Multi-author textbooks can often be a mixed bag but each contributor will be recognised as an international expert in his or her own right and their individual contributions have been skilfully gilded by the joint editors. It is amazing that such a complex subject can be so effectively and efficiently covered within 500 pages.

Traumatic brain injury continues to reap devastating effects in both industrialised and non-industrialised countries. It also continues to challenge those who work in civilian practice in many conflicts world-wide.

It would be a disservice to recommend this book either to undergraduates or those in their early postgraduate years but only on grounds of cost. However, any individual charged with contributing to the care of a traumatic brain injured patient must be able to access a copy by day or by night. No one working with patients who have suffered traumatic brain injury should be left unaware about the existence and content of this textbook.

Such is the value within its pages that, in the past, a copy would only have survived on a departmental bookshelf if anchored by a stout chain. Nowadays, an electronic tag might be more appropriate; alternatively, all of the contents could be accessed on a departmental computer or local intranet.

Medical Statistics: A Guide to Data Analysis and Critical Appraisal

JENNIFER PEAT, BELINDA BARTON

EXTENT P/H	336 p, paperback
PRICE/ISBN	£29.50 0727918125
PUBLISHER	Blackwell (Oxford), 2005
REVIEWER	Jim Lewsey
STAR RATING	****

This basic medical statistics book aims to, in the authors' own words, 'provide the 'know how' and make statistics analysis and critical appraisal easy for all researchers and health-care professionals'. I don't think medical statistics is easy even for medical statisticians but this book is certainly a useful addition to the field.

The two main strengths of this book are the chapter-specific notes for critical appraisal and the time devoted to explaining the assumptions of statistical testing. These two

related topics are usually not considered in other books (or only to a limited degree) yet are important factors for improving the quality of statistics in medical research.

Users of the statistical software SPSS will get the most out of this book as it includes the commands for carrying out the statistical tests but I would not hesitate in recommending it to users of other software as well. However, I felt that more emphasis on encouraging researchers to save files of the underlying syntax should have been given. The advantages of such are that an exact record of what analyses were done is documented and that new or updated analyses can be done at the press of a button. Although the authors introduce the 'paste' command in chapter 1, they do not provide a more detailed example of its use in the remainder of the book. It might have been useful to write 'click OK or paste' rather than just 'click OK' in the boxes of SPSS commands that are found throughout the book.

The book has good coverage as it includes *t*-tests (and their non-parametric equivalents), chi-squared tests, analysis of variance, regression (linear and logistic), tests of agreement, diagnostic tests and Kaplan-Meier survival analysis.

Chapter 1 is devoted to data management; the authors are to be congratulated for this as it is a subject not often addressed yet many medical researchers collect and record data in a sloppy manner resulting in data sets not primed for statistical analysis. The standard error is a notoriously difficult concept to get across when introducing statistical testing (chapters 3 and 4). To this end, I think these chapters ought to have included sampling distributions. A positive point is that these chapters detail the difference between statistical and clinical significance; many clinicians make the mistake of declaring that a statistically significant result indicates an important finding.

Chapters 5 and 6 are excellent introductions to methods for continuous outcome variables with good sections on post-hoc tests, collinearity, interactions and model building. Measuring repeatability and the utility of diagnostic tests, for both categorical and continuous variables, are the subject matter of chapters 9 and 10. The inclusion of both topics is most welcome as they are important and not always covered in basic medical statistics books. These chapters also contain a useful general point that *P*-values sometimes have little meaning even though statistical software automatically churns them out.

I also enjoyed the quotations that start each chapter, the clearly presented and labelled tables and figures, and the glossary of terms. In conclusion, a very good book.