Reviewer's report

Title: Eye exercises: their impact on myopia and ocular fatigue in Chinese urban students

Version: 2 Date: 26 March 2013

Reviewer: Eric Borsting

Reviewer's report:


The purpose of the article is to investigate the impact of eye exercises on the progression of myopia and ocular discomfort in a group of Chinese school children.

All items must be responded to.

The term “eye exercises” is too broad and could confuse the readers of the article. Eye exercises can refer to stimulation of accommodation, vergence, or other eye movements. In this article the term eye exercises refers to bilateral acupoint self-message. The authors should have a term that is more specific to the activity of what the students are doing each day. For example, the CITT group used the term “vergence accommodation therapy”.

The introduction and article is difficult to review because the reference list is not accurate. References 16-19 are omitted, 20 and 21 are in the wrong order, reference 22 has two different references listed, 31-39 are omitted, and 42-46 have two different references listed. Without an accurate reference list it is difficult to provide a thorough review of the article.

The last statement in the introduction is confusing; It primarily aims to investigate … This statement refers to a relationship between NITM and permanent myopia which is not the purpose of this article. The last paragraph should state the two hypothesis outlined in the introduction.

Methods

Why did you need to use the Myopia Questionnaire?

In the CITT studies the CISS was administered by asking children the questions and they would answer while looking at a response sheet. It is not clear in this study if the children read the survey question on their own or were the questions read to them. This should also be addressed for the Eye exercise questionnaire.

Results

Why were 14 students excluded?

The analysis uses outdoor activity and amount of near work in the analysis but it
is not clear where the authors got this information in the methods and data analysis section.

Discussion

The authors need to discuss the clinical significance of the results found with the CISS. They state that the eye exercises relieve CI like symptoms. However, the reduction in symptoms was relatively small (2.5 to 3 points) and the students did not start out with high symptom scores. This creates a floor effect so there was little room for the CISS to change. The CISS studies indicate that scores of 16 or higher are symptomatic and the overall score in this study was 14.3. In contrast, the mean score in children with CI tends to be around 30. The results would say that the eye exercises would mildly reduce symptoms in children with high normal scores.

**Level of interest:** An article of importance in its field

**Quality of written English:** Needs some language corrections before being published

**Statistical review:** Yes, but I do not feel adequately qualified to assess the statistics.