

BOOK REVIEWS

Aluminium in Biology and Medicine. Eds Derek J Chadwick, Julie Whelan. CIBA Foundation Symposium 169. (Pp 316; £42.50) Wiley, Chichester, 1992. ISBN 0-471-93413-5.

This book contains the papers and conference proceedings from a symposium of biologists, epidemiologists, physiologists, and physicians involved in research into the role of aluminium as an environmental toxin in human pathology. A particular focus is made on the role of aluminium in Alzheimer's disease. Many papers are very specialised, dealing with the detailed chemistry and physiology of aluminium in living organisms. Of interest to the general reader is the evidence presented on the possible relationship between aluminium and Alzheimer's. McLachlan *et al* argue that in evaluating the possible role of this agent in Alzheimer's disease, aluminium neurotoxicity fulfills Bradford Hill's criteria for cause and effect. The same paper suggests how susceptible individuals could reduce their total intake of aluminium. In presenting the epidemiological evidence for a link between aluminium and Alzheimer's, Martyn suggests that although definite proof is still lacking, there is more than enough positive evidence to fuel further epidemiological investigation. It states that such investigations might specifically address the issue of the confounding effect of silicon and an assessment of exposure to specific sources of aluminium. A further paper gives details on dietary sources of aluminium. It points out that even for those people who consume relatively high doses of aluminium through food additives, this is a tiny proportion of the amount of aluminium that is consumed by way of antacids, buffered analgesics, antidiarrhoeal agents, and some antiulcer drugs.

For the non-specialist reader seeking answers to a few pertinent questions on the role of aluminium in Alzheimer's disease, the book may be a useful source of reference, but otherwise it is probably of more interest to the specialist reader.

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Power and Dependence: Social Audit on the Safety of Medicines. Charles McDawar. (Pp 276; £10.00) Social Audit Ltd, 1992. ISBN 0-946448-04-3.

One of my first experiences as a clinical student was of the huge impact of the pharmaceutical company via the drug lunch. Their immense resources and glossy presentation had an immediate effect on me. At the start of what I hope to be a long medical career I found this book a very interesting read. It has helped to highlight for me the power of prescribing and will, I hope, make me look more carefully at what I give and at whose recommendation.

It lists a catalogue of misuse surrounding a specific category of medicines, those for anxiety and insomnia, and gives examples of their over-subscription without proper drug trials. It highlights the fact that each anxiolytic, from alcohol in the mid-19th century to the benzodiazepines of today, has been surpassed by drugs thought to be infinitely superior with no addictive tendency and yet this has not been found to be true. It questions whether the 1990s will be so very different.

In general, the public are confused about medicines. Even with over the counter headache tablets, patients' conception of the side-effects is often minimal. Some reach for the packet at the slightest hint of a headache, others would prefer to retire to bed and sweat it out because they "don't like taking tablets". Additional information for consumers, one of the aims of this book, must be a good thing.

The book certainly focuses on the negative side of the drug industry, but perhaps this is a good thing when the industry itself may tend to mislead prescribers with its expensive advertising.

Overall, I found the book enjoyable and easy to read. It achieves a combination of the history of developments in this field followed by suggestions and a call for radical change in the future.

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States, Regulation and the Medical Profession. Moran M, Wood B. (Pp 150; £12.99) Open University Press, Buckingham, 1992. ISBN 0-335-15748-3.

Moran and Wood have produced an interesting and surprisingly readable text on subject matter which in other hands could have proved tedious. Their avowed target audience of "students, both of medicine and of social science" would certainly benefit from reading this book, but then so did I and I suspect I am not the only consultant unaware of the important and complicated links that exist between the practice of medicine and state regulations.

The main argument of the book can be fairly simply summarised. It is that "nations make a difference". Not in the form of traditional national stereotypes but in the way that a state's history and traditions influence in significant ways the relationship that state has with its professions, including medicine.

The authors confine themselves largely to the examples of the US, UK, and Germany. This is perhaps a shame; however, it does allow them to look at these three contrasting systems in some detail. They examine not only the differences that exist but also those goals of the medical profession that seem universal.

Throughout, the authors present their arguments logically and coherently. Indeed the disciplined structure of the book, working as it does through the development, anatomy, process, and outcome of regulation gives it a thesis-like feel. I found this quite satisfactory—others may disagree.

In summary, I'm glad I read this book and will be pleased to keep my review copy to hand as I suspect I will both quote from it and recommend it to others.

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Methodology for Genetic Studies of Twins and Families. M C Neale, L R Cardon. (Pp xxv+496; £99.00) Kluwer Academic Publishers, Dordrecht, Netherlands, 1992. ISBN 0-7923-1874-9.

For ethical and practical reasons, researchers in human behavioural genetics cannot experimentally manipulate their subjects, and must therefore resort to complex modelling and path-analytical approaches in order to tease out the relative contributions of genes and environment to multifactorial traits. This book aims to teach researchers how to analyse and interpret the twin and family studies that have long provided the basic data for these approaches. The treatment is limited to *linear* structural models and is strongly biased towards the use of LISREL software, without access to which the reader's understanding would be severely restricted. It was written largely on the basis of the authors' experience in running a series of week-long workshops on twin methodology.

How well it succeeds in its aims is debatable. Several key concepts are introduced in an exceedingly cursory fashion. Thus, standardised variables (p 91), eigenvalues (p 77), and the difficult (for the non-numerate) notion of the asymptotic variance-covariance of a sample correlation (p 127) all make their appearance without previous or concurrent discussion. Even the fundamental concept of correlation between twins (p 39) is introduced without making the distinction between ordered and unordered pairs. Certain errors may confuse the uninitiated. For example, Figure 17.1 omits arrows connecting the paternal additive genetic factor to one twin, and the corresponding maternal factor to the other. On the other hand, for the more numerate reader who is not put off by these deficiencies, the book does provide a comprehensive and generally lucid overview of the capabilities of current path-analytical techniques.

For these reasons the book will probably succeed better as a course text than as a stand-alone introduction for researchers without a strong statistical background. A minor irritation is the small font size which, at 500 words to the page, makes prolonged reading very unpleasant.

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Children and their Accidents. J G Avery, R H Jackson. (Pp 213; £14.99). Edward Arnold, London, 1993. ISBN 0-340-37001-7.

Accidents are everyone's business—both because we are all at risk and because prevention of accidents requires social and political change. Gordon Avery and Hugh Jackson have been writing and lecturing on accidents for many years, and Jane Bishop, their ghost coauthor, has collated and developed their notes into a book. Child accidents are described by place (road, playground etc) and character (falls, burns etc), and there are also chapters on non-accidental injury and prevention. There are no text references, but a general bibliography. The audience, while not indicated by the authors, would seem to be the interested public and schools.