

Book reviews

Modelling hospital resources

Modelling hospital resource use, PH Millard, SI McClean, eds. pp 125, illustrated. Royal Society of Medicine, London, 1994. £15.00, paperback

A simple message is buried deeply in the complex mathematical models that adorn most pages of this book. It is that most hospital wards, and especially those caring for the elderly, contain two populations of patients – those who are in for a few days and those who will stay for much longer. This is already apparent to those working in hospital medicine. Patients with chronic bronchitis come in and out of the beds beside the nursing station while those with severe neurological deficits languish at the bottom of the ward. Millard and McLean have highlighted how conventional bed statistics, with their implicit assumption of a homogenous population, take insufficient notice of this. Applying curve-fitting software to patient census data, they have constructed a series of models based on patients being admitted for a short period and then either being discharged or moving into a long-stay state. Using multiple exponential expressions, they describe features of each population, such as discharge rate and expected length of stay. The consequences of altering these parameters can then be estimated.

Multiple compartment models have been used widely in health services research but this is the first time, to my knowledge, that they have been used in this setting. As such, it is a useful contribution to the literature. What is less clear, however, is whether an entire book was needed to convey this message. The introductory section, in which a clinician, a manager, and a social service director set out their 'needs' bears little relationship to the rest of the book and, in the cases of the last two, I remain unclear about what their needs actually are, still less whether this approach might meet them. The case studies in part three are repetitive and seem to have been included purely to show that the model can be generalised. This apparent redundancy is disappointing, given that there is much more that needs to be said about this approach. The further work required is touched upon in the final chapter. In brief, there is a need for sensitivity analyses examining the effect of small changes in the parameters on the outputs of the models and for an examination of how stable the models are over time. It would have been very helpful to have seen how the r-squared values changed using data from the same wards a few weeks later. Models are simplified versions of reality. One is left with the impression that this one is still far too simplified.

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Psychiatric medicine

Psychiatry in medical practice, 2nd edn D Goldberg, S Benjamin, F Creed, pp xiv + 350. Routledge, London, 1994. £16.99, paperback

It is a pleasure to welcome the second edition of this outstanding text book. It is informed by the practical and research experience of its three distinguished authors and its balance is very much in tune with the real needs of medical students and young doctors. Proper emphasis is given to the management of the doctor/patient relationship and how to use it to make an adequate assessment and to help the patient thereafter. A number of important practical situations such as dying, bereavement and breaking bad news, are taken and the reader guided to deal with these issues sensibly.

Psychiatric illness is well described and there is an excellent summary of its neuropharmacology. There is a superb account of somatization, but it was disappointing that there was no discussion of hyperventilation, which is one of the commonest mechanisms for the psychological induction of physical symptoms. Given the interest of the authors it was surprising that they have not included an account of irritable bowel syndrome, which is both a common cause of physical symptoms and provides an illuminating paradigm of the interaction between the physical and psychological. Although the book is generally up to date, there is no mention of the link between contaminated growth hormone and Creutzfeldt-Jakob disease or amyloid and Alzheimers' disease. These are minor defects, which can be corrected in the next of the many more editions that this excellent volume is bound to have.

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Clinical paediatrics

100 Paediatric picture tests, AP Winrow, M Gatzoulis, G Supramaniam, pp 200, illustrated. Churchill Livingstone, London, 1994. £16.95, paperback

It is difficult to write a review of this book without being over-effusive in its praise. It scores highly on both presentation and content, resulting in a compact, highly informative, reader-friendly package. The book consists (the title is a clue) of 100 clinical pictures, 71 being quality colour plates, the remainder radiographic. The subjects vary from premature neonates throughout all age groups, and the conditions from simple and common, to complex and rare.

Each plate is accompanied by up to three questions. These usually ask for a diagnosis, then for relevant investigations, treatment, prognosis or aetiology.

Over the page, facing the subsequent plate, is the more than complete answer. Where one example is demanded, a detailed list is usually given in response. Filling the rest of the page is supplementary information. Clearly it is a difficult chore to summarise all the relevant

information on any clinical condition in three paragraphs, but the authors achieve an excellent compromise. Their comments are concise, relevant, broad-based and presented in a highly readable manner. Statistics are included and the subject matter is linked to related topics in the field.

