Reviewer’s report

Title: Focussing Both Eyes On Health Outcomes: Revisiting Cataract Surgery

Version: 1 Date: 13 May 2012

Reviewer: Konrad Pesudovs

Reviewer’s report:

This is a nice simple cataract surgery outcome study designed to address several questions about patient reported visual disability in cataract patients and the improvement with surgery. The study design is sound and the study well executed. The authors find that people undergoing cataract surgery in Canada have little pre-operative disability pre-surgery and therefore benefit little from surgery. The discussion is reasonable. However, there is one glaring omission – scrutiny of the choice of questionnaire.

The VF-14 was chosen without justification. Certainly it is a widely used instrument. However, it is nearly 20 years old, and the safety and predictability of cataract surgery have improved over this time which has driven surgical thresholds lower. Consequently, this instrument is out of date. There are other instruments which may appear similar, but are more responsive to cataract surgery. See McAlinden C, Gothwal VK, Khadka J, Wright TA, Lamoureux EL, Pesudovs K. A head-to-head comparison of 16 cataract surgery outcome questionnaires. Ophthalmology. 2011 Dec;118(12):2374-81. Indeed, in this study, the VF-14 is one of the least responsive instruments. There are probably several reasons for this. Besides content, the question format of the VF14 is problematic. In the VF-14 patients are asked – do you have any difficulty with …? Yes or No. Only if yes do they get to choose a level of difficulty. This question format probably biases to the under-reporting of disability. By contrast other instruments offer levels of difficulty at the original question which are often framed to encourage the admission of disability (e.g. the Visual Disability Assessment: To what extent, if at all, does your vision interfere with your ability to…). The other problem is that the VF-14 is a noisy instrument whose responsiveness greatly improves with the application of Rasch analysis: see Gothwal VK, Wright TA, Lamoureux EL, Pesudovs K. Measuring outcomes of cataract surgery using the Visual Function Index-14. J Cataract Refract Surg. 2010 Jul;36(7):1181-8. However, even the Rasch scaled and modified version performed poorly in McAlinden’s comparison paper above. While Rasch analysis would improve the responsiveness in this study, it would render your MCID values irrelevant and require calculation of new values which would be difficult for the authors.

Major essential revisions

While it is difficult for the authors to do much about their choice of questionnaire, they need to justify it and they need to acknowledge its limitations in the
discussion. Unfortunately this has implications for the conclusions drawn from this paper. Certainly people undergoing cataract surgery have high levels of functioning, but if better measured, it may be the case that MCIDs are being met with surgery.

Minor essential changes
VA reporting – is this decimal VA? Can you at least co-report Snellen fractions to broaden audience understanding.
Reference 17 is incomplete.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:
I declare that I have no financial competing interests. I would like to note that I have brough to the attention of the authors some of my own work which may benefit me if cited.