*Lepr Rev* (1982) **53**, 77–78

# Book Reviews

**Medical Laboratory Manual for Tropical Countries,** by Monica Cheesbrough. Vol. 1. Introduction to the Laboratory; Anatomy and Physiology; Clinical Chemistry; Parasitology; Wall Charts; SI Unit Tables. Cambridge, U.K., 1981. 496pp. Cloth, 18 × 26 cm, 2.5 cm thick. Extensive index.

In the Foreword, Dr Waldemar Ferreira, formerly Chief Medical Officer of the Health Laboratory Unit of WHO, refers to the WHO publication 'Manual of Basic Techniques for a Health Laboratory' and indicates that the present manual by Monica Cheesbrough has 'a more ambitious purpose; to fill the gaps existing today in manuals for laboratory technicians in intermediate and referral hospitals in tropical countries, where the need for laboratory support is greater than in the peripheral areas. Such a manual could be used both for training and for reference, as many of the technicians work in isolated conditions.'

The main sections are as listed above. There are also 3 appendices entitled 'Preparation of Reagents, Addresses of Manufacturs and Useful Tables'. In addition, there is a 'pocket' with colour charts for wall display, SI unit conversion tables, labels to mark dangerous chemicals and colour charts for use with urine reagent strips. Obtainable on direct application of Miss Monica Cheesbrough, FIMLS, Tech RMS, 14 Bevills Close, Doddington, Cambridgeshire, England PE15 OTT. Cost: £4.70 in developing countries, plus £1.25 for postage and packaging; £7.60 in other countries, plus £1.75 for postage and packaging.

This remarkable manual, at an almost unbelievably low price, should be in the possession of all laboratory workers and teachers in tropical laboratories, at any rate in English-speaking areas. This statement is made on the understanding that such workers, even at beginner level will have achieved a reasonable level of literacy. In fact, the book contains a wealth of detailed information, which should be of great value at all levels, from junior technician to qualified pathologist.

AC MCDOUGALL

**Leprosy—Tuberculosis Eradication. Principles, Practical Implementation,** by Enno Freerksen and Magdalena Rosenfeld. Excerpta Medica. Amsterdam, Oxford, Princeton, 1980.

Despite its title, this book is largely concerned with leprosy. It includes 31 pages on the scientific principles of leprosy and tuberculosis eradication, but only 8 pages on the practical implementation of such programmes. It represents the accumulated experience of the Borstel Institute; of the 68 references quoted, 38 refer to work undertaken by, or in association with that Institute.

The main emphasis of the book is in the area of leprosy; the standpoint may be summarized as follows:

1. Leprosy can only be eradicated by chemotherapy; hopes for an effective vaccine are misplaced.
2. All (or almost all) cases of leprosy can be cured by treatment for 150 days with a course of combined therapy, including rifampicin, isoniazid, prothionamide and dapsone.

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3. This short-course treatment offers for the first time a realistic possibility of leprosy eradication in defined areas.

The book ranges widely, and one can agree with much of what is written. The emphasis on the need for multiple drug therapy, and on the possibility that leprosy can be cured by periods of treatment shorter than those advocated for dapsone monotherapy, is most welcome, as is the insistence that the only sound assessment of the value of a drug or drug combination is to discontinue treatment and, by careful follow-up, measure the relapse rate. Similarly, the Borstel Institute pioneered study of the use of surrogate mycobacteria to study the chemotherapy of leprosy, and this approach seems likely to become fruitful.

The reports of treatment of leprosy patients with the combined regimen are optimistic; however, only 1 such trial (the Malta project) has undergone detailed independent follow-up. The patients in that programme have developed remissions of disease for encouragingly long periods, but one can take serious issue with the statement 'relapses in leprosy are usually seen within the first 12 months after discontinuation of therapy' (p. 48). It would be most unwise to consider a patient with lepromatous leprosy as proved to be cured merely because there was no sign of relapse 5 years after stopping treatment.

Some statements on clinical matters must cause concern. They include: 'immunosuppressants have proved ineffective in leprosy reactions' (p. 17); 'dapsone initially has some effect in halting the spread of the disease, and can delay its course a little' (p. 26); 'punch biopsies are not feasible because of the cosmetic consequences' (p. 36); 'the occurrence of leprosy reactions requiring additional treatment. Thalidomide is added in such cases' (p. 44). Statements such as these must cast doubt on the reliability of the clinical findings reported by these workers.

Similarly, many workers will take issue with the statement 'the widespread view that only "solid forms" are viable is unfounded; some other forms can be viable' (p. 15). The view, though ultimately probably impossible to prove, is well founded on quantitative experimental findings; and its general validity is implicitly accepted by the authors when they state 'if only killed, acid-fast material is present or demonstrable, there is no point in continuing chemotherapy' (p. 46).

The authors make many general pronouncements that are hard to justify. They include: 'the aspirations [of a vaccine] based on work done in armadillos are utopian' (p. 16); 'controlled trials [are] in principle, unsuitable in the field of chemotherapy research, and [have] not led to any unequivocal findings either in tuberculosis or leprosy' (p. 21); 'clofazimine . . . was considered to be unsuitable in tuberculosis as early as 1960. Obviously, the arguments against its use in tuberculosis also apply to leprosy (p. 25).

Finally, one must comment on the authors' presentation of the development of their combined therapy regimen. This was selected on the basis of its efficacy against *Mycobacterium marinum*. But, consisting as it does of the 3 most active anti-leprosy drugs in full dosage, it would probably have been selected empirically as the most active drug combination. The addition of isoniazid is still of unproven benefit in terms of the chemotherapy of *M. leprae*. and may well increase the toxicity of a potentially toxic drug combination. The success of this combination, though gratifying, would not be unexpected; but much longer follow-up will required to substantiate the claim that it can, in 5 months, usually cure lepromatous leprosy. One must hope the claim proves to be true, for this would indeed be a major breakthrough in the control and possible eradication of leprosy.

JMH PEARSON