Reviewer’s report

Title: Current Status of Periodontal Disease in Adults in Takahagi, Japan: A Cross-sectional Study

Version: 0 Date: 14 Dec 2019

Reviewer: Koichi Tabeta

Reviewer's report:

The authors aimed to investigate the severity, prevalence, and extent of periodontal disease in the adult population of the city of Takahagi in Japan, referring to the past study conducted in Ushiki city in Japan in 1980s.

The study subjects are 582 inhabitants of Takahagi city who answered a comprehensive questionnaire and clinical examinations. In results, compared with results of the 1980s survey in Ushiki, the mean percentages of plaque and BOP were lower in the population of Takahagi. The mean CAL and prevalence of attachment loss of ≥5 mm in some age groups were higher in the study than in the 1980s Ushiki study but no differences of mean probing depth was observed between the studies.

The authors concluded that periodontal disease was still prevalent in current Japanese population and suggested the need of proper public health programs.

Major comments

I admit fundamental importance of the study and preciousness of data which suggests the incompleteness of Japanese public health program for periodontal disease to date. However, I am afraid to say that the current analyses in the paper, mainly presenting raw data and comparing to the past study similar to each other but different in several aspects, may lead wrong conclusion potentially. I suggest that the authors perform additional analyses in the obtained data to figure out the rationales of their observation or to report finding from the population and then add the comparison to the past study, even failing it with clarity. By that, I expect the conclusion obtained by the analysis of Takahagi population secures credibility of the paper to be published. The data for educational level, tooth brushing frequency, use of inter-dental care devices, regular dental visit, and experience of periodontal therapy is presented without any analysis. I hope the author successfully make precious data open in public.

Other comments

The excessive discussions including the repetition of results make the point unclear. The description in results are mostly repetition of tables, which is unpreferable to the manuscript.

The title of table 2 should be revised for clarity. The detail should be described in the legends. The description of SE and X2 test has an error and incomprehensive.
Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

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

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I am able to assess the statistics

Quality of written English
Please indicate the quality of language in the manuscript:

Needs some language corrections before being published

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