BOOK REVIEWS

When smoke ran like water

This is a powerfully written book, and it is not only about environmental research and epidemiology itself, but also about the life of a scientist before and after research. In moving chapters the childhood years spent in a horrendously polluted steel mill town in the Monongahela valley become the backdrop for a life devoted to environmental research. An extreme pollution episode during a fog period culminates in the loss of many lives and is described like a crime story. From there, Devra Davis takes us to the places and times of other environmental calamities of the past, to a foggy London and an utterly polluted Liege. These chapters are written like wartime reports about the effects of a mixture of limited knowledge, poverty, and malign intent to disguise the real effects of pollution. Let us forget to stop this from happening again now and in the future.

This book also takes us to what may occur after the research is finished: the typical researcher’s war cry of “more studies are needed” has been misused by interested parties to avoid the political and often costly consequences of epidemiological or climate research studies. Interest groups have bullied and destroyed the lives of people who were an obstacle to their financial interests, while individual researchers have still prevailed and come out vindicated. Devra Davis lets us observe how environmental researchers are in a similarly difficult position, particularly in developing countries even today.

Devra Davis has the rare gift of bringing to life the world of environmental science and the people who generate it. This brilliant and vivid narrative is really hard to put down, and left me with the impression of having lived through many of its stories myself. A must for everybody interested in this field!

T Nicolai

Gender and social inequities in health—a public health issue

The aim of this edited volume of 10 chapters, predominantly Swedish authored, is to introduce a gender perspective into the health inequalities framework. Wamala and Lynch argue that both gender inequalities—observable differences in health and inequities—inequalities that are unjust—need consideration. The book’s orientation is sociological with due attention paid to theories of power relations and, of course, rehearsal of the distinction between gender and sex. Some chapters are based on the literature and consideration of theory, while one or two report on specific small scale studies. The theme dealt with most comprehensively is that of stress at work and additional health damaging stress faced by women because of their greater involvement in repetitive jobs and possible role conflicts and role overloads. Chapter six, by Ulf Lundberg, offers a detailed review of this topic with extensive and useful references. Certain paradoxes—notably the lower mortality of women in nearly all populations despite their higher reported morbidity and their disadvantaged socioeconomic position—are referred to but, not surprisingly, remain unresolved. The book is generally well edited, although there are some grammatical oddities and in Chapter 10 in particular (on gender and health in a multicultural society) the English is hard to follow. This chapter is rather confused even without this, jumping between terms such as ethnic minority group, immigrant and refugee as though they were interchangeable, and expounding some contradictory arguments. Even so I cannot believe that the author meant to say that “Measurement of mental health is trivial” (page 236).

This book is strongest on discussion of debates about multiple roles and work/family life balances and would be useful for students interested in these themes. It is not comprehensive (and probably does not seek to be so); the orientation reflects the geographical location of most of the authors and certain important topics (for example, aging) receive little attention.

Emily Grundy

Epidemiology for the uninitiated, 5th ed

This is the fifth edition of a short textbook, primarily aimed at UK students and practitioners, although of value elsewhere. First published in 1975, the book is concise (73 pages), easy to read, and follows a clear structure. It is accessible to a wide readership, and provides a reasonable overview of many basic methods. There are 12 chapters, and topics covered include quantifying disease and case definitions, rates and risks, survey design, measurement error and bias, ecological and analytical studies, experimental designs, screening, outbreaks, and reading epidemiological studies. It uses clear and varied examples, mostly from the UK, to illustrate epidemiological principles, and practice.

Comparatively little has been updated from previous editions and the book has a slightly “historical” feel (compared with the 3rd, the only substantive addition is one paragraph covering data protection, although there are some more substantial changes compared with earlier editions). As such, it does not describe many of the modern developments in epidemiology. Although beyond the scope to cover the details of multivariate methods, their range of potential applications could be highlighted. Furthermore, omissions in systematic reviews and meta-analyses or the role of epidemiology in health impact assessment and policy making are not mentioned. Although deliberately concise, a few additional pages to cover examples of calculating basic epidemiological measures such as odds ratios and relative risks may be beneficial. In a few instances, I feel that important key concepts have not been explained or discussed (for example, the importance of allocation concealment in randomised controlled trials). Some limitations may be inevitable in a book of this length. It is perhaps too concise to study topics in depth, but ideal as an introduction to major epidemiological concepts for the naive reader.

Julia Critchley

Statistics in clinical practice, 2nd ed

This short book provides a quick introduction to the use of statistics. It is geared toward medical professionals without prior exposure to statistics and would serve as a necessary evil. The book is intended to cover basic statistical principles, but does not go into great detail for a reader to actually perform the calculations. The goal is to help the reader understand and interpret statistical information. For calculations, the reader is encouraged to obtain advice from a statistician. The book assumes no prior statistical training and is quite readable. The brevity of the book (about 100 small pages) is also a big plus; readers who are not keen on statistics may find it more accessible and appealing than a large tome.

The book arranges topics in a logical order beginning with descriptions of data and ending with statistical modelling. The chapters cover types of data, summarising data, probability, hypothesis testing, confidence intervals, statistical power, modelling, and interpretation. Examples are used promiscuously to both motivate and illustrate statistical principles. An additional strategy is to point out assumptions and weaknesses of various approaches. The net effect is to aid the reader into thinking about statistics critically. I think this is exactly the right goal to aim for in a book of this type and is in sharp contrast with off putting formalistic introductory statistical “cookbooks”. The style of writing is quite accessible and I had a pleasant couple of hours reading the book. I did feel that more ink could have been given to discussing the strengths of clinical trials and how they can go awry. I also feel that the use of statistical methods to control or adjust for confounding factors might have been touched upon. But these are minor quibbles. Overall, I quite liked the book and would recommend it to medical professionals who need to be gently introduced to statistics.

Dean Follmann

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