Book reviews


The basis of this book is a conference called to define the present state of knowledge of risk factors in cancer, and thence to apply that knowledge more expeditiously in the identification and protection of high-risk subgroups of the population. Supported by the American Cancer Society and the National Cancer Institute the conference was attended by nearly 100 people, mainly from the USA, interested in various aspects of cancer epidemiology.

It is an excellent up-to-date and authoritative reference book for virtually all the risk factors in human cancer. Individually, whether by site of tumour or by aetiological factor, the comprehensive index provides the location of all references to the subject, and can lead to a rapid summary of current knowledge. In the body of the book the subject-matter is dealt with in 32 chapters divided into five sections, followed by an Envoi. Each chapter is of the same general form: a paper, varying in length from half a dozen to 20 or more pages, reviewing the particular topic of its title, with a summary, and a list of references (amounting to over 200 in some cases), and a discussion, which is a precis of what followed the delivery of the original paper.

Each of the five sections concludes with an overview which, in different ways as suits its author's intention, provides a conspectus of the section and its relevance to the main theme of the book. The first section, Host Factors, deals with genetic and familial susceptibility, immune deficiency and predisposing diseases, precancerous lesions and multiple primaries. The next section is headed Environmental Factors, and as befits its title is the longest single section. Occupation is one of the chapter-headings of this section, and it includes a useful classification of occupational carcinogens. Among other chapters of this section are Tobacco, Alcohol, Radiation, Drugs, Diet, Air Pollution. The third section includes demographic and geographical factors and is based both on studies of worldwide comparisons, and on internal studies of the USA. In the first chapter of the fourth section, Higginson lists high-risk groups by exposure patterns to chemical carcinogens, giving the sites affected, the relative risk and the latent period. Screening methods and other detection, and education of the public are in the same section. The fifth section attempts a further delineation of high-risk groups, and includes an important chapter by Selikoff and Hammond on multiple risk factors in environmental cancer, describing the synergistic effects for instance of asbestos exposure and cigarette smoking in the aetiology of bronchial cancer. The overview chapter of this section, by Knudson, is also an overview of the whole of the book. The final two chapters (the Envoi) are based on the findings of two discussion groups set up at the meeting, and provide valuable summaries of the conference in terms of the future prospects and opportunities for cancer control, and for cancer aetiology.

J. A. H. WATERHOUSE


The International Labour Office had an early interest in this subject, three of the six conventions adopted at its opening session in Washington in 1919 being concerned with hours of work or night work. The current publication (translated from French) is one of a number planned by the International Labour Office in the area of hours of work or their arrangement and 'is intended as a general introduction to the question'. In that it covers extent and kinds of shiftwork, reasons for its introduction, effects on health, performance, social life, and so on, it does not differ from a number of other reviews of the subject which have appeared in recent years. This would not matter if its content really did fulfill the promise of the introduction that the various aspects of the subject would be dealt with 'on the basis of the information available'.

Frankly, however, it is not very up to date. For example, although it makes a number of references to the Industrial Society's 1966 survey of 'current practice in Great Britain' it ignores the Society's follow-up survey in 1970 which illustrated a number of changes in shift practice. Only 12 of the 121 references are dated after 1966: only one is later than 1969. This is not necessarily a criticism of earlier material, although a number of the conclusions about shiftwork derived from wartime and earlier studies no longer apply under changed social and economic conditions, but it does undermine the author's avowed aim of encouraging research by pointing out gaps in the evidence.

There are certainly gaps in the evidence still, but not quite so great as this review suggests. It shows in particular a curious reluctance to make use of the last 10 years of British research (some of which has been reported in the British Journal of Industrial Medicine). For example, it is a little hard to discuss questions of health and absence in relation to shifts without any reference to the work of Taylor and his colleagues at the London School of Hygiene, to say nothing of Taylor's earlier studies on shiftwork and absence in the oil-refining industry.

Other major omissions include the National Board for Prices and Incomes' 1970 report on Hours of work, overtime, and shiftwork (particularly for its discussion of social effects); the experimental studies of Colquhoun and his colleagues at Cambridge and Sussex on hours of work and performance; and the more recent report of Wedderburn in the steel industry. In all these studies there is a wealth of well-documented evidence, based on carefully planned and executed research, to open up some of
those areas which the author regards as uncharted.

This review will no doubt introduce the topic of shiftwork to a new and nationally wider circle of readers. It will certainly serve to underline to them the range and complexity of the problems involved, but they should not regard it as the final or latest word on the subject.