For those readers who find this tantalising nibble into the subject in question insufficient, references are also included. Whilst this cannot (obviously) be a definitive listing, those mentioned are key reviews or recent original articles.

Altogether, the presentation, format, breadth of field covered and depth of information given combines to make this one of the best picture test books I have found.

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Paediatrics

Key topics in paediatrics, AEM Davies, AL Billson, HR Jenkins. pp 329. Bios, Oxford, 1994. £22.00, paperback

As the authors say, this text is primarily aimed at doctors preparing for postgraduate paediatric examination. It contains 100 chapters arranged in alphabetical order, starting with abdominal pain and ending with vomiting. In between is an eclectic mix of subjects ranging from dysmorphism and teratogenesis to Kawasaki disease. At an average of just over three pages per subject, only the briefest detail is possible.

This book is a collection of revision notes on a number of different topics. The topics are covered in variable depth. The chapter on haemolytic syndrome would arm the candidate sufficiently to cope with a viva on the subject, the chapter on nutrition would not. A large and complex subject like nutrition cannot be given justice in just over two pages. The subject of Munchausen by proxy is covered in only five lines! In one area, brevity is much appreciated; the synopsis of the mechanisms of the Children Act is well written and easy to understand.

There will always be a market for revision aids such as this, but the book lacks sufficient depth to serve as a useful source of information for either medical students or nurses, as suggested by the authors.

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Assisted ventilation

Assisted ventilation, J Moxham, J Goldstone, eds. pp 103, illustrated. British Medical Journal, London, 1994. £12.95, paperback

Over the last decade there have been many advances in the management of critically ill patients, especially with both invasive and non-invasive techniques of ventilatory support. Assisted ventilation and respiratory care in intensive care are subjects that cause much anxiety to physicians in training and in this

respect, this book fills the gap particularly well and is most welcome.

The first edition of 'Assisted ventilation' was based on a series of short articles published in the *British Medical Journal*. This second edition has been considerably revised with the addition of other authors, all practising in the UK.

The first chapter describes in a very readable manner equipment used for artificial ventilation and this is followed by a description of the indications for mechanical ventilation. This chapter contains practical advice and describes typical settings of the equipment used for assisted ventilation. There is a comprehensive chapter on the case of the ventilated patient, with good advice on the management of tracheostomies and the reader is also reminded of the problems of psychological and sleep disturbances in critically ill patients. The chapter on weaning emphasises the importance of the respiratory muscle pump and provides an excellent account of the mechanisms of ventilatory failure. The last chapter describes techniques of non-invasive ventilation with practical advice on the initiation of nasal ventilation. However, this chapter mainly focuses on patients with chronic ventilatory failure, unlike the remainder of the book which deals with ventilation in the intensive care unit. There is relatively little mention of the use of non-invasive ventilation in acute-on-chronic respiratory failure; yet this is the situation when nasal ventilation can be particularly difficult to administer. Perhaps the third edition will expand on this point.

This book is well illustrated with clear diagrams and useful tables and there are good reference sections. I would recommend that it is read by both physicians and anaesthetists involved in the management of patients with respiratory failure. It will also be useful to physiotherapists and nurses involved in the management of these patients.

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Historical connections

Medicine in the making of modern Britain 1700–1920, C Lawrence. pp 91, Routledge, London, 1994. £6.99, paperback

The role of medicine in the political and social developments of the last three centuries is the subject of this book in the 'Historical connections' series.

Lawrence's central theme is that medicine has been a powerful weapon in the hands of both reactionaries and reformers. During the 18th century, doctors tended to use their knowledge in the interests of conservatism; their concept of body and disease stressed the importance of 'natural place' and of bodily matter not crossing its proper boundaries.

The 19th century saw the age of reform when the conservatives were challenged by radicals in the profession who believed that the natural order was not static but could and should be reformed. The authority of science superceded that of religion, medical intervention was seen as a powerful instrument for effecting social progress and medical men provided many of the categories through which people explained the world.

According to Lawrence, and implicit in the book's title, medicine has made little further impact on the social and political develop-

ment of Britain since 1920. By then, we are told, many of the ideas and practices of modern medicine were already in place. This may come as a surprise to those who have been practising as doctors during the second half of this century – and a disappointment to readers who would have welcomed the application of Lawrence's original thought and lucid style to the role of medicine in the Britain of the 1990s. The importance which the author attaches to medicine as a prime mover in social reform and progress might well be challenged by groups with similar claims – churchmen and lawyers, for example – but Lawrence does make a convincing case and the book as a whole provides an enjoyable and challenging read.

