Longitudinal Study, a study of the role of birthweight in areal variations in infant mortality, and increased attention to the mortality of migrants, and variations according to place of birth.

The examination of mortality from selected causes back to 1921 shows how long some of the variations between areas have persisted. It is perhaps a pity that the authors have not paid more attention to the influence of age in variation between areas. The use of the SMR as a summary measure implies that the ratio of death rates in two populations is constant over age strata, or at least not sufficiently variable as to make the SMR misleading. It is interesting that the regional variation in "all cause" mortality is rather wider for the age groups 15–64 than for 65 and over, but this finding is only briefly commented on. Local authority areas were used as the main units of analysis, although it was recognised that they are internally heterogeneous with regard to their social, economic, and environmental characteristics. Such heterogeneity inevitably limits investigators' ability to explain the variations in mortality that are observed. The suggestion that future volumes may make more use of smaller areas such as wards is therefore welcome.

Such minor criticisms do not detract seriously from the value of this volume, which will be of interest to epidemiologists, public health specialists, and anyone interested in geographical variations in health.

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Design and Analysis of Reliability Studies—the Statistical Evaluation of Measurement Errors. Graham Dunn. (Pp 198; £25.) Edward Arnold, London; Oxford University Press, New York, 1989. ISBN 0-85264-297-0.

This book brings together a body of work on statistical methods for assessing reliability which is scattered throughout the statistical, psychological and medical literature. It will prove a useful reference text for the applied statistician or the more mathematically confident epidemiologist. A basic knowledge of statistics, up to the level of analysis of variance and regression, is the level which the author expects of his readers. This background is certainly necessary for most of the book, as is confidence in mathematical manipulation. However, the introductory chapter and chapter 4 on the design of reliability studies provide a useful introduction to this subject without any difficult mathematics. It is particularly gratifying to find an accessible section on the choice of sample numbers for reliability studies in chapter 4.

The first three chapters provide an introduction to measurement models and to measures of inter-rater agreement (such as κ coefficients) and indices of reliability. The relationships between the different measures and the interpretations of each are fully discussed. Chapter four deals with the design of studies, including practical matters like the choice of subjects, and more technical questions such as nested and blocked designs.

The final three chapters deal with more complicated methods, such as variance

component models and likelihood methods for estimating these. Much of this last part of the book goes beyond what most workers in epidemiology will need. However, examples are given in every case, and more space is devoted to explanations than to the derivation of algebraic results. An appendix reviews the computer software which is available for performing the methods discussed.

The text seems to be remarkably accurate, and free from the typographical errors which so often mar statistics texts. It is a practical and useful book which I would recommend without hesitation to anyone who wants a broad background in this field.

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Oxford Database of Perinatal Trials. Ed I Chalmers. (£250.) Oxford, Oxford University Press, 1988.

When I was a medical student during the 1970s, psychiatry was, among medical subjects, the *bête noire* of progressively minded folk. This position was soon usurped by obstetrics (no doubt with a feeling of relief among psychiatrists) and in little time this medical specialty was subjected to unparalleled scrutiny by clients, the media, and other professional groups. These were the days when the rate of induction of labour exceeded 50% in many maternity units, when new techniques of fetal assessment were being introduced with little understanding of their pathophysiological bases and still less of their impact (beneficial or otherwise) in actual practice, and when doctors still expected "their patients" to comply meekly with medical advice. The clinical atmosphere had evolved, I believe, through benign paternalism and uncritical acceptance of reigning dogmas rather than from any sense of malice, so it was a bewildered profession which suffered this public onslaught. It is understandable that it was maternity care, as a subject primarily concerned with healthy women undergoing a physiological event, that should have been highlighted in this way, but what became rapidly apparent, sometimes under the unforgiving lens of the television camera (and editor's scissors) was that obstetricians had little scientific proof to support many of their cherished practices. In 1979, one prominent epidemiologist awarded obstetrics the "wooden spoon" as the medical subject with a practice least based on clinical science.

Times have changed and there is a rapidly increasing awareness among obstetricians of the nature of scientific enquiry and the central importance of randomised controlled trials in directing clinical management. Much of the thanks for this (both in the UK and also globally) must go to Iain Chalmers and his colleagues in the National Perinatal Epidemiology Unit in Oxford. As well as tirelessly trying to influence reluctant obstetricians (they still exist as the pages of some journals show) they have accumulated the most comprehensive database of randomised controlled trials in perinatal medicine, including not only those published

but also (to avoid biases) those never published, those in progress and even those being planned. To overcome the common problem of small numbers, meta-analyses have been performed to derive consensus views from similar studies on the same theme.

This information has now appeared in two forms. The first is a large two volume book called "Effective Care in Pregnancy and Childbirth" (edited by Iain Chalmers, Murray Enkin and Marc Keirse, Oxford University Press, 1989). Now an electronic package "Oxford Database of Perinatal Trials" has appeared, edited by Iain Chalmers. There is overlap in content between book and electronic package but only so much, and those who enjoyed the book should not feel deterred from dipping into the computer.

Over 3000 reports of controlled trials since 1940 have been identified. These are packaged in 12 floppy discs which are installed (easily and simply) on the hard disc of (only) IBM compatible personal computers. (I exist in a workplace totally dominated by Apple Macintosh and found this irksome). After installation, the Database is easy to use. There is great flexibility of operation. The trials are accessed using a single topic (eg, bed rest) or multiple topics, eg, bed rest for preterm labour). They are grouped according to specific phases of the perinatal period or alternatively the entire period can be reviewed. Results are presented in tabulated and graphical forms (odds ratios with 95% confidence intervals). Overviews by experts from many different parts of the world are also included. These are incomplete as yet but this does not much detract from the current product. In any case the main advantage of this electronic journal is that it is updated for subscribers twice a year. The overviews are modified as fresh trials are completed. I am a committed browser of libraries and bookshops—the Oxford Database of Perinatal Trials allows, I am pleased to say, a most enjoyable and instructive form of electronic browsing.

At the end of the day, has my clinical practice been modified by my browsing? It has. I am now convinced of the value of antepartum corticosteroid therapy in some clinical situations in which preterm delivery can be anticipated. I accept there is no justification for routine bed rest of women with twin pregnancies. Technique of repair of episiotomies may seem a mundane subject, but it is very important and I found the data collected here to be highly instructive.

The Oxford Database of Perinatal Trials is a great visionary achievement which follows years of preparation. It carries obstetrics into the 21st century with a sound base of clinical science encapsulated in the technology of the future. It should be available not only in academic departments of obstetrics and gynaecology, but in all maternity units with ready access for all professionals involved in maternity care.

Just as there are other medical specialties which could benefit from the type of public scrutiny applied to obstetrics, so there are also, I suspect, specialties (gynaecology certainly included) which would benefit from this type of exercise. It is time for the wooden spoon to pass on.

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