Text for RSS News:

Primary Health Care Study Group

The primary health care study group hosted a half day meeting in March. The meeting consisted of three talks on various study designs and their application in primary health care research.

The afternoon commenced with a talk given by Tim Peters on the design, analysis and reporting of 2x2 factorial trials. Tim began by providing some background on factorial trials, including their definition and historical use. Relevant modern pieces of work were cited, including the current guidelines on the analysis and reporting of factorial trials and a review published in BMC trials on factorial trials of complex interventions. Tim continued to outline when factorial trials should and should not be used. Examples were given where Tim had used factorial trials in his own research, with issues highlighted of both a design and analytical nature. X d] u [• š o l u } À } v š }] • µ • • reporting of factorial trials, including the use of descriptive statistics, the primary analysis and the testing of interactions. Tim evaluated the reporting in his own factorial trials, objectively demonstrating both strengths and weaknesses. Concluding remarks stressed the importance of providing both a rationale statement upfront and full estimates of any interactions considered. Additional complexities, including economic evaluation, clustering and complex interventions, were also considered.

Toby Prevost gave the second talk of the afternoon on adaptive two stage designs in early phase trials with multiple biomarkers. Toby began by giving a brief introduction to biomarkers, indicating the common types and their common uses. The talk continued to discuss the choice of design when using biomarkers. Specifically, it was suggested that considerations should be made for the role of the biomarker. An example was provided of an early phase trial in the treatment of Psoriasis. The study was outlined and study design considerations were made. The use of a two stage design was suggested, indicating that one could be designed which would be powered to drop unsuccessful interventions with a given percentage at the interim stage and rules could be implemented so that the top five biomarkers could be retained regardless of the results. The talk concluded with an indication of further work, including the use of means and correlation coefficients in this area.

The final talk of the afternoon was given by Celia Taylor on the stepped wedge study design. Celia started by providing an introduction to the design, including its advantages and disadvantages, its historical use and outlining a systematic review of the use of the cluster stepped wedge design. Considerations were given to the calculation of the sample size for such a design, focussing on the cluster stepped wedge design and comparing issues encountered in parallel groups cluster randomised trials. Celia continued by providing an example of the design in a trial of malnourishment of children in Malawi. Celia concluded her talk by stating that the systematic review found that the use of the design was increasing, though it was not often used in primary care despite being used frequently in health research. Celia indicated that the design would be useful for studies involving GP practices.

The slides from the above talks can be found on https://www.jiscmail.ac.uk/cgi-bin/filearea.cgi?LMGT1=PRIMSTAT.