Reviewer’s report

Title: The Agewell trial: a pilot randomised controlled trial of a behaviour change intervention to promote healthy ageing and reduce risk of dementia in later life

Version: 3
Date: 27 October 2014
Reviewer: Alexandra König

Reviewer’s report:

Review article « The Agewell trial: a pilot randomised controlled trial of a behaviour change intervention to promote healthy ageing and reduce risk of dementia in later life »

Overall, the article is very interesting and highly relevant, in particular at the moment where in dementia research trials the focus is shifting more towards prevention or delaying disease onset. The article helped understanding the importance of personalizing the intervention and use goal-setting strategies to increase engagement of the person in his/her lifestyle changing process. Overall, the article should be accepted for publication, and no essential major or minor revisions are needed, just some small minor revisions (see my comments below):

Generally, it took me quite some time to read the article, more than usually, and I found certain parts very (maybe a bit too) long. In order to increase potential reader’s interest, I think the article would benefit from summarizing certain parts and/or even removing (I made some suggestions).

1. Is the question posed by the authors well defined? Yes, the research objectives are clear and well defined?

2. Are the methods appropriate and well described? Yes, has been described extensively (could be maybe a little bit reduced)

3. Are the data sound? Yes

4. Do the figures appear to be genuine, i.e. without evidence of manipulation? Yes

5. Does the manuscript adhere to the relevant standards for reporting and data deposition? Absolutely, it appears highly professional

6. Are the discussion and conclusions well balanced and adequately supported by the data? Yes, both parts are good and support the data. The discussion part is just a bit long (see comments below)

7. Are limitations of the work clearly stated? Yes, clearly stated in the discussion part.

8. Do the authors clearly acknowledge any work upon which they are building,
both published and unpublished? yes, has been acknowledged

9. Do the title and abstract accurately convey what has been found? Yes
10. Is the writing acceptable? Yes
   No minor or major essential revisions needed

Comments:

1. Abstract: In the conclusion section, it could be added « …cognition, health, diet and physical fitness and even more if mentoring is provided »
   It would be good to emphasize this aspect already in the abstract.
2. Introduction: In line 83 on page 3, I am not sure if that reference is really appropriate considering it’s about bilingualism. I would try to find a better one that simply focuses on coast benefits of dementia prevention. For example: Barnes, D, Yaffe, K, The projected impact of risk factor reduction on Alzheimer’s disease prevalence. Lancet Neurol, 2011. 10(9): p. 819-28.
3. Method: In line 216 on page 8, a reference should be provided after SMART principles.
   Maybe add in the Design description of what the assessment consisted (e.g. neuropsychological test battery, physical examination, etc.)
   Context: The whole method section is already quite long and I would propose to shorten it up and possibly remove the context part, it seems less relevant.
   Further, maybe the ‘Design’ and ‘Procedure’ sections (which should be a bit reduced) could be merged to reduce the method section.
   The tables are difficult to read and it would be helpful to summarize certain variables.
4. Results: On page 18 (around up from line 477), the description of the test and results should be somehow summarized, it’s too long..maybe prioritize the main findings.
5. Starting on page 19-21, I would remove the participant’s comments or at least reduce them to just a few.
6. Discussion: On page 26 line 703 up from « Solutions were found… » til « local community » can be removed.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:
I declare that I have no competing interests