Author's response to reviews

Title: Pattern and severity of early childhood caries in Southern Italy: a preschool-based cross-sectional study

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Author's response to reviews:

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Editor, BMC Public Health

RE: Manuscript 1798621349102846 entitled "Pattern and severity of early childhood caries in Southern Italy: a preschool-based cross-sectional study"

Dear Editor,

as suggested, I am enclosing a copy of the revised version of the manuscript “Pattern and severity of early childhood caries in Southern Italy: a preschool-based cross-sectional study” for further consideration for publication in BMC Public Health. Thank you for your comments about the manuscript, and all the concerns made by the Reviewer have been addressed.

All Authors have contributed significantly to conception and design of the study, acquisition of data, analysis and interpretation of data. All Authors drafting the article, revising it critically and have seen and approved the submission of this version of the manuscript and take full responsibility for the manuscript.

There are no directly related manuscripts or abstracts, published or unpublished, by any authors of this paper.

The authors declare no conflict of interest.

Reviewer 1

Abstract

I suggest that this part is described which is a population-based cross-sectional study with a sample composed of 515 preschool children aged between 36 and 71 months. In summary could be described succinctly as also was the collection of data: which indexes used in data collection? there was an interview with the parents? What statistical tests used? In the description of the results in the
summary, add the p values observed in statistical tests and describe the results of both the chi-square as logistic regression, with respective p values of odds. As suggested, we thoroughly described the study design, sampling procedures, indexes used in data collection and statistical tests (page 2, paragraph 2, lines 6-17). Moreover, in the results in we added the p values observed in statistical tests and p values of odds of both the chi-square and logistic regression (page 2, paragraph 3, lines 18-25).

Background
In the second paragraph, add references to cite that caries impacts the quality of life. I suggest the following reference: Caries Res 2013, 47 (3) :211-8. doi: 10.1159/000345534. Epub 2012 Dec 13.

As suggested, in the second paragraph, we added the suggested reference to support that caries impacts the quality of life (page 4, paragraph 2, line 6).


In response to the point regarding the association between breastfeeding and caries, we read the suggested articles, and we added an in-depth description of the role of child feeding practices (pages 4, last paragraph, lines 22-25 and page 5, 1st paragraph, lines 1-20).

Objective: As this is a cross-sectional study, I believe that using the word risk is not the most recommended. It would be better to use: associated factors. As suggested, in the objective and throughout the manuscript, we replaced the word “risk” with “associated factors” (page 6, paragraph 1, lines 1-36).

Methods
We performed sample size calculation? What were the criteria for exclusion of children and parents?

In response to the point regarding sample size calculation, we specified that it was determined before study initiation and how it was arranged (page 6, paragraph 3, lines 14-18). Moreover, we clarified that no exclusion criteria of children and parents were established (page 6, paragraph 2, lines 9-10).

• Information on pregnancy and child birth were collected from the memory of their parents or had any record of these data by writing. There is the possibility of recall bias? If, as the authors have dealt with this?

In response to the point regarding information collected, we specified in the study limitations that, as with any survey based on a self-administered questionnaire, information resulting from the memory of parents, may not be entirely accurate,
primarily because of the long time frame that may introduce recall bias (page 14, paragraph 1, lines 8-12).

- How was the calibration of the examiner? What are the values of agreement? Where tests were performed?

As suggested, we specified how the calibration of the examiner was achieved, the values of agreement and what tests were performed, in the methods section (page 7, paragraph 2, lines 5-6).

Results
What is the justification of losses?
As suggested, we specified reasons of non-responses (page 8, paragraph 3, lines 6-10).

I suggest that the term predictor is replaced by an associated factor. As suggested, in the results and throughout the manuscript, we replaced the term “predictor” with “associated factors”.

It would be p<0.001 instead of p<0.0001
As the reviewer suggested, we replaced p<0.0001 with p<0.001.

During the description of the results, add the values of p.
As suggested, during the description of the results, we added the values of p.

Discussion
Check the formatting of references (quote). Reading the article suggested above about breastfeeding can contribute to the best discussion of this association.
As suggested, we checked the formatting of references throughout all the manuscript.
As suggested, we thoroughly discussed the association about breastfeeding and early childhood caries (page 13, first paragraph, lines 1-7).

Reviewer 2
Major compulsory revisions
1. An in-depth description of the risk factors associated with early childhood caries must be displayed in the introduction section. Caution is recommended and appropriate references must be provided when reporting that previous well recognized risk factors are now recognized as non-cariogenic.

1. As suggested, we provided in the introduction section an in-depth and cautious description of the well-known and controversial risk factors associated with early childhood caries and appropriate references were quoted (pages 4, last paragraph, lines 22-25 and page 5, 1st paragraph, lines 1-20).

2. Page 3 second paragraph: the authors describe the opportunities for prevention of early childhood caries. Is the statement that preventive measures can be undertaken by only elucidating pattern and severity of early childhood
caries appropriate?

2. In response to the point regarding the opportunities for prevention of early childhood caries, we clarified that preventive measures can be undertaken by not only elucidating pattern and severity of early childhood (page 5, paragraph 2, lines 22-24).

3. Discussion section, second paragraph: With regard to caries distribution it is often observed the phenomena of "polarization" with some subgroups of populations exhibiting higher caries prevalence particularly those disadvantaged.

Although this phenomenon is commonly observed it seem to be supported by data from this study so where this is mentioned appropriate references must be provided.

3. As suggested, in the discussion section, we provided appropriate references about different distribution of caries prevalence among subgroups of populations (page 11, last paragraph, line 23, reference no. 7 and 52, and page 12, first paragraph, lines 6 and 7, reference no. 8, 12, 15, 20 and no. 18 and 19).

Minor essential revisions

The following sentences must be corrected.

Page 7 second paragraph: "The pattern of mean dmft...."  
Page 9 line 6 from top: ".....and our figure are intermediate and similar to...."  
Page 9 line 11 from top: "....comparisons have to be cautious."

As suggested, the sentences has been changed in the manuscript and appears as follow:

"The associated factors for mean dmft almost resembled those observed for ECC;" (page 9, last paragraph, line 22).

"and our figure are similar to many other European and Italian studies" (page 11, paragraph 3, lines 14-15).

"and therefore, comparisons must be interpreted cautiously." (page 11, paragraph 3, lines 18-19).

Yours sincerely,

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Professor of Public Health