stocks should be made from lepromin yielding 160 million bacilli per ml. The following criteria are recommended for the late (Mitsuda) lepromin reactions: 0 = no reaction; ± = induration less than 3 mm; + = nodule of 3 to 5 mm; ++ = nodule of 6 to 10 mm; and +++ = nodule larger than 10 mm or with ulceration. The letter "U" should be added to the size to indicate ulcerations.

The paragraph on recent advances in the immunology of leprosy indicates the progress made in recent years, and mentions the isolation of a protein antigen that is apparently specific for *Myco. leprae.* An indirect fluorescent antibody technique, employing smears from *Myco. lepraemurium* as antigen, is reportedly giving consistent results in sera from persons with leprosy.

The section on chemotherapy and chemoprophylaxis summarizes accepted views on the sulphones, the long-acting sulphonamides, clofazimine, and acedapsone. Regarding thalidomide, the Committee recommends that for the present the drug should "be used only for strictly investigative purposes under proper conditions of observation and control". The studies in chemoprophylaxis are referred to briefly, with mention of the need to determine the optimum dose of drug needed and the duration of administration. The gaps in our knowledge of epidemiology and transmission, and of genetics, are emphasized in a concluding section.

This Fourth Report of the Expert Committee provides a useful summary of the generally accepted views on leprosy, and will be referred to as an authoritative and serious pronouncement on the major aspects of the disease.

S. G. Browne

Health and the Developing World, by John Bryant. Ithaca and London: Cornell University Press. 345 pp. Price $10.00; £4.75.

This book should be required reading of everybody having to deal in any way with problems of health and disease in the developing world. It would be of great and salutary interest to all workers in leprosy, but particularly to those who have any say in the formulation of policy and in its implementation. The proverbial isolation of the leprosy worker will sooner or later have to yield before economic, social, and medical pressures. Reading this book will both prepare him for the inevitable changes, and help to make him an active participant in accelerating and welcoming them.

Dr Bryant marshalls in eye-catching and convincing array all the statistics and tabulated information required for an appraisal of the health situation in the countries of the Third World and for the formation of a judgement on the trends now apparent. Throughout the argument, he spares no punches—for the dead-hand of western-orientated teaching in the new medical schools, for the insistence on curative medicine in sophisticated surroundings for the favoured few, for the uneconomic yield in terms of cost/effectiveness of much foreign aid and many teaching programmes. He notes that leprosy at first attracted only the voluntary agencies, and that their help, for the "outcast" sufferers from leprosy could not keep pace with the "never-ending demand". He expatiates at length on the place and function of the medical auxiliary (perhaps retrained and up-graded) in any scheme for the delivery of some kind of health care to rural communities, and criticizes the widespread professional opposition to their deployment, especially where doctors and medical services generally are concentrated in the big towns.

Dr Bryant considers that no single country in the developing world can afford to seek out and treat all those suffering from tuberculosis or leprosy. Perhaps some problems that share common causes or have some common elements, such as tuberculosis and leprosy, might profit from a single programme of detection, treatment, and prevention. A programme of BCG

vaccination, inexpensive and practicable, might well point the way to effective control of both diseases. He does not see how countries with severely limited budgetary resources can embark on a programme entailing a series of specialized divisions pursuing particular problems or specific diseases. As an example of ill-considered spending, he cites the example of a country that allots the disproportionately high sum of 5% of its national budget to leprosy, but fails to bring any kind of treatment to over 90% of leprosy sufferers. The reason?—an instance of institutional as opposed to ambulatory treatment. The recurrent problem is to disburse severely limited resources so as to obtain the maximum possible benefit. While admitting that "some of the most important reforms in the fields of health and education are of necessity social reforms", Dr Bryant advances weighty arguments to support his main thesis that despite all obstacles, the way to health in the developing world would be made less difficult by more knowledge, more goodwill and more co-operation. Leprosy workers would re-echo these sentiments.

S. G. Browne

Handbook of Leprosy, by W. H. Jopling. London: William Heinemann Medical Books Ltd. Price £1.15.

