Reviewer’s report

Title: Interventions provided in the acute phase for mild traumatic brain injury: A systematic review

Version: 2 Date: 10 April 2013

Reviewer: Maya O'Neil

Reviewer’s report:

This is a well conducted and well written systematic review of literature relevant to the timely issue of rehabilitation for mTBI. A strength of the paper includes the clear reporting of systematic review methods, presented according to PRISMA guidelines. I am not aware of any RCTs on cognitive rehabilitation for mTBI that the authors did not include in their review, and therefore I believe the findings to be a comprehensive summary of existing literature.

Major compulsory revisions:

1. More information should be provided about risk of bias in the included studies, and this quality assessment should be better accounted for in the data synthesis. For example, the authors describe 5 of the 15 included studies as having “potential” risk of bias, though do not discuss the other 10 studies, 5 of which were rated as having “unclear” risk of bias (“unclear” ROB should generally not be weighted similarly to “low” ROB studies). Though Figure 2 is a helpful summary of overall risk of bias across the studies, it would help to know specific areas of risk of bias in individual studies to facilitate comparison across studies (this could be added to Table 1 in addition to the “low, unclear, potential” descriptors). Was study quality considered in the qualitative or quantitative analysis of results? I would recommend consideration of study quality in the data synthesis (both quantitative and qualitative). Having reviewed the quality ratings of the included studies and the results, I don’t imaging there would be a great impact on results; however, weighting the otherwise considering quality in the synthesis warrants mention.

2. More information is needed in the introduction and discussion on other systematic reviews of cognitive rehabilitation effectiveness. For example, the recent IOM review (2011, by Cicerone & colleagues) is the most up to date systematic review of the literature through 2008 (see http://www.archives-pmr.org/article/S0003-9993(10)00950-0/abstract). Similarly, ECRI completed a review in 2009 with similar results as the IOM report, and an older AHRQ report by Carney and colleagues was not mentioned (see http://www.ncbi.nlm.nih.gov/pubmed/10381980). A more comprehensive summary of past reviews and comparison to the current findings should be presented. The authors provide a good summary of findings from the 2004 WHO report on mTBI, and should be aware that the same WHO group is in the process of completing an update to that report, to be published soon (per communication from a lead author, Linda Carroll).
Minor essential revisions: Instead of referring to “victims of mTBI” change to individuals with mTBI or other more neutral language (e.g., in the abstract).

In spite of the points that I recommend be revised, overall, I saw this paper as a concise, well-written, well-conducted systematic review of literature related to mTBI, and therefore I would recommend that the paper be resubmitted following revision.

**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 competing interests