Reviewer’s report

Title: Temporary employment and tooth loss: a cross-sectional study from the J-SHINE study

Version: 0 Date: 19 Sep 2017

Reviewer: Paulo Frazao

Reviewer's report:

The authors sought to assess the potential effect of temporary employment on the tooth loss. To address the objective, a retrospective cohort analysis comprising 2,652 participants aged 25-50 years (men = 1,394; women = 1,258) was undertaken. The authors have described some evidences relating temporary employment and adverse effects on health. According to them, only one cross-sectional study has reported associations between the workplace-related factors such as precarious employment status and poor self-rated oral health. The research question is very relevant however some points should be assessed before the manuscript would be considered publishable. The authors examined whether the experience of temporary employment among working adults in Japan is associated with tooth loss adjusted by covariates and the manuscript would benefit if the authors could explain the criteria for selecting and entering the covariates in the models. The study was defined as a retrospective cohort study but it seems a cross-sectional study nested in a cohort.

Line 142- The last term should be revised as the authors are probably referring to model 1.

Line 155- The sentence "More than half of the participants were men (n = 1,422, 52.8%)" should be revised. Table 1 reports n=1,394.

Line 156- The response rate was very low. Although the obtained sample has been fairly comparable with the vital statistics of the target population in terms of age and sex distribution, others characteristics of the analyzed sample may not support the use of the term 'prevalence'.

Tables 1 and 2 should be revised as sum of values in determined columns do not result in 100.0%. In Table 2, "Having the experience of temporary employment" corresponds to 771 instead of 202.

Line 159 and 163- I am afraid that the sentences may not be supported in the results. The authors should test whether the observed differences are statistically significant. Several variables did not show association with the outcome and should not be included in the model if the objective is to evaluate potential association routes. Additionally the authors should explain why visiting a dental clinic for preventive care and hesitation to use medical and dental care were included in the model simultaneously.
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.

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes

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 recommend additional statistical review

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