This little book of 91 pages, with 4 pages of coloured plates and several black-and-white photographs and diagrams, should prove a useful introduction to leprosy for doctors and nurses. The author expresses the hope that medical assistants will find in it the help they need in the diagnosis and managment of leprosy. Dr Jopling gives a very readable account of the practical aspects of leprosy, combining his descriptions with some up-to-date observations on advances in the bacteriological and immunological investigation of this intriguing disease.

The pages devoted to treatment contain much good advice from a clinician who is constantly confronted by the problems he describes. His tribute to the invaluable work of the medical auxiliary will be re-echoed by anybody connected with a leprosy control scheme anywhere in the world.

S. G. Browne

Memorandum on Leprosy Control, by Stanley G. Browne. London: OXFAM, LEPRA, The Leprosy Mission.

Here is a brochure of 27 pages that will prove of value to all concerned with leprosy. Written largely in non-technical language and intended primarily for the guidance of OXFAM Field Directors, Committees, and Headquarters Staff in examining requests for financial assistance, it should prove very useful to those who put forward the requests, and in fact to all engaged in organizing or taking part in schemes for leprosy control.

The brochure summarizes the generally accepted principles of leprosy control, and includes sufficient technical details to indicate the scientific basis for the rather dogmatic assertion printed on the title page: "if existing knowledge about leprosy were conscientiously and persistently applied, the disease could be controlled in our generation and eradicated in the next".

The brochure was prepared for, and approved by, the Medical Panel of OXFAM. It is issued jointly by OXFAM, the Leprosy Relief Association (LEPRA) and The Leprosy Mission. Copies of the English edition are available free to medical and senior paramedical personnel concerned in leprosy work. Requests should be addressed to:

The Editorial Department,
The Leprosy Mission,
50 Portland Place,
London W1N 3DG.

Translations into French, German, Spanish, Italian, Dutch and other languages are in active course of preparation. Details may be obtained from:

Dr. S. G. Browne, O.B.E.,
57a Wimpole Street,
London W1M 7DF.

Leprosy in Five Young Men, by George J. Hill. Boulder, Colorado: Colorado Associated University Press. February, 1971. Price $8.00

This book provides a fascinating record of a most detailed investigation of 5 Mexican leprosy patients who voluntarily submitted to a whole battery of tests at the National Institutes of Health, Bethesda, Maryland, U.S.A. It thus provides a summary of the bacteriological, biochemical and immunological findings in typical patients, 4 of whom had lepromatous leprosy and the other near-tuberculoid leprosy. One's respect for the high standards of the investigators is matched by admiration of the co-operation of the "human guinea-pigs" who endured the succession of procedures and tests, the results of which are tabulated in this account.

Many of the investigations reported are of academic interest only; others are of genuine pathological importance. *Myco. leprae* is to be found almost anywhere in the human body, and it persists at out-of-the-way sites for long periods. (The brain and cerebro-spinal fluid appear to have escaped the probing curiosity of the Bethesda team.)

One important omission impresses the reader: that is, any informed and detailed discussion of the morphology of *Myco. leprae* as seen in the material examined. Another point: the bacillary content of the lepromin used; and the significance of late (Mitsuda) skin reactions of less than 5 mm in diameter.

This book should stimulate the investigation in depth of patients with other forms of leprosy, and the use of techniques (especially serological techniques, and those of immuno-fluorescence) now becoming available. There must still be "more light and truth to break out" from leprosy, and we thank Professor Hill for permitting us to share something of the scientific fascination of the work of the distinguished team of which he was so enthusiastic and competent a member.

S. G. Browne

Leprosy, by S. G. Browne. Basle: Geigy 1970. 78 pp. Illustrated. (*Documenta Geigy: Acta Clinica, No. 11*)

This is a distillate of the knowledge acquired during a professional lifetime devoted largely to leprosy work, research and teaching, and as such is "heady" wine supplied in a small container. Publishers of medical books and papers will wince at the sight of this magnificent array of colour photographs—100 in all!

Those engaged in the study and management of leprosy will have good reason to be grateful to the author and to Geigy Ltd. for giving them such an authoritative and stimulating guide.

W. H. Jopling