LETTERS TO THE EDITOR

Methods for epidemiological surveys of ethnic minorities

Sir – The article by Chaturvedi and McKeigue\(^1\) fails to mention the danger of relying on the 1991 UK census as an accurate estimate of ethnic minority populations. Both Ballard and Kalra,\(^2\) in their discussion of the census nationally, and Glover,\(^3\) in his figures for the London areas of Camberwell and Hammersmith, point out the huge under-representation of black Caribbean men aged 25 to 44. Both reports attribute this finding to undercounting. If this explanation is valid, there are clear implications in attempting to estimate rates of illness such as schizophrenia in this group of the population.

BERNARD INEICHEN
Department of Public Health and Epidemiology, Charing Cross and Westminster Medical School, London


Reply

The analyses of the 1991 UK Census returns by age, sex, and ethnicity were not available at the time we prepared our article. We agree that these data suggest that men aged 20–44 years in the groups “black Caribbean” and “black other” are probably under-represented by about 20%. In this situation we suggest using age-standardised proportional mortality ratios or proportional admission ratios, which do not depend on population denominators, to compare patterns of mortality or morbidity in different ethnic groups.

NISH CHATURVEDI
Department of Epidemiology and Public Health, University College London School of Medicine

PAUL MCKEIGUE
Department of Epidemiology and Population Sciences
London School of Hygiene and Tropical Medicine

BOOK REVIEWS


This is a completely new approach to explaining basic statistics. The book’s most striking features are its logic, and the fact that it follows a thread where each chapter is an expansion of a previous one for more complicated cases: it breaks away from the classic division of statistical books into chapters devoted to isolated techniques. With the latter arrangement the researcher can get confused about which technique is appropriate for their data. Fundamental to understanding the book are the type of variables to be analysed (continuous, ordinal, nominal) as well as the concept of dependency/independence. Although these concepts are defined in the early chapters, given their importance for the understanding of the book, more prominence and ease of reference in the treatment would have helped the reader.

Statistical First Aid gives a good insight and overview of how different types of data are handled by the statistician; this fact in itself should also help the reader to understand their results.

On the other hand, “thread” structure compared with self contained chapters means that the book may not be very useful where the reader is interested in understanding more about a particular statistical technique, without wishing to refer to a number of different chapters. Furthermore, the layout, with too dense text and not much graphic support, could be discouraging for new users of statistics.

A crucial area of weakness, especially for those not well versed in statistics, is in the teaching of data presentation by means of graphic methods such as charts, scatter diagrams, graphs, or summary figures such as summary measures of frequency distributions, tables of counts, means, etc. The information on this area is limited. A similar criticism could be made in the area of sampling and study designs.

Overall this publication is highly recommendable for medical students or researchers who already have some basic background in statistics/epidemiology and who want to understand better the use of the different statistical techniques depending on the type of data. For more “casual” readers or “first time” users of statistics this book would need to be complemented by a more “classic” introductory book.

S LORENZO
Institute of Occupational Medicine, Edinburgh


“Each year, at the end of the first week of meeting of the World Health Assembly, the representatives of the member states devote two days to the exploration of a single compelling subject which has been chosen as the theme of the technical discussions… in May 1990, the selected problem was ‘Health Research’ and this book is based upon those discussions” (from the editor’s preface). The organisation and content of the book reflect these origins and those unfamiliar with WHO bureaucratese will find many of the chapters heavy going.

There are 5 central sections: Research for health; a global overview; Health systems research; Research capability strengthening; Nutrition; and Biological and physical sciences and technology.

The meaning of “research” is itself unclear. It ranges from the sense of research in natural sciences (activity which aims to add to the stock of generalisable knowledge of the natural world) to the disciplined seeking of solutions to specific health service problems. It is this latter meaning which is often used in the more policy oriented discussions. Some examples: “health research is defined very broadly as a method of obtaining systematic knowledge which can be used for improvement of the health of individuals or groups” (a definition which would seem to include taking a clinical history or performing a physical examination) (p 38); “health systems research is the scientific approach which enables us to generate necessary data for making better-informed decisions…” (WA Hassouna, p 61); “Health research is a process for obtaining systematic knowledge and technology which can be used for improvement of the health of individuals or groups…” (Report of technical discussions, p 193).

A central proposition is that the optimal use of resources requires good local knowledge. Thus, applied health services research should not be seen merely as a “luxury of resource rich countries but also a necessity for poor countries who can at least afford to waste resources on ineffective or inefficient pro-

NOTICES


This is a comprehensive overview and reference text on the use of statistical and data analysis methods by health professionals and researchers. The book is divided into four sections: The role of statistical thinking in health research, Descriptive and inferential methods, and choosing statistical tests, and Assessing the results of a statistical analysis (Questions, Conclusions, Communication).

The book is in two volumes. The first volume, Descriptive statistics, presents statistical methods that allow us to describe data sets in a way that is both meaningful and useful. The second volume, Inferential statistics, presents methods that allow us to make inferences about the population from which the data were drawn. The third volume, Choosing statistical tests, presents methods that allow us to select the appropriate statistical test for a given situation.

The book is written in a clear and concise style, and is well-organized. It is a valuable resource for health professionals and researchers who need to use statistical methods in their work.