BOOK REVIEWS

Belehu, A., ed. AHRI Research Digest: First Ten Years of Leprosy Research, 1970–1980. Addis Ababa: Armauer Hansen Research Institute, 1980. Price: US\$5.00.

History is always formed by individuals and is a reflection of the people involved. This is certainly true for the Armauer Hansen Research Institute (AHRI). In its short period of existence it has seen several scientists join for short contract periods when they have contributed their share. The present AHRI Research Digest, with its selected papers and its bibliography, reflects this general feature of historical events.

Looking through the scientific papers from the Armauer Hansen Research Institute, the continuous development of research activities is clearly seen. New laboratory techniques and new ideas have constantly been brought in, resulting in a very complete coverage of various immunological and bacteriological aspects of leprosy. The initial year marked the establishment of basic laboratory methods with emphasis on recruiting and training of personnel. It was followed by the important application of the in vitro tests for measuring cell-mediated immunity in leprosy, providing new insight into aspects of host responses against the leprosy bacillus. Indeed, apparently healthy persons were found to respond immunologically towards M. leprae even after short periods of exposure. The subsequent introduction of micromethods for testing cellular immunity in combination with considerations of the antigenic mosaic of the leprosy bacillus has further increased our understanding of immunopathological events.

Links with other scientists proved rewarding. Clinicians at ALERT have served as essential research counterparts. Field research in leprosy using *in vitro* methods for testing cell-mediated immunity have been conducted. Other guest scientists contributed to our understanding of syphilis, a disease with several immunopathological features similar to leprosy. Collaborative work with laboratories in other countries has

highlighted selected aspects of host reactions. Further expansion of the activities have included studies aiming at an understanding of basic defects in host responses in leprosy. Possible correlations with various genetic markers have been sought. Lately, leishmaniasis has been taken up as a suitable experimental model for immune reactions in chronic infectious diseases.

In view of these developments, the establishment of AHRI ten years ago must be judged as uniquely timely. The credit for its foundation goes to the foresight of members of the Leprosy Committee of the Norwegian and Swedish Save The Children Organizations. In a daring moment of decision-making in the mid-60s, the Armauer Hansen Research Institute was created. Continuous care of the institute by the founders, by ALERT, by the Addis Ababa University, by the Ethiopian Ministry of Health as well as by other institutions and individuals has secured its continuing growth.

The milestone representing the decade passed is a place not only for looking back to summarize the past. It also represents the crossroads with several new possibilities ahead, a time to reconsider goals set and directions for future work. Some new trends might already be noticed. Links with other institutions in Ethiopia have developed, and a more firm place in the national context is discernible. Training aspects to promote the spread of knowledge and technical know-how have received increased attention.

It is possible that this aspect might prove most important in the future. The present AHRI Research Digest with its review chapters and its collection of scientific papers can serve such a teaching purpose. It is therefore my sincere hope that this booklet will promote a wider understanding of basic immunological mechanisms in leprosy. The reader will be enlightened not only about past achievements in leprosy research but also about possible new avenues for future research.—G. Kronvall

Buchmann, H. Leprosy Control Services as an Integral Part of Primary Health Care Programs in Developing Countries. Wurzburg: German Leprosy Relief Association, 1978, 79 pp.

This booklet is a slightly revised version of Mr. Buchmann's M.P.H. thesis at the University of North Carolina, Chapel Hill, School of Public Health. The work is divided into two principal sections. Part one deals with "the need and rationale for leprosy control services to become an integral part of primary health care (PHC)." In this part, the author deals with the historical inadequacies of leprosy control strategies because of factors such as administrative shortcomings, inadequacy of general health care infrastructures, and problems or lack of knowledge about transmission, chemotherapy, and treatment. He then proceeds to state the rationale and objectives of integration of leprosy control services into the general public health care infrastructures of developing countries. Part two deals with the "implementation of a leprosy integrated primary health care program.' He details the training, role, and community acceptance of primary health workers (PHWs) in this implementation strategy and elaborates on a number of the integrated activities of PHWs in this scheme such as dealing with malnutrition, maternal and child health, population control, data collection and activity recording, etc.

This work is extremely well organized, highly detailed, and well referenced.

