BOOK REVIEW

[The first item in this section does not deal with an actual book, but with a publication that should not be submerged in the abstract section. —EDITOR.]

W.H.O. Expert Committee on Leprosy. First report. World Hlth. Org. Tech. Rep. Series No. 71, September 1953, 28 pp; 1/6, $0.20, Fr.fr. 65, Sw. fr. 0.80. (Also available in a French edition.)

The first report of the Expert Committee on Leprosy emphasizes the fact that "leprosy is not a disease apart," that it is rather "a general public-health problem in the countries where it is endemic." It is maintained that any measures for raising public-health standards are likely to help in the control of leprosy, whether they be directed against specific infections or infestations or be concerned with the improvement of nutrition, sanitation, or housing. It is further stated that "public health and not public fears and prejudices should determine the policy in respect to leprosy control."

Considering the methods of leprosy control, the committee endorses the statement made [at the Cairo leprosy congress, 1938] to the effect that leprosy "is an infectious disease spread principally by direct contact, and possibly by indirect contact.... As with other infectious diseases, the aim is to discover cases as soon as possible in order to control the spread of infection to the community, and in order to give the patient the benefit of treatment." Modern treatment is, in fact, regarded as "the most potent generally applicable weapon now available in the control of the disease." The report describes a dispensary system, aiming at the early detection and treatment of cases, which is felt to be essential in the organization of leprosy control.

In respect to isolation, and from an administrative point of view, leprosy cases should be classified as infectious ("open") or non-infectious ("closed"), even though it is recognized that there are degrees of infectiousness. Only cases considered infectious need to be subjected to some form of isolation, but all cases require treatment. It is pointed out that there are variations according to country and area with regard to the degree of isolation of infectious cases necessary, the methods of securing it, and the amount of compulsion required. Attention is drawn to the disadvantages of compulsory isolation. Because patients fear to break up their families and to leave their dependents unprovided for, and, still more, because they fear an indefinite stay in the leprosarium, they tend to conceal their disease at a time when treatment would be most effective and when they are a danger to their contacts. The need for education of the public concerning the nature of leprosy is stressed, since "public opinion ranges from callous indifference to panic, and the patient and his relatives are often subjected to barbaric cruelty."

Sulfone treatment is stated to be "greatly superior to previous forms of treatment." It was long believed that DDS (diaminodiphenyl sulfone) was too toxic for use in human beings, but "experience in thousands of cases of leprosy in several countries for a period of over four years has shown this belief to be erroneous, provided the dose is suitably regulated." Treatment with thiosemicarbazones and other therapeutic agents, supplementary therapy, physiotherapy, surgery, and orthopaedics are also discussed in the report.

Possible prophylaxis by means of BCG has been studied in some countries, particularly Brazil; further investigations, it is felt, are needed to confirm the preventive value of this vaccine in leprosy and are accordingly recommended.

Other subjects dealt with are the epidemiology of leprosy, classification of cases, immunology (in which details concerning the lepromin test are given), and the signif-

icance of histopathological examinations.—[Review from *Chron. World Hlth. Org.* **7** (1953) 291-292.]

ADDENDUM: The foregoing review deals adequately with certain parts of the report, but it dismisses very briefly, in the last paragraph, certain features that are not without some importance. A more balanced and considerably longer review will be found in *Excerpta Med.* **8** (1954) 70-72. An excellent one will also be found in *Tropical Diseases Bulletin* **51** (1954) 270-272.

Actually, this report, which was prepared in sessions held in Rio de Janeiro and São Paulo in November 1952, and which became available just too late for general distribution at the Madrid Congress (October 1953), is divided into six sections: epidemiology, control, treatment, classification, immunology and significance of the histopathological examinations.

