Author’s response to reviews

Title: Inequalities in oral health among adolescents in Gangneung, South Korea

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Response to referees

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Inequalities in oral health among adolescents in Gangneung city, South Korea

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BMC Oral Health

Please see our responses to the reviewers’ comments. We hope you agree with the changes below.

Yours sincerely,

Prof Jae-In Ryu
Thank you for revising the manuscript. The manuscript still needs some minor amendments before final acceptance. Please check additional comments from the reviewer. Please also check comments from the editor and revise accordingly.

- Please provide the full terms the first time they appear in the text and abbreviation in parentheses, e.g., SEP and FAS in the abstract.

Response:

We changed the methods in abstract according to the reviewer’s suggestion as follows.

As SEP indicators, school type (general vs. vocational), gender, father and mother’s education, perceived economic status, and FAS were measured.

→ As socioeconomic position (SEP) indicators, school type (general vs. vocational), father’s and mother’s education, perceived economic status, and Family Affluence Scale (FAS) were measured.

- First sentence, last paragraph, page 5 under study participants: please revise. I assume you want to say ‘inequality in untreated caries among adolescents’

Response:

We changed the methods according to the reviewer’s suggestion.

The aim of this panel study was to explore the inequality of adolescent in oral health, especially in the rate of untreated dental caries.

→ The aim of this panel study was to explore inequality in untreated caries among adolescents.
Please revise the sentence in lines 24-29, page 7: 'The status transition in dental caries between 2011 and 2013 were classified as follows: 1) no to no (to stay caries-free); 2) yes to no (to get treatment); 3) no to yes (to develop new dental caries); and 4) yes to yes (to stay unhealthy).’ The classifications are not clear, perhaps by removing 'to' for example "yes to no; received treatment, etc.

Response:

We changed the methods according to the reviewer’s suggestion.

'The status transition in dental caries between 2011 and 2013 were classified as follows: 1) no to no (to stay caries-free); 2) yes to no (to get treatment); 3) no to yes (to develop new dental caries); and 4) yes to yes (to stay unhealthy).

→ The status transition in dental caries between 2011 and 2013 were classified as follows: 1) no to no (remaining caries-free); 2) yes to no (received treatment); 3) no to yes (developed new dental caries); and 4) yes to yes (remaining untreated caries).

Under statistical analysis, please report all variables included in the regression model.

Response:

Among the regression models in Table 3, Model 1 included SEP indicators only and Model 2 included SEP variables and oral health related variables together. All the related variables reported in the Table 3. However, it might be not clear about this in results section. Thus we decided to change the sentences as the reviewer’s suggestion.

The odds ratios (ORs) for untreated caries were estimated after adjusting for SEP indicators and covariates (Table 3).
The odds ratios (ORs) for untreated caries were estimated after adjusting for SEP indicators only in Model 1, and SEP indicators and oral health related behaviours covariates together in Model 2 (Table 3).

- Tables should be self-explanatory. In all tables please include years, location, number of participants, age and statistical test in the title or the footnote.

Response:

We changed the tables according to the reviewer’s suggestion.

Table 2 Number and percentage of subjects who have untreated dental caries (D rate) by survey year

D rate  2011  2013

Table 2 Number and percentage of subjects who have untreated dental caries (D rate) by survey year in Gangneung adolescent

D rate  2011  2013
(1st grade)  N=1,267  N=1,073
(3rd grade)

Table 3 Adjusted odds ratio and 95% confidence intervals estimated from unconditional panel logistic regression models for D rate

Table 3 Adjusted odds ratio and 95% confidence intervals estimated from unconditional panel logistic regression models for D rate in Gangneung adolescent (N=2,003)
Table 4 Condition transition for untreated caries over the two-year follow-up

→ Table 4 Condition transition for untreated caries over the two-year follow-up in Gangneung adolescent at 2013 (N=1,073)

- Page 14, first sentence: 'father's education to reflect household….' Sentence not clear, please revise.

Response:

We changed the discussion according to the reviewer’s suggestion.

Along the same line, in our study, father’s education to reflect household material conditions rather than mother’s education to represent cultural and behavioural resources might be important.

→ Along the same line, in our study, father’s education to reflect household material conditions might be more important than mother’s education to represent cultural and behavioural resources.

- Please proof read the whole document, particularly the tenses, and the use of 'the' 'a'.

Response:

We proof read the whole documents according to the reviewer’s suggestion.

Reviewer reports:

aswathikutty gireesh (Reviewer 2):

- I am satisfied with the author's response, but the manuscript would benefit from a thorough edit for grammar/language. Sometimes the authors use the single form of a noun instead of plural, or missed punctuation, used wrong prepositions (of particular concern is newly added sentences).
For instance "Variable to measure oral health behaviours"?/ diverse opinions for the ..?/ some of others...?? / KNOHS) which established by the...??.. These examples cannot guarantee that all mistakes are addressed and I suggest to clean up the manuscript grammatically.

Response:

We proof read the whole documents according to the reviewer’s suggestion.

- Table 3 shows that D rate is significant for FAS in adjusted model -1.34(0.94-1.91) * [But, CI has crossed 1]. Do correct the mistake.

Response:

We checked all the tables and corrected if there are some minor mistakes according to the reviewer’s suggestion.