

BOOK REVIEWS

Request for reviewers of books

Are you someone who wonders why you are never asked to review books for this journal? The answer is simple. As book review editor, I rely on my own network of contacts to seek out reviewers. If you would like to review a book occasionally, or would like to nominate a colleague, please write, mentioning your main interests, to:

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New entrants to epidemiology or the other disciplines of community health, both in the United Kingdom and other countries, are most welcome to join our list of book reviewers.

GERRY FOWKES

Safer Childbirth. A Critical History of Maternity Care. Marjorie Tew (Pp 298; £14.95) Chapman and Hall, 1990. ISBN 0-412-337401

Safer childbirth represents the culmination of Marjorie Tew's pioneering contribution to the debate over home versus hospital birth. In search of epidemiological exercises for her students in the mid-seventies, Tew carried out a preliminary analysis of birth data; surprised, she failed to find the basis of the obstetricians' claim to safer childbirth, that is, the alleged link between decreasing perinatal mortality rate and the decreasing occurrence of home birth. Further examination of the initial data and later reanalysis of data from the British Births Survey 1970 lead her to the "inescapable conclusion" that a relationship between the two did exist, but in the other direction to that portrayed by members of the medical profession. Safer childbirth, she concluded, was childbirth out of hospital. Professional hassles over the continuation and publication of her work only convinced her more of the correctness of her findings, although many would still argue that the situation remains "not proven". In the book, Tew extends her critique of obstetrics to include an examination of the rational basis for a number of birth related practices such as birth position, fetal monitoring, ultrasound, and so on, concluding that these too are routines built upon little sound scientific basis.

Seeking to place into context her contemporary research, Tew produces in the first half of the book a history of the development of childbirth in Britain, dealing

both with the place of birth and also the attendant. The demise of the power of the midwife, and the rise in control of the birth situation by the male obstetrician in hospital, complete with his (sic) increasing paraphernalia of technology and scientific arguments, is thoroughly reviewed.

Tew is perhaps on less familiar territory with the historical data; for whatever reason, they lack the soundness of the analysis of the statistical and epidemiological data. The blunt analysis of simple careerism by obstetricians is not convincing enough to explain the complexity of events surrounding the increasing trend towards hospital delivery in earlier decades. As well as accepting motives of professional and territorial development, one would surely wish to examine (for example) contemporary social attitudes towards science and technology and to offer a closer analysis of the role of the hierarchy of midwifery. Tew's book presents us with a bit of a conundrum; while the second part of the book presents a rational critique of the obstetric claim to safer childbirth, the first, weaker, section which draws upon sociopolitical arguments, is in a curious way more accurate in that it acknowledges that the debate is not conducted only at a rational level.

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Child Health Matters. Eds Sally Wyke, Jenny Hewison. (Pp 151; £10.99.) Open University Press, Milton Keynes, 1990. ISBN 0-335-09393.

The title will attract those who consider themselves advocates of the needs of children, whether health visitors, general practitioners, paediatricians, or public health physicians. While reading the book they will find themselves challenged to reconsider these needs in a way which puts the situation of the family above the interests of health professionals.

The theme of the book is to enable us to understand the parents, almost invariably mothers, who are the real providers of child health care in the community. Drawing on previously published work, detailed description of research methods is avoided in favour of the presentation and discussion of results.

There are 11 papers from contributors with backgrounds in the social sciences, health services research, and community child health. The papers are organised into four sections. "Resources for care" deals with the effect of money on the material environment that mothers can provide for their children. "Perspectives on health" examines the cultural gap between mothers and health professionals and the influences on this gap of ethnic and socioeconomic factors. The mother's common sense approach is contrasted with the booklearning of professionals. "Using health services" describes the factors influencing the mother's decision to consult a doctor when her child is sick. Who defines the appropriate use of health services, mothers or professionals? "Available knowledge" contains concise

reviews of four important topics in child health: breastfeeding, asthma, sexual abuse, and AIDS. Extensively referenced, these provide background information which could be of use in the formulation of local policies.

This book is well written, well compiled, and easily read. It will find a wide readership.