With respect to epidemiology, the committee avowedly dealt with only one aspect of that subject, namely, the infectiousness of the different forms of leprosy—a matter which is obviously important with respect to control measures. Much of this section is devoted to the evidence of the greater infectiousness of lepromatous cases, the point being stressed because "recent studies in one centre have been interpreted by some workers as providing evidence on the infectivity of the non-lepromatous cases." It ends with the following statement: "The recognition of a marked difference in the degree of infectivity of 'open' and 'closed' cases provides the basis of the widely practiced policy of confining segregation to 'open' cases. There is no adequate evidence to justify departure from this policy."

The section on control is the main subject of the foregoing review. The basic principles are (*a*) the one just noted about infectiousness; (*b*) the importance of treatment, since the advent of the sulfones; (c) the belief that the dispensary will—or at least should—come to be a main element of the operation, primarily to provide treatment but with various other functions; and (d) the possible usefulness of BCG vaccination.

The section on treatment comprises a conservative statement of the status at the time of the various drugs in use or under experimentation, one which would not be changed very radically today. A more recent evaluation of the situation is in the report of the Committee on Therapy of the Madrid congress.

The section on classification emphasizes the leading place held by the clinical features among the criteria, these including the bacteriological findings; the immunological and histopathological features come afterward. "The histological examination....should not govern the primary classification except in case of definite error in the clinical determination...." Four forms or classes are recognized, lepromatous, indeterminate, tuberculoid and borderline—the last being given a definite place in classification for the first time. The tuberculoid type is divided into minor and major forms, and a "reaction tuberculoid" condition is also given recognition—which should help correct the rather prevalent idea that the major form *is* the reactional condition.

The immunology section, limited to the lepromin reaction, recommends the Mitsuda-type antigen for this test; if any of the other antigens introduced in recent years are used, that fact should be made clear in reporting results. Because suitable leproma material is becoming increasingly difficult to obtain, as a result of present-day treatment, and because the classical technique is wasteful, an improved (hitherto unpublished) method of making the antigen is given in detail. An essential feature is the use of nylon bolting cloth, which does not absorb fluid, instead of multilayered surgical gauze for filtering the leproma suspension. To encourage uniformity of reading and recording the reactions to lepromin, both the early (Fernandez) and late (Mitsuda) ones, recommended gradings are given. These do not differ greatly from those recommended by the Second Pan-American Conference (Rio de Janeiro, 1946).

The last section, quite different from the rest, tells of a project that is predicated on the fact that clinicians tend to believe that the histopathological examination gives the final word in cases difficult to classify, whereas in fact such examinations "are not necessarily absolute or infallible, as for example those of a chemist may be." A project is proposed for determining how well histopathologists working in leprosy agree in their findings with "unknown" specimens, including some from problem cases.

Copies of this report are obtainable, in either English or French, from any of the WHO publications agents in various countries or directly from the Sales Section, Palais des Nations, Geneva, Switzerland. The prices are indicated in the heading; payment must be made in one of those currencies. —H. W. W.

World-Atlas of Epidemic Diseases, Part I. Edited by Professor Dr. med. ERNST RODENWALDT. Assistant scientific editors: Dr. med. Ludwig Bachmann, *et al.* In collaboration with Professor Dr. med. Richard-Ernst Badet, *et al.* [In German and in English.] Sponsorship: Bureau of Medicine and Surgery, Navy Department, Washington 25, D.C. Cloth-boards, 225 marks. Pp. 128, with illustrations and 52 maps. Falk-Verlag, Burchardstrasse 8, Hamburg 1, 1952.

During World War II, German epidemiologists, under the direction of Dr. H. Zeiss, director of the Institute of Hygiene of the University of Berlin, prepared the material for this atlas. It is patterned somewhat after Hirsch's "Handbook of Historical and Geographical Pathology," written in 1881, but this publication includes large multicolored maps that depict not only the prevalence of epidemic diseases but also trends of prevalence.

The book is large, measuring approximately 15 in. by 20 in. The text is written in both English and German. This is the first volume. Work on the second volume is now in progress, and it will include diseases such as tuberculosis, influenza, pneumonia, and other respiratory diseases, which are more important than some of those now included.

