Reviewer's report

Title: Socioeconomic-related inequalities in oral hygiene behaviors: A cross-sectional analysis of the PERSIAN Cohort Study

Version: 0 Date: 06 Nov 2019

Reviewer: Jagan Baskaradoss

Reviewer's report:

General Comments

* I would like to thank the Editor and the authors for giving me this opportunity to review the manuscript, entitled "What lies behind socioeconomic-related inequalities in oral hygiene behaviors? Evidence from the PERSIAN Cohort Study". The manuscript presents a nationally representative data from an ongoing cohort study. The manuscript is interesting and the topic is important that needs to be better studied. However, the present study is lacking several important pieces of information, especially on how the outcome variable is defined. The methods present some limitations that needs major compulsory revisions. I have questions and suggestions that I hope will improve the paper. The specific comments are listed below:

Title

* The title is attractive, but I feel the cross-sectional design of the study may not permit an in depth analysis and presentation of the component "What lies behind..." A more realistic title would suit the paper better.

Abstract

None

Background

* As per the journal recommendations - the term 'introduction' should be replaced with 'background'.

* Some of the description of the relationship between SES and oral health behavior should be shifted to the Discussion section. The authors could use this section more effectively to present the background of the study, including the rationale of the study with reference to existing literature and gaps.
Methods

* Pg 8; Ln 7-14: The primary outcome variable is oral health behavior, for which the authors refer to the ADA recommendation. However, the ADA's recommendation for home care, states the following 4 points:

The ADA's has come up with 4 recommendation's on home-care,

1) Brush your teeth twice a day with a FLUORIDE TOOTHPASTE. It is important to recognize that the recommendation of brushing twice daily was based on studies that evaluated the frequency of tooth-brushing with a FLUORIDE TOOTHPASTE rather than tooth-brushing alone. This is not represented in the current study, where the authors have only mentioned tooth-brushing.

2) Clean between your teeth daily - Flossing has been addressed in this study

3) Eat a healthy diet that limits sugary beverages and snacks - This is not addressed in this study

4) See your dentist regularly for prevention and treatment of oral disease - This is also not addressed in this study

* The outcome variable has to be more clearly defined. Did the authors collect data on the current brushing habits of the respondents? If so, would this be influenced by other factors like: pain, recent visit to the dentist etc? The authors need to clarify this very important component of the paper.

* Pg:9 Line19-20: Negative (Positive) ... needs to be clarified

* The authors need to include information on the exact questions that were included in the survey for which the analysis was done in this paper (SES; oral hygiene etc)

* I assume the data presented are the Self-reported hygiene practices. If so, then the authors did not describe how they tackled social desirability bias which is common in these types of study

Results

* There seems to be a need for further analysis of the data to adjust for the effects of confounding and interactions. A multivariate logistic model could shed more light on the relationship between the variables.

Discussion
Overall, our findings indicated a very low prevalence of individuals with recommended oral hygiene behaviors in Iran. Here it is very important to present information on the use of additional oral hygiene aids that are popular in Iran[1]. In a country where the use of Miswak or similar chewing sticks is popular, I believe this needs to be presented in a National level study. Culturally sensitive oral hygiene aids like there might cut across the socio-economic lines.

The authors need to construct the discussion more convincingly on the relationship between SES and Oral hygiene behaviors. Is it the cost factor, is it the Knowledge Attitude and practice or is it Oral health literacy or is it a combination of the above ???

The reference to Bof de Andrade et al. may not be appropriate as this paper studied the relationship between SES and use of dental services and not the use of tooth brush and dental floss.

The discussion primarily focuses on the relationship between SES and oral hygiene behaviors. However, it is important to discuss the other variables that were also found to be significant like education.

References


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.

No

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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