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Lecture Notes in Biomathematics (83)—Mathematical and Statistical Approaches to AIDS Epidemiology. C Castillo-Chavez. (Pp 405; DM80.) Springer-Verlag, Heidelberg, 1989. ISBN 3-540-52174-7.

Mathematical epidemiology is one of many fields where tremendous growth over the last few years has resulted from the need to understand and control the global epidemic of AIDS. In this volume, Castillo-Chavez has edited a wealth of current research (predominantly from the USA), encompassing many of the latest ideas. In particular, emphasis has been placed on further exploring the implications of variable infectivity, the immune system, and social/sexual mixing dynamics for our understanding of the epidemic process.

Discussion of infectivity includes: its measurement; the stages of infection and associated transmission probabilities; modelling heterogeneity in susceptibility and infectivity by introducing heterogeneity parameters (rather than partitioning the population into discrete risk groups); and the effects of variable infectivity in combination with a variable incubation period.

Addressing the immune system, models are developed to describe the complex interaction of the immune system and HIV (accounting for features such as the long latency period, the almost complete absence of free virus particles, the apparently low frequency of infected T₄ cells and the slow T cell depletion seen during the course of the disease). The roles of network theory, alloimmunity, and autoimmunity are also investigated.

It has been shown that the dynamics of the HIV epidemic depend crucially on patterns of social/sexual mixing, and this has resulted in an explosion of theoretical work in this area. Early mathematical models for HIV and AIDS dealt primarily with one homogeneously mixing risk group (often highly sexually active homosexual men). More recently models have been formulated both to examine the impact of non-random mixing, and to develop ideas on social dynamic patterns.

In this compilation, much attention is focused on these related issues, including: the structure and context of social interactions; patterns of contact among individuals in different risk groups; pair formation, taking into consideration the temporary periods of protection provided by short or long term monogamous relationships; mixing frameworks incorporating preference through a mixing function; and heterogeneous mixing by the definition of activity groups within disjointed subgroups.

There is now considerable agreement that the issues addressed above are key factors that must be understood, if some degree of success in the fight against this epidemic is to be expected. This collection of notes clarifies current thinking and provides guidance in directions for future research and the urgent need for data collection. Since many papers, however, contain considerable mathematical sophistication, it is unlikely to generate wide appeal—though, for mathematical epidemiologists working in the field of HIV/AIDS, it will no doubt prove a constant course of reference in the coming years.

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The Natural History of a Survey. Ann Cartwright, Clive Seal. (Pp 131; £10.50.) King Edward's Hospital Fund, London, 1990. ISBN 1-85551-0561.

This book documents the natural history of a study of life before death. It describes the process of conducting a nationally based survey: objectives, methodology, frustrations, and rewards.

Initially the authors describe the development of an idea and demonstrate the value of exploiting available data sources. Then follows a convincing argument for pilot studies, even in follow up surveys, and detailed documentation of problems resulting from the computerisation or record systems, eg, stratification and selection of random samples.

Descriptions of difficulties with ethical committees will be very valuable to the research community. The authors experienced a wide variation in their policies, practices, and final decisions; some insisted on scrutinising research proposals and questionnaires. Of particular concern is the requirement that individual GPs be consulted before citizens are interviewed. The chapter addressing interviewing is thorough and practical, describing methods of training, remuneration, and support of interviewers. Myths are dispelled that high response rates are not achievable in distressing situations and evidence presented that interviewees in such circumstances (in this case bereavement) can find the experience therapeutic; also that reasonable response rates from health professionals are possible. The practical description of data processing is very thorough, demonstrating attention to detail for which the Institute is renowned. Imaginative strategies for examining validity are described which would be valuable to the less experienced. Finally, the authors address the issue of dissemination of findings: comparing benefits of publishing in journals or books, and some findings are presented to whet the appetite.

This book has much to offer those who have learned the theory of research methods but have yet to conduct a major survey. Experienced researchers will also benefit from the honest description of pitfalls and the painstaking and rigorous attention to detail. Advice on the development of protocols would have been helpful. It should be

obligatory reading for those maintaining record systems, for funding committees, for ethical committees, and for health professionals wishing to turn their hand to a survey without seeking appropriate advice. It might discourage naive enthusiasts approaching large surveys for the first time, but such a dose of realism should do no harm. To those with more experience it will provide not a little amusement and comfort that others have found similar frustrations.