Mr. Buchmann was formerly coordinator of a German Leprosy Relief Association (GLRA) supported national leprosy control program in Togo and is now acting as a GLRA consultant and coordinator in southern Sudan where the regional government is establishing a primary health program, including leprosy control and treatment.—G. Gordon

Kelly, E. D. Physical Therapy in Leprosy for Paramedicals. Bloomfield, New Jersey: American Leprosy Missions, 235 pp.

This book is a training manual for paramedical workers in leprosy. It is a remarkable production, and the author is to be con-

gratulated for the patient work that has gone into its production and for the admirable clarity and discipline which characterize it.

Dr. Kelly has an impressive background for her authorship. She has been a teacher of health education and physical education for more than 40 years. She is in fact a teacher of teachers and is the author of a standard text, Adaptive and Corrective Physical Education, which is still used in the United States for teacher training. Since her retirement Dr. Kelly has worked as a volunteer in Ethiopia where she organized all the training programs at ALERT and did a lot of the teaching herself.

Lest the casual observer think this either too large a book or too advanced for health workers in leprosy, one has only to read the sections carefully to see that its size is used chiefly to make quite sure that each statement is understandable on the basis of earlier statements in the book. No pre-knowledge is taken for granted. The whole teaching and learning process flows in an orderly sequence and is understandable step by step by anyone who can read and understand English. The manual is arranged in three levels. Level I is a summary of aspects of leprosy which are important to physical therapy, health education, and home health care. Level II covers physical therapy techniques for use in hospitals, clinics and in the field. Level III covers preand post-operative physical therapy and the anatomy and physiology necessary to understand it.

Throughout the manual there is a parallel teaching of knowledge and skill. Each piece of knowledge is matched with the skill or application which grows out of it. The whole production is illustrated and clarified with diagrams from artist David White, who has combined beauty and simplicity in his work

In almost any manual for programed education the subject is taught with a certain dogmatic assurance, as if we knew the answers and as if each question had just one right answer. This is justifiable because this is not a background for research but to put our existing knowledge to work where it is needed. Even so, some teachers may be annoyed to find instructions that they do

not agree with. In the application of a plaster cast, for example, some would want padding placed around the malleoli before the plaster casts are applied; others, like myself would want to go on molding the first layer of plaster until it has set—to get a perfect inner layer before all the plaster slabs and strengthening foot plates are applied. I also would have wanted a warning about the need to remove the cast early a) if the leg had been swollen before the cast was applied, b) if the cast became loose or cracked even a little, and c) if the patient felt something was wrong inside. These individual differences of emphasis are inevitable, and I would hope that nobody would allow any book to become a substitute for personal supervision and teaching; however, this should not make any teacher discard a teaching manual such as this simply because it does not accord with all of his or her own ideas. Most of us over-emphasize the details we have learned from our own experience and neglect the wealth of wisdom available from the experience of others. This manual has been carefully collated from many sources and will serve to insure a broad solid background of knowledge and skill on the basis of which each of us may highlight his or her own special insights and unique experience.-P. W. Brand (reprinted with permission from Lepr. Rev. 50 [1979] 335-336)

The 2nd International Workshop on Training of Leprosy Workers in Asia. Bangkok, Thailand, January 7–16, 1979. Tokyo: Sasakawa Memorial Health Foundation, 1979, 242 pp.

In an introductory statement to this document entitled "Purpose and Conduct of the Workshop" (written by Dr. T. Hongladarom of the Faculty of Medicine of Chulalongkorn University, Bangkok), the specific educational objectives intended for each participant in the workshop are given: a) learning to identify common problems in leprosy training programs; b) acquiring basic educational principles to deal with these problems such as curriculum development, design of teaching methods, and selection of teaching materials; c) gaining the capacity to define appropriate training concepts; and d) learning how to develop a training plan that might be implemented at the participant's own institution.

The workshop featured sessions on numerous educational concepts such as program presentation and analysis, learning principles, teaching methods, media, group processes, evaluation, and manpower development, and a full record of each session is provided. Additionally, the workshop report reprints an exhaustive series of source materials available at the workshop; these consist of papers adapted from recognized works on educational theories for use at the workshop. Examples of these source materials include behavioral training objectives, resistance to change, defining objectives, and examination methods.

The workshop report also includes a full record of the related activities of the meeting, including formal addresses during the opening and closing sessions, the program of the meeting, and a list of participants.—G. Gordon