The atlas is limited to diseases in areas of military importance. Although during wartime it is possible to collect a great deal more information than is generally available, some of the selections are somewhat limited, probably because the material available does not depict a true picture. However, for those interested in geographical epidemiology, the text should be very useful. Owing to its size and cost, the atlas probably will be available only in libraries.—[From *J. American Med. Assoc.* **152** (1953) 197.]

ADDENDUM: One section of this work (pp. I/39-I/46, the first part in German and the second part in English, the two parts not identical, with Map 15), deals with leprosy in Europe. It was prepared by K. E. Littann, who exhibited copies at the Madrid Congress.

The text with its tables, and the map contain a great deal of information; not all of the features can even be indicated. The map (which measures about 24 x 17 inches unfolded) includes all of Europe to the Urals, some of Northwest Africa, the Mediterranean islands, and a part of the Near East. It shows at a glance the distribution and concentration of leprosy cases, and to a considerable extent their sources. The locations of leprosaria and of leprosy dispensaries are indicated, with one or two surprises (e.g., dispensaries indicated for Stuttgart and Vienna, as well as Hamburg). Symbols indicate decreasing or increasing prevalence—decreasing in all of the northern region, but increasing in Spain, the Odessa region, and around the Caspian Sea, although it is admitted that little is known about the present number of cases in the U.S.S.R. A summary table gives 9,324 as the total number of registered cases in Europe, and 20,000-23,000 as the estimated total.

Unfortunately this section of the Atlas is not obtainable separately, and the high cost of the whole work will limit its availability severely. —H. W. W.

Contribuiçao ao Conhecimento da Natureza da Reaçao de Mitsuda. By J. LOPES DE FARIA. Serviço Nacional de Lepra, Rio de Janeiro: Depto. Imprensa Nacional, 1953, 197+54 pp., 98 figs; paper.

This book, a Contribution to the Knowledge of the Mitsuda Reaction, deals with three subjects, but for better clarity of this note we will combine the first two, dividing it therefore into two parts.

(1) First, the nature of the Mitsuda reaction is investigated, and a comparative study is made of the reaction to lepromin in dogs and in leprosy patients. The saline-soluble fractions (proteins and polysaccharides) are void of effects, while on the other hand the lipid fractions of the Mitsuda antigen produce in dogs and man, by a non-specific mechanism, a reaction which is essentially similar to that obtained with the integral antigen. It is, therefore, concluded that the reaction is not one of allergic nature, but of foreign body type dependent upon the natural resistance, even in the tuberculoid patients in whom allergy (hypersensitivity and acquired immunity) plays only a secondary role. The delay in the appearance of the reaction is due to the slow liberation of the lipids through disintegration of the bacilli. The author denies that there is fibrinoid degeneration or necrosis in the Mitsuda reaction lesions in tuberculoid patients. The difference between the lepromin reaction in dogs and in tuberculoid patients is that the early reaction occurs in the latter, with no period of histological latency such as precedes the late nodular reaction. Both of these facts are explained by the existence of allergic hypersensitivity in the tuberculoid patients. The longer duration of the Mitsuda reaction in leprosy patients as compared with that in dogs may be explained on the ground that in the patients there is less disintegration of the bacilli because of the lesser natural resistance.

(2) Reactions similar to that of Mitsuda are produced by normal skin extracts. An extract from normal skin, obtained by the technique used for the preparation of integral antigen, produces in at least 50% of tuberculoid cases a late skin reaction of tuberculoid structure similar to that of Mitsuda. The author interprets this fact as a foreign body reaction due to natural resistance, allergy playing no part in the matter. In lepromatous patients no such reactions are produced. It is gathered from these facts that the Mitsuda antigen contains, besides bacilli, constituent elements of the skin, and that it is these elements of the integral antigen which are responsible for the production of the late reaction. —G. BASOMBRIO.