Reviewer’s report

Title: Hierarchizing caries risk factors among first-year university students in Nice (France): a cross-sectional study

Version: 0 Date: 26 May 2017

Reviewer: Sisko Honkala

Reviewer’s report:

This is a very interesting manuscript describing oral health and oral-health related behavior and background factors of university students. The topic has not been studied very much although the routines of life and life-style might change enormously after moving out from parents' house and starting more independent phase of life.

However, there are several points which needs some modification before the manuscript can be accepted for publication. Please, see below the detailed list of suggestions.

Abstract (page 2)

There are some terms, which need to be changed. These are following:

- "daily behavior" (line 30) - would be better 'daily health-related behaviour'
- "activity of mother" (line 36) - change to 'professional status of mother'
- "financial considerations" (lines 40 & 41) - would be better 'financial reasons'

Please, modify these terms throughout the paper including tables.

Line 42: 'R' is missing from 'OR'

Line 43: "Conclusion" should be in plural i.e. 'Conclusions'

Lines 43-45: Conclusions are not drawn from your results. Please modify.

Background (pages 2-3)

Page 2

Line 52: References inside text should be placed inside square brackets, e.g. [1]
Line 53: "DMF" should be 'DMFT'. Replace square brackets with normal parenthesis for '(decayed-missing-filled teeth)'.

Line 53: "...the periodontal status was not overall satisfactory." sounds a little non-scientific when compared to other part of that sentence (prevalence of carious lesions and the mean DMF). Please, give more details for the periodontal status.

Line 55: "preventively" - change to 'for preventive reasons'

Page 3

Lines 56-57: Omit sentence "The purpose was to investigate…"

Line 58: "the carious lesion experience" - might be better 'the caries experience'

Line 60: "In this population of" - replace by 'Among'

Lines 64-65: Omit sentence "The authors chose the fear…"

Methods (pages 4-5)

Page 4, lines 83-84: You mention that "The students in the first year of the study who came for the preventive consultation were invited to participate in the study." What was the total number of the first year university students? Did all first year students had a preventive visit? How many students from the total number of the first year students participated in the study?

Line 89: It was stated that the oral examinations were conducted "...by investigators previously trained and screened for the study..." Please describe how they were trained and screened. How many dental students acted as examiners? Did you measure the inter- and intra-examiner reliability?

Line 93: What do you mean by "professional activity in parallel with the studies"? Please, explain in text.

Line 94: "Number of snacks besides the main meals" - should be 'number of snacks between the main meals'. Change this also to the Table 1 and in text where applicable.

Line 97: "time of brushing over one day" - should be 'daily toothbrushing frequency'. Change this also to the Table 1 and in text where applicable.

Page 5, line 110: Do you mean p-value by "The alpha value"?

Results (pages 5-9)
Page 5, line 117: Please move "(Table 1)" from the end of the title inside text, for example after the first sentence (line 118).

Line 120: The title of the Table 1 is not enough informative. Please, modify. For example 'Background factors, health-related behavior and oral health behaviour among the first year university students.'

Page 7

Line 122: Please move "(Table 2)" from the end of the title inside text, for example after the second sentence (line 126).

Line 128: The title of the Table 2 is not enough informative. Please modify.

Line 131: Please move "(Table 3)" from the end of the title inside text, for example after the first sentence (line 135, page 8).

Line 140: The title of the Table 3 is not enough informative. Please modify.

Discussion (pages 9-12)

The structure of the Discussion needs to be modified. Please, start this chapter by comparing the main results of your study with the previous studies (how they differ or are they similar). Pages 10-11, lines 180-199: Please, do not list the protective factors against dental caries but write as full sentences/chapters by combining the comparisons to the results from previous studies where applicable.

Page 12, lines 225-228: References are missing.

You should also discuss the possible strengths and weaknesses of your study.

Conclusions (page 13)

Lines 240-243: Please modify conclusions. They should be drawn from the results of your study.

References (pages 14-15)

Please, check the instructions for the authors for writing the reference list and correct your list accordingly. For example: how many authors of articles should be mentioned before adding 'et al.' and is there a full stop after abbreviations of the journals?

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.

Unable to assess

**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.

I am able to assess the statistics

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