Author’s response to reviews

Title: Tooth wear among five-year-old children in Jakarta, Indonesia

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Author’s response to reviews:

Prim Auychai, D.D.S., M.S. (Reviewer 1)
The present study poses a scientifically interesting question since it is the first to report on the erosive tooth wear status of primary teeth of Indonesian preschool children. The study design suited to fulfill the aims of the study. The selection criteria and the rates of loss to follow-up permit conclusions as to whether the study sample is representative of the target population. A good study description includes information on missing values. The findings are presented clearly and objectively. The discussion is appropriate.
Response: Thank you very much.

Baoying Liu (Reviewer 2)
1. Prevalence of dental erosion were not high in several Asia places, what's special in Indonesia to make the survey results meaningful to others?
Response: Required justification was added (Line 71-73 and 285-288).
2. The describing of stratified clustered random sampling method was not consistent in the abstract and the methods part of the manuscript, should correct.

Response: Thank you for pointing this out. Revision was made (Line 32, 106, 266, 275)

3. Only 1 examiner was involved in the examination, then how inter-examiner kappa be calculated?

Response: This was revised accordingly (Line 133 and 276).

4. Besides, calibrating performance and kappa value for duplicated examination was not reported.

Response: The kappa value was reported (Line 168).

5. Which criteria was used for the diagnosis of dental caries in the children? Please specify clearly as well.

Response: This was specified in line 142-144.

6. Will the diagnosis of dental caries affect the diagnosis of erosion? Will the two status diagnosed at the same time?

Response: The description was added in line 141-142.

7. What's the average number of teeth with dental erosion in the children?

Response: This information was added in Line 173.

8. Detailed information on logistic regression modeling should be reported and the relating result table should be more informative.

Response: Table 4 was revised for more information. Information on the regression is in line 154-158 and line 186-187.
9. Cross-sectional survey cannot find or verify the causal relationship between factors, be careful on the discussion on the relationship between dental caries and dental erosion, and be scientific in the finding interpreting.

Response: This part was revised as advised [Line 250-253].

10. I suggest the effect of the diet habit among different countries or regions on erosion be summarized in the background part and discussed in the discussion part.

Response: First sentence in 2nd paragraph of the background was revised. Discussion was revised and reference was added to address the valuable comments from the reviewer (line 242-247).

Minquan Du (Reviewer 3)

This manuscript firstly reports on erosive tooth wear in Indonesian preschool children and helps to fill the information gap in the literature. But there are several defects in this study which are listed below:

1. English editing should be pay attention throughout the manuscript.

Response: Before re-submission, the paper was edited for English by a professional English editing company.

2. The article investigated the incidence of erosive dental wear and dental caries, I think it is necessary to specify the criteria for the diagnosis of dental wear (BEWE>0) and caries in the METHODS section.

Response: The method section was revised (Line 137-141).

3. It is recommended that the percentage in the articles and tables be unified to one decimal place like table 2.

Response: Revision was made accordingly.

4. line 38-39, add ‘in which’ between ‘Erosive dental wear occurred in 23% (BEWE > 0) of the participants,’ and ‘most (78%) children……’.
Response: This sentence was revised as suggested (Line 40).

5. The author should consistent the representation of the references. ‘2’ in line 75, ‘1’ in line 77, ‘8-9’ in line 206 are in the upper right corner.
Response: The representation of the references were revised.

6. The specific value of 95% CI doesn’t need to written in the article.
Response: The specific values of 95% CI were deleted accordingly.

7. I suggest replacing ‘1’ in line 32, 39, 220 and line 246 to ‘one’.
Response: ‘1’ in those lines were replaced into ‘one’ as suggested.