R. SERGEAN


Unfortunately toxicology has never been a discipline that has attracted many able scientists from the more glamorous aspects of pharmacology, yet it can be easily argued that the development of selective pesticides has been of much greater benefit to mankind than all the components of the drug revolution used in the treatment of human disease. This enormous benefit has also been obtained at much less cost! As pointed out by the late John Barnes, more agricultural workers die each year from tractor accidents than the total number poisoned by pesticides since they have been in common use. Most of such cases were undoubtedly due to gross misuse.

This book is a magnificent testament to the knowledge that has been developed into their proper use. It begins with the best introduction I know on the benefits from pesticides in modern agriculture and an assessment of the problems posed by pesticides. This introduction is followed by three chapters on the general principles of toxicology as applied to pesticides, with particular reference to dosage, metabolism, and nature of chemical injuries produced. A further three chapters are devoted to studies in man and these are followed by diagnosis and treatment of poisoning, and an excellent synopsis on prevention of poisoning which should be of great practical use to all doctors involved in occupational medicine. Finally, and appropriately, there is a chapter on the effects of pesticides on wildlife, which should be mandatory reading for all who have read Silent Spring.

This book is an excellent, up to date and exhaustive study of modern pesticides. As an example, it includes all measurements of pesticide levels in human breast milk. It is produced by a photographic process which is almost as good as old-fashioned printing, but its price of £22 is unbelievable for just over 500 pages. It should certainly be available for reference in all departments concerned with occupational medicine.

R. KILPATRICK


The author writes 'The purpose of this book is twofold. Firstly to inform the GP of advice he can give his patients before they travel; the advances in preventive medicine with regard to tropical diseases have probably been greater than in any other branch of medicine. Secondly to help the GP in his differential diagnosis of these exotic diseases'.

The first chapter on 'pre-travel immunisation' and the second on 'pre-travel and in-travel advice' cover part of the first aim. The history both of international sanitary regulations and of the discovery of the aetiology of motion sickness are given, although why a general practitioner would wish to advise his patients of this is not clear. Much useful information is in fact contained in these chapters. In the section on travel sickness no doses are given of 'the most popularly used drugs' and mgm is used in place of mg for the one dose that is later given.

Further chapters on climate and acclimatisation, diseases of insanitation, and insect-borne diseases complete aim one.

In the second part of the book, post-travel symptomatology, heat disorders, fevers, alimentary and urinary tract infections, skin problems, bites, stings, venereal diseases, other infections both parasitic and non-parasitic are discussed. The advice given on the diagnosis and management of LGV using the Frei test and bed rest sounds rather old fashioned. Fitness to travel by air is a useful chapter.

The book concludes with a good review of medical assessment for living in warm climates.

Appendices are given on the vaccination requirements (WHO, January 1975) and on the climate of various countries, the location of yellow fever vaccination centres around the world, admitted malarious areas (WHO, 1972), overseas medical costs, and useful addresses.

Some of the material in the appendices is available elsewhere (WHO) and will date rapidly. It seems a pity to add to the cost of the book by including such information. A bibliography and index complete the book.

This book will be useful to those with little experience in this field, but will not compete with Brian Maegraith's book Exotic Diseases in Practice in the geography of disease, in useful clinical pointers or in the clinical aspects of exotic disease.

In summary, a useful book for reference, which could also help nursing staff. It is expensive even by today's prices and is written in rather turgid English. It is a pity that the companion volume The Traveller's Health Guide was not available for review at the same time.

A. WARD GARDNER


People concerned with occupational health will recognise that, as in many other branches of medicine, epidemiology 'the study of the determinants of the incidence and prevalence of disease' is playing an ever-increasing part. Although this book is not specifically aimed at occupational health physicians it does provide a general introduction to the way epidemiologists think and tackle problems, and a guide to the tools of their trade.

The chapter titles: the Role of Epidemiology; the Use of Mortality Statistics; Other Sources of Routine Data; Cross-sectional Studies; Retrospective Studies; Prospective Studies; Intervention Studies; and Medical Care Studies, conceal the emphasis that is placed on practical aspects of the subject. Examples such as the rise in daily deaths following the fog in December 1952 and the rise in cigarette consumption coupled with a rise in deaths from lung cancer throughout this century are used to illustrate particular epidemiological techniques. After describing the examples each chapter is then concerned at a general level with the important aspects of study design, methods of analysis and the interpretation of the data.

Those readers who will want to use this book as a foundation for epidemiological investigations are likely to find the omission of definitions and technical explanation a little frustrating. The approach results in considerable forward referencing which occasionally leads to a nonexistent or wrong subsection. There is, however, an extensive list of references at the end of each chapter and these provide the basis for further reading on most aspects of