Reviewer’s report

Title: Eye exercises of acupoints: their impact on refractive error and ocular symptoms in Chinese urban students

Version: 4 Date: 8 July 2013

Reviewer: Kathryn Rose

Reviewer’s report:

The authors have undertaken substantial revision of the manuscript in line with the reviewer’s suggestions and comments. It is noted that the authors have now made the hypothesis of this paper clearer at the end of the introduction, but they have still failed to justify why they would be looking at symptoms related to near work in persons with myopia. This is brought further into question by the unsurprising low CISS scores obtained for this group, who were predominantly recruited on the basis of their refractive error. The analysis of the measures related to the symptoms of convergence insufficiency with refractive error as the primary outcome is still unconvincing, with the potential to confuse the naïve reader.

Major revisions:

The term “students” is used to describe the subjects in this study which implies that the study was solely school-based, however, no mention is made in the manuscript that patients were also recruited via advertisement in the hospital (mentioned in reply to reviewer’s comments) which makes the study in no way generalisable to the whole population or a school population. The sample is also biased by the choice of elite schools that of course would elevate the prevalence of myopia and may also present particular attitudes to the performance of eye exercises. This limitation of the study and its possible biases should be addressed in the discussion. Also the term “students” should be changed to ‘subjects’ throughout the manuscript.

While the authors have somewhat modified their call for further studies of the effect of eye exercises and reduction of refractive error, they still argue for larger studies looking at different eye exercise regimes despite their own negative finding. They need to make it clear that well-designed RCTs would be necessary to prove or disprove the widely held belief that these exercises are effective in reducing myopia, a very different design from the current study. However, it should be noted because it is such a widely held belief in Asia, it would be difficult to establish a control group.

Minor revisions:

The new columns in Tables 2 & 3 are not labeled in manner that makes it clear what is being presented namely “Multiple OR (95% CI)* for age” but also adjusted by age, gender etc?. Please clarify.

The abbreviation “ser” for serious attitude to exercises and “aqu” for acquainted
with exercises should be included in Figure 2 & 3 as a legend.

**Level of interest:** An article whose findings are important to those with closely related research interests

**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 competing interests