Reviewer's report

Title: Do self-rated oral health and dental care utilisation depend on socioeconomic factors? Recent evidence from a large population-based study in Sweden

Version: 3 Date: 18 June 2014

Reviewer: Vanessa Muirhead

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Discretionary Revisions
The manuscript would benefit from a proof-read to correct semantic and spelling errors.

Major Revisions
1. Abstract
   1.1. The background section in the abstract does not clearly articulate the aims presented in the introduction.

2. Introduction
   2.1. The introduction cites previous studies that have explored the relationship between self-rated oral health and dental attendance. Unfortunately, no clear rationale is presented for this study. A clear rationale for conducting this study is needed to avoid the criticism of “secondary data fishing” (1).

   2.2. Similarly, it would be helpful if the authors provided a theoretical framework to clearly explain the posited relationships between self-rated oral health and socioeconomic factors and dental attendance. This would help the reader to identify the independent and dependent (outcome) variables and the mediators and moderators described in the results section.

3. Methods
   3.1. The methods sections would benefit from a more detailed description about the sampling method and data collection procedures (i.e. what was the sampling frame? How many municipal were sampled? How was information about the sampling frame obtained?)

   3.2. The authors do not explain why they chose to use dental attendance within three years as the indicator for regular attendance. This cut-off level was not particularly discriminating since 89% of respondents were deemed regular attenders. The three-year dental attendance did not seem to relate to the question about refraining from dental visits in the past three months.

   3.3 The method sections states the “very good/fairly good” self-rated oral health categories were coded as “good oral health” while “quite poor and very poor”
were categorised as “poor oral health. What happened to participants who reported neither good nor poor self-rated oral health?

3.4 No information about what statistical software was used to analyse the data was presented. The authors do not confirm if survey weights were included or if any adjustments were made in the analysis for the complex (stratified) sampling.

4. Results
4.1. I would suggest that the authors provide some descriptive statistics about the sample socioeconomic characteristics (numbers and percentages) in addition to the age and gender sections in Table 1 at the start of the results section. This would allow readers to assess the representativeness of the sample (external validity). The discussion alluded to the differential response rates by age group. This information should have been first included in the results section in the descriptive statistics before being alluded to in the discussion.

4.2. The paper provides no information about the other reasons for refraining from dental visits collected in the study (i.e., symptoms subsided, dental fear, lack of time and other reasons). These factors were not included in the logistic models. Is it possible that these factors could be stronger predictors of self-rated oral health than refraining from dental visits for financial reasons? Studies have shown that lack of perceived need (i.e. symptoms subsided) is a cogent predictor for people not visiting the dentist regularly (2). It could also be a significant mediator of the relationship between SES and self-rated oral health. The authors’ conclusion that “refraining from dental treatment thus largely explained differences in oral health status in relation to country of birth, between the employed and the unemployed or those on disability pension or on long-term sick leave” is not completely correct because these measured factors were not included in the analysis. I would suggest that the authors include these potential mediators in the modelling to fully support their conclusion.

5. Discussion
5.1. The authors acknowledge the limitations of this study. However, some of the inferences made cannot be support by the data analysis presented in this paper. For example, the statement, “This implies that if they had not refrained from treatment, their self-rated oral health would have been comparable with that of the employed” cannot be supported by this cross-sectional study. The authors themselves refer the possibility of reverse causality in the discussion.

5.2. Are the authors describing the lack of an age modification effect on the relationship between having a cash margin and self-related in the sentence “in our study, the differences in oral health between those with and without a cash margin exceeded the differences between age groups”? It would helpful for readers if this was more clearly explained.

Tables
Table 3 column 1 showing univariate figures is not correct since these ddds ratios were adjusted by age and gender. I would suggest that the authors remove
the terms univariate and multivariate from the column headings. Including the P values in addition to the 95% confidence intervals would also be helpful or using asterisks to indicate $P<0.05$ or $P<0.001$

References


Level of interest: An article of limited interest

Quality of written English: Needs some language corrections before being published

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

I declare that I have no competing interests