Public health biostatistics notebook

B V Girdler-Brown, FCPHM (SA), FFPH (UK), MMed (Community Health), MB ChB, MBA, Hons BCom (Econ)

School of Health Systems and Public Health, Faculty of Health Sciences, University of Pretoria, South Africa

Corresponding author: B V Girdler-Brown (brendangirdlerbrown@gmail.com)

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The intention for this section is to make a space available for peer-reviewed articles that contribute to biostatistical awareness and skilling for public health practitioners. It is directed at a range of different levels. The idea is not to publish research articles under this heading, but rather to print notes, comments, tutorials, news etc. to do with applied biostatistical practice among public health practitioners. Articles may vary in length between 1 000 and 10 000 words. A single edition may include one longer article, or it may include a number of shorter articles (from the same author(s) or from different contributors).

There is a growing number of experienced biostatisticians in southern Africa who would be able to assist the journal with occasional articles that would be suitable for this section. In addition, it is planned to invite local as well as international experts (especially those who have been involved with assisting southern African researchers in the past) to contribute on specific topics.

If a reader is planning an article, please contact the editor of the journal to ensure that the topic planned is not already being addressed by someone else.

In addition, the editor would welcome suggestions for future topics, as well as suggestions as to who would be a good person to approach for an article about the suggested topic.

The idea is not to ‘plod’ through the MPH or MMed syllabus, but to provide a range of clear, well-written and authoritative informative articles. Ultimately, after there have been many editions of the journal, these articles, collectively, will provide a resource for the non-statisticians (and perhaps some statisticians as well) tasked with the analysis of their own data sets, as well as for students preparing for the MPH MMed or College exams.

It is anticipated that the journal’s readership will be made up of people with a wide range of statistical abilities, all the way from those MPH and MMed students who might not have any past exposure to statistics learning to those with higher degrees in statistics. Therefore, the range of articles that will be accepted for publication will be wide as well. Since the intention is to offer skilling opportunities through the articles that are published, it would be useful if articles also include statistical software commands to assist readers with applying the content.

The following list contains some suggestions for articles that might be considered appropriate for this section of the journal. The list is provided in order to give potential authors an idea of just how wide the scope might be, as well as the range of sophistication that would be acceptable. It is obviously not complete, and is not intended as a shopping list.

- Moving data efficiently between software packages
- Setting up a questionnaire in EpiData
- Getting started with R
- Using different statistical packages to switch between wide and long data formats
- A tutorial on the principles of hypothesis testing
- Estimating Bayesian credible intervals
- Examples of free sample-size estimation software packages
- Determination of sample size for logistic regression
- Sample-size determination for ANOVA (or a Bland and Altman plot etc…)
- A tutorial on methods of imputation for missing data
- A tutorial on analysis of data obtained from a survey with complex sampling
- Introduction to graphics with Stata (or with R)
- A tutorial on propensity score-matching.

Suggestions and contributions will be welcome. The first contribution will be an overview of hypothesis testing for the difference between two population means, along with Stata commands.