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Genetics

Annual review of genetics, vol 27, A Campbell, W Anderson, EW Jones, eds. pp 557, illustrated. Annual Reviews, Palo Alto, California, USA, 1993. £23.00, hardback

This volume contains 16 articles, some of which are of medical interest. From the public health point of view, there is a review of the activation of pro-mutagens in the environment by green plants and for the virologist, a review of the genetics of the normal and attenuated phenotypes of poliovirus.

For the medical geneticist, relevant articles include genomic imprinting, sex determination in mammals and DNA repair genes. Morton briefly reviews genetic epidemiology, but the speed of the developments he describes ensures that some descriptions are already out of date, eg, diabetes, where some loci have been mapped by sib-pair analysis, a method condemned by Morton as inexact and inefficient. He gives a concise listing of the problems with such analyses.

Many articles provide an insight into basic genetics. Birchler reviews maize endosperm development and comments upon the effect of aneuploidy. Mapping polygenes in plants reveals the power of molecular genetics in estimating the number of polygenes, the magnitude of their individual effects and degree of interaction. The possibility of mapping polygenes in humans by comparative mapping is briefly mentioned.

Detailed reviews of meiotic segregation and the molecular genetics of the kinesin superfamily of genes (involved in intra-cellular transport) are given. Inter-cellular signalling in the nematode *C elegans* is reviewed. Nearly all classes of signal transducers in mammals are present in this organism.

There are articles in this volume to interest clinicians and much to interest researchers. It should find a place on the bookshelves in academic departments of genetics.

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Postgraduate training in the US

Getting into a residency – guide for medical students, 3rd edn, KV Iserson. pp 433, illustrated. Galen, Arizona, USA, 1993. £15.00, paperback

This manual provides in minute detail a *modus vivandi* for the American medical student embarking on a postgraduate training. It is not surprising that this should have become a standard reference work, by a dedicated teacher and clinician with the able assistance of his wife who has provided computing skills and a smattering of business science. It is indeed remarkable for the detailed advice given with almost maternal concern. There is even a section advising the young medical student on how to pack a suitcase before travelling to his interview. In general there is very little relevant material for the UK medical student whose specialist training is still generally achieved by accident. Nevertheless it provides an interesting insight into the American system which sadly seems to contrast with our own in requiring a greater degree of motivation, competitiveness, and longer hours of duty than will be required with the New Deal. The emphasis still seems to be on maximal quality of training, if necessary at the expense of conditions of service which we would now regard officially as unacceptable. However, some of the terms relating to undergraduate training in the US (eg mentors, OSCE) are beginning to feature in the new curriculum and the Continuum training post is obviously conceptually close to a Residency. Some of the terminology is interesting though unfamiliar. 'Physiatry' doesn't feature in any UK list of specialities and official training in osteopathy (phomeopathy) has yet to be considered in parallel with its allopathic counterpart. Whilst much of the advice is given as fireside chat Dr Iserson has a tendency to revert to businessese with trendy but irrelevant algorithms. Pithy quotations at the start of every chapter may not necessarily appeal. There are interesting sections on constructing a resumé (CV) in anticipation of questions at the interview, from which both the victims and interviewers could certainly benefit.

I doubt that this book will be of interest other than to medical educators and to the diminishing number of UK students seeking postgraduate training in the USA. As such it should be provided by medical school libraries as a useful source of reference.

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Neuroendocrine tumours

Diagnostic histopathology of neuroendocrine tumours, JM Polak, ed. pp 290, illustrated. Churchill Livingstone, London, 1993. £95.00, hardback

Neuroendocrine tumours are of abiding interest for many reasons and a book like this is most welcome. In 11 chapters, various authors cover not only the pathology of neuroendocrine tumours of the gastro-enteropancreatic system, the respiratory tract, the thyroid and parathyroids, pituitary, paraganglia and skin, but also review methods for their detection and investigation, their genetics, the pathophysiology of the peptides they secrete and the transgenic models used in their study. All of these contain useful information, although it must be said that, for the histopathologist faced with a diagnostic problem in this area but without the appro-