

"Medical Statistics from Scratch: An Introduction for Health Professionals, 2nd Edition"

David Bowers, 2008, 284 pages, Wiley, \$50.00

Review by Norman M. Goldfarb

"Medical Statistics from Scratch: An Introduction for Health Professionals, 2nd Edition" deprives non-statisticians of any excuse to claim ignorance of basic biostatistics. The book is written in clear prose with lots of practical examples, tables and charts, but almost no formulae, for example:

Prevalence and the incidence rate. If appropriate, we can also summarize data by providing a value for the *prevalence* or the *incidence rate* of some condition. The *point prevalence* of a disease is the number of *existing* cases in some population at a given time. In practice, the *period prevalence* is more often used. We might typically report it as, "the prevalence of genital chlamydia in single women in England in 1996 was 3.1 per cent." The prevalence figure will include existing cases, i.e., those who contracted the disease before 1996, and still had it, *as well as* those first getting the disease in 1996. The *incidence* or inception rate of a disease is the number of *new* cases occurring per 1,000, or per 10,000, of the population, during some period, usually 12 months.

This book has been selected for
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Essential reading for clinical research professionals

The book consists of 20 chapters:

- First things first — the nature of data
- Describing data with tables
- Describing data with charts
- Describing data from its shape
- Describing data with numeric summary values
- Doing it right the first time — designing a study
- From samples to populations — making inferences
- Probability, risk and odds
- Estimating the value of a single populations parameter — the idea of confidence intervals
- Estimating the difference between two population parameters
- Estimating the ration of two population parameters
- Testing hypotheses about the difference between two population parameters
- Testing hypotheses about the ratio of two population parameters
- Testing hypotheses about the equality of population proportions: the chi-squared test
- Measuring the association between two variables
- Measuring agreement
- Straight line models: linear regression
- Curvy models: logistic regression
- Measuring survival

- Systematic review and meta-analysis

The book is available in bookstores.

Reviewer

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