

## Book Reviews

**Smallpox and its eradication.** Eds: Fenner F, Henderson DA, Arita L, Jezek Z, Ladnyi ID. (Pp 1460; £80.00) Geneva: WHO, 1988.

Smallpox: fearsome scourge for over 3000 years, causing at least 10% of deaths in the middle ages: reduced somewhat by Jenner's discovery of 1796; over ten million cases and 59% of the world's population in endemic areas in 1959; abolished by a decision of the World Health Assembly in 1966? This last seems unbelievable in a world littered by declarations of piety rather than realism. Yet the 1966 decision to set up the Intensified Smallpox Eradication Programme with the goal of global eradication in ten years led to success in eleven. The story of smallpox eradication should be as well known as that of penicillin, the double helix or the heart transplant. This book is also a result of a WHO decision, this time to record the story. It is unique, magnificent, and enthralling.

Written by five men who personally contributed greatly to the campaign, but drawing on 78 others for review, this is the authoritative document on smallpox and for this reason alone should be widely available. But in the 1500 beautifully produced and illustrated pages the photographs, mini biographies and details of the successes and the failures of the programmes make this much more than a technical story.

The presentation is superb. The maps and graphs of the control programme can be flipped quickly to get a moving picture of the battle. Vignettes throughout the text have quotations and "human interest"; there are pictures of patients, religious artefacts, smallpox medals, stamps, health workers, nomads, vehicles, villages... It would make a fine presentation item.

The technical aspects can hardly be faulted. The clinical and pathological aspects of the disease are dealt with fully, with a series of full page photographs of the progression of lesions in one patient, and discussion of the effects of vaccination, differential diagnosis, virology and immunology. The history from Egyptian mummies to the 1966 situation is dealt with fully. Then the eradication campaign in each country is described. This is not mere statistics; we read of the effects of war in Somalia and Ethiopia, new epidemics after hopes of containment in India and Bangladesh, deaths of health workers in accidents, and of political and administrative problems everywhere; all leading up to the picture of Ali Maow Maalin, whose willingness to give directions to workers taking two patients to an isolation unit led to his becoming the last case of naturally occurring disease. And to my one criticism of the book—did he recover?—we are not told! The certification programme is discussed,

and the final (we hope) tragedy of the Birmingham outbreak and Professor Bedson's suicide. If there are yet those who despise the past, the final chapters on related diseases and on the lessons from the programme are valuable. Those interested in global issues, be it AIDS, HFA 2000, greenhouses or ozone holes, will find much of relevance in this success story of global cooperation.

One is tempted into popular reviewese by this book; "the monumental story over many generations of triumph, despair, setback, and tragedy . . . soon to be a major movie?" Well, I hope so. This story deserves a wider audience and this book could excite an Attenborough or a Puttnam into bringing it the attention it deserves.

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**Statistical methods in cancer research: Volume 2. The design and analysis of cohort studies.** Eds: Breslow NE, and Day NE. (Pp 406; £30.00) Oxford: Oxford University Press, 1988 (IARC Scientific Publications No 82).

Over the past decade or two the emphasis of occupational and environmental epidemiology has moved from case-control studies—the subject of the first volume—to cohort studies, as researchers have sought to address more detailed questions about exposure-response relationships. In their earlier book, Breslow and Day stressed the essential similarity of statistical methods applicable to these two approaches to epidemiological research, the flexibility of new methods for handling a variety of data configurations, and the wide range of problems that could be approached from a common conceptual foundation. The present volume maintains their pursuit of unity and flexibility. It falls into seven main chapters dealing with the role of cohort studies in cancer epidemiology, rates and rate standardisation, comparisons among exposure groups, fitting models to grouped data, fitting models to continuous data, modelling the relationship between risk, dose and time, and design considerations. As with the previous volume each statistical idea is illustrated with practical examples. Two data sets, one of grouped data from an American study of respiratory cancer in smelter workers and the other of individual (and grouped) data for a Welsh study of lung and nasal cancer in nickle refiners, are given in full to allow the student/researcher to test out ideas advocated by the authors and even to see the effect of developing their own alternative approaches to the analysis.

As the authors rightly note, this is one of the

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features of the previous volume which made it so successful. Among the others one must list the comprehensiveness of the material, the attention to detail and the way in which these highly regarded experts make complex material comprehensible to a wide non-statistical audience. This volume will be welcomed by all in the field who will be well rewarded for their patience in waiting for its publication.

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**Community medicine study guide.** Eds: Weir RD, Innes G, Russell EM. (Pp 162; £7.95) London: Heinemann, 1988.

There is great variation in the extent and content of the teaching of community medicine in medical schools around the country, and this book provides a useful insight into the comprehensive course taught in Aberdeen. Aimed at providing an "index and guide to items that should be studied by students during a community medicine course" it achieves this by setting out a list of learning objectives for each broad topic covered, followed by a concise text related to those objectives and supplemented by a list of pertinent references.

Inevitably in a text embracing the concerns of community medicine there is a need to be selective. The sections on "Methods of Investigation" and "Prevention" are well defined subject areas that lend themselves to the authors' format. Sections on "Medical and Social Care" and "Health and Behaviour" are less well defined and it is often in these fields that medical students find the greatest difficulty, used as they are to absorbing factual knowledge of other subjects. However, the authors have defined their objectives well and related the text to these objectives in a readable way.

Given the broad nature of the subject it is easy to quibble about content. On a general level the authors missed the opportunity in their introductory chapter to place this study guide within the context of community medicine as practised in the NHS today. It is only in the final chapter "Priorities for the Future" that we learn something about the scope of the work of a community physician. On a more specific level in the section on "Methods of Investigation", the great emphasis on the health economic methodology compared with standard analytical epidemiological investigation (case-control studies and cohort studies not warranting a mention by name) presumably reflects the interests of the Aberdeen group.

This book is to be recommended to medical students exasperated by the seemingly hazy nature of their

community medicine studies and will also provide a useful resource for teachers keen to develop their community medicine courses.

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**European community atlas of avoidable death: CEC Health Services Research Series No. 3.** Ed: Holland WW. (Pp 356; £40.00). Oxford: Oxford Medical Publications, 1988.

This book presents selected mortality data and minimal data on health service resources and indicators of social conditions for all the EC countries as a series of maps and tables. There is little text, all of which is written in English, French and German. Twenty individuals are listed as having participated in assembling the data, in addition to the 11 contributors who were part of the London based coordinating team at some time between 1983 and 1986.

Although Paolo Fasella, European Community Director-General for Science, Research and Development, claims in the preface that "no attempt has been made in the atlas to interpret the patterns observed or draw conclusions", the title itself implies a judgement—European Atlas of *Avoidable Death*. The criteria for the selection of diseases are set out in a table form in one of the many appendices. Unfortunately the logic governing the selection of diseases is not universally transparent and many would argue with the inclusion of some of them and the exclusion of others. Some of the data are presented on a pan European basis and others are presented for divisions of each country. The way in which the spread of mortality is demonstrated is ingenious but not immediately obvious.

It is difficult to imagine the target audience for this book. It is too formal for the interested generalist to grasp the implications of variations in mortality, yet too sketchy and limited in time to be of value to a student of a particular disease or the effect of health care and social circumstance on the incidence of disease. One thing is clear. Within the European Community there are real difficulties in obtaining comparable mortality data from all member states.

The volume is beautifully presented, for which the publisher deserves congratulations. Its contents, although interesting in part, do not really justify the work that has gone into its production.

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