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Occupational Cancer Epidemiology. Ed P Band. (Pp 189; price not stated.) Springer-Verlag, Berlin, 1990. ISBN 3-540 (0-387) 52090-2.

The title of this compilation is somewhat misleading in that several contributions relate as much to environmental as to occupational hazards. For example, one concerns the risk of lung cancer from domestic use of coal, and another is devoted largely to radon exposure in dwellings.

Of greater interest to occupational epidemiologists are reviews of phenoxy herbicides, asbestos and manmade mineral fibres, and electromagnetic fields. These are short and overlap with other more comprehensive reviews published quite recently. Nevertheless, they present interesting angles on controversial topics.

The most useful sections of the book deal with methodological issues. There is a helpful review of confounding in occupational cancer studies, and a clear account of weaknesses in the traditional approach to analysing cohort studies and of how these may be countered. A discussion of measurement error and its effect on dose-response relationships is rather mathematical, but touches on an important topic. As epidemiology turns increasingly to the investigation of low relative risks, it is essential that we recognise its limitations and understand the potential impact of inaccurate data. The message is brought home further in a chapter which compares different methods for assessing occupational exposures and illustrates the effects of misclassification.

This book is not essential reading, but epidemiologists working on occupational disease will find plenty of interest if they browse through it.

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Cancer: Causes, Occurrence and Control. Ed L Tomatis. (Pp 352; £24.) WHO—IARC, Lyon, 1990. ISBN 92-832-0110-8.

I have been using this book profitably and with increasing regularity in my practice as a cancer epidemiologist since I received it. All the important features of cancer epidemiology are present and as correct as present knowledge allows. This is as expected from a group of distinguished editors led by the present Director of the International

Agency for Cancer Research. This 100th scientific publication of this organisation is cause for celebration, as is the 25 years of solid scientific achievements which much of the book is based on. The choice of title is a statement of the authors' confidence in epidemiology as the foundation of cancer control.

To have distilled, refined, and commented on the epidemiology of 34 anatomical sites, 16 single and 14 complex environmental agents; then to include comprehensive up to date reviews of tobacco, alcohol, diet, hormones, drugs, radiation, pollutants; and finally to discuss the effects of population screening for every conceivable organ in just over 300 easily read pages is a remarkable achievement when the evidence on which it is all based is so complex and intimidating. It is a bargain at £24.00.

Readers of this journal will enjoy this book. Students and practitioners of public health medicine especially those in health promotion will need to buy it and refer to it. Undergraduates and postgraduates in medicine and allied sciences will find much to interest them and to challenge their teachers with.

This book should be used to interest policy makers. Resources for health care are unlikely to increase. Society needs to invest more in health than care. The final chapter on quantification of the effects of preventive measures is of considerable worth though somewhat esoteric. If it stimulates the setting up of such exercises in individual countries that would indeed be a fitting outcome to the magnificent effort this book represents.

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A Short Cut to Better Services: Day Surgery in England and Wales Audit Commission. (Pp 70; £8.50.) HMSO, London, 1990. ISBN 0-11-88030-5.

This is the Audit Commission's first report for the NHS and it sets a high standard. Written in the form of a practical guide for District Health Authorities (DHA) and hospital managers, the report claims that an increase in the use of day case surgery could result in an additional 300 000 patients being treated annually without increased expenditure.

There are several barriers to be overcome before this target can be achieved, however. The first of these—the lack of information on which to assess current performance—affected the scope of this report. The Commission had to resort to collecting data from four Regional Health Authorities in order to fill the gap caused by the demise of the Hospital In-Patient Enquiry, a casualty of Körner implementation. The Department of Health's Health Service Indicators packages do not adequately fill this gap because the data are aggregated to specialty level and are therefore of limited use for assessing performance in day surgery, owing to the fact that they cannot take account of case mix differences.

Within the 54 DHAs studied by the Commission, there was considerable