Reviewer's report

Title: Comparative effectiveness of school-based caries prevention: A prospective cohort study

Version: 1 Date: 07 Feb 2018

Reviewer: Yusuke Matsuyama

Reviewer's report:

Dear authors,

Thank you for your effort and time to revise the manuscript. The paper has been much improved, but there are still points that should be considered. Please consider to revise the manuscript according to comments below.

Major comments

#1
Please include following descriptive statistics to Table 1:
- Number of schools in treatment/control group
- the number of teeth at baseline with decay
- prevalence of participants who had access to fluoridated water
- Average TOCE at each visit
- Prevalence of untreated dental decay on permanent teeth at each visit

#2
Table 2, models 2a and 2b shows that water fluoridation was significantly associated with larger TOCE. Is there any possible reason of the (weird) association?

#3
I am still not convinced with Figure 1.
- How did you conclude that there was difference in TOCE development between treated/control group? Was any statistical test conducted to evaluate this difference in GAM model?
- It would be easier to compare if the two graphs were put together.
- How can we interpret the y-axis (smoothed components)? Does the y-axis mean s1 and s2 in the equation at line 152? Or, does the y-axis mean predicted TOCE at each visit?

Minor comments
#1
"Adult decay" in the Table 2 and "Untreated decay" in the Table 3 should be "Untreated decay on permanent dentition".
#2
All abbreviations should be spelled out in each Tables and Figure to make them self-understandable.

#3
In the second paragraph of the Result, it would be better to describe which model (GAM or GEE) the values come from.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.
No

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.
Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.
No

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.
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