8. Line 65: change ‘>’ to ‘more than’.
Response: The term was changed.

9. Line 133: maybe ‘loss in’ should be ‘loss of’?
Response: This line was revised as suggested.

10. Delete the ‘125/161’ in line 167.
Response: The numbers were deleted accordingly.

11. Delete the ‘odds ratio’ in line 177, add ‘OR’ at ABBREVIATIONS section.
Response: The ‘odds ratio’ in line 177 was deleted and ‘OR’ was added at the ABBREVIATIONS section.
12. In the discussion, line 205, 206 and 253, when comparing the incidence rate with other articles, it is recommended to write out the data of other articles.

Response: The rates were reported [Line 217, 218, 220].

13. According to this investigation, weather the father’s lower education level lead to less brushing times, which may influence the erosion dental.

Response: The 5th paragraph of the discussion section was revised to improve the content of the discussion.

14. Line 249: change ‘> 90%’ to ‘91%’

Response: This was changed.

15. Table 3, the number of each variable should be in a separate column, instead of being listed in parentheses.

Response: Table 3 was revised as suggested.

16. Too few references.

Response: References were added.

17. Add OR and CI in ABBREVIATIONS section.

Response: These were added (Line 278 and 279)

18. Line 86 “erosive dental wear” should revise into “erosive tooth wear”.

Response: The terms was revised throughout the manuscript.
19. Line 100 the sample size is according to the reference 9 and 10, but the prevalence of erosive tooth is 15% and 6%, but authors chose 20% to calculate sample size. Please explain and give the calculation formula.

Response: The 2nd paragraph of methods section was revised to improve clarity.

20. Line 102 how to control the random errors of cluster sampling? In the abstract, the stratified random sampling was used, but in the method, cluster sampling was used. They are different sampling methods. Which one is truly used in this survey?

Response: We have revised this, and added description in line 266-272. Thank you very much.

21. How to do the questionnaire, on-site or take-away? Is there an instructor?

Response: Related information was inserted in the method questionnaire section.

22. Throughout the manuscript, “erosive tooth wear” and “erosive tooth” are different, but there are “erosive tooth wear” or “erosive tooth” or “dental erosion”, these concept may be confused. Please make them consistent.

Response: Consistency of terms was revised throughout the manuscript.

23. In the last paragraph of results, the questionnaire is about the father’s education level, and the discussion said “father may lead to unhealthy dietary habits.” There is no significant relationship with dental erosion. But as we know, erosive dental wear is also associated the habit of oral hygiene. The mother’s role can’t be dismissed. The authors should explain more comprehensively.

Response: The discussion section was revised with adding appropriate references as well as an effort to improve the quality of the manuscript.

24. In the last paragraph of results, “children with caries experience had a lower risk of having erosive tooth wear” please discuss.

Response: Discussion was added in line 260-264.
25. Line 239-242, the explanation of the inverse relation between DMFT and erosive tooth wear makes no sense. Cariogenic bacteria can survive low pH caused by acid.

Response: This explanation was revised.

26. In table 2, lower posterior teeth are not included.

Response: Lower posterior teeth was included.

27. Line 170, “The mandibular anterior sextant (19%) had the highest prevalence of erosion”, is the difference statistically significant?

Response: Yes, additional description was added (Line 179).

28. Have you evaluated the relationship between score of erosive tooth wear by BEWE and these Variables listed in the table 3?

Response: One of the objective was to investigate whether there was any association between selected variables and tooth wear. The reviewer considered the association between score of tooth wear and selected variables. We chose to carry out a simple association analysis using a chi-squared test. This choice was made prior to the analysis being carried out. The re-analysis shows that by evaluating the relationship between score of erosive tooth wear by BEWE and variables listed in table 3, there is no differences in presented variables that has p-values bellow 0.05. We acknowledge that the priori binary classification of the BEWE variable as existing, and not as BEWE scores, have made the results of this analysis easier to interpret. However, given that we chose to categorize the BEWE variable in two categories, and not as tooth wear scale, we do not feel that it is incorrect to state that there is evidence of an association between the selected variables and tooth wear.