Author's response to reviews

Title: Time loss due to dental problems and treatment in the Canadian population: analysis of a nationwide cross-sectional survey

Authors:

Alyssa Hayes (alyssa.hayes@mail.utoronto.ca)
Amir Azarpazhooh (amir.azarpazhooh@dentistry.utoronto.ca)
Laura Dempster (L.dempster@dentistry.utoronto.ca)
Vahid Ravaghi (vahid.ravaghi@mcgill.ca)
Carlos Quiñonez (carlos.quinonez@utoronto.ca)

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Dr. Alyssa Hayes
BDent MSc Dental Public Health
373 Rankin Drive
Burlington ON L7N 2B2

Christopher Foote
Executive Editor
BMC Oral Health

Re: Revisions to manuscript submission – “Time loss due to oral health issues in the Canadian population: analysis of a nationwide cross-sectional survey”

Dear Dr. Foote,

Thank you again to Reviewer #2 for their comments. We have addressed them below.

Thank you in advance.

In response to:

Reviewer #2 (Anna-Lena Ostberg)

# The term “oral health issues”: This term was used in a heading in a referred report. An alternative, and more specific, description would be “dental problems and treatment”. Please consider.

We have replaced the term “oral health issues” with “dental problems and treatment” in the title and throughout the manuscript.

# The conclusion in the abstract: This is re-formulated I am afraid, to be more vague than before. The one in the main text is better specified.

We have changed the abstract’s conclusion to mirror that seen in the main text.

METHODS

# Answer options: A suggestion for describing answer options is to refer to Table 1 here in the methods.

We have added a statement to this effect in the text (p. 6; paragraph 1, line 9).

# Exclusion of variables due to multicollinearity: This is now better described. However, please consider to give the VIF in the tables.
Including the VIF for each variable included in the regression models would be ideal, however, due to disclosure rules at Statistics Canada’s Regional Data Centre, this information was not part of the output that was allowed to leave the facility.

The data were collected between March 2007 and March 2009 and the average household wages per occupation classification from February 2012 were used to estimate individual losses. Still, I think this is not relevant. The reason for doing like this is stated to be that the average wage data from the Canadian Labour Force Survey during the CHMS survey period was not publicly available. Did you try to get access to these data?

Unfortunately, access to certain datasets controlled by Statistics Canada is highly restricted. While certain micro-files or tables are available publically, access to raw data is limited. This was the case with the Labour Force Survey, therefore at the point of analysis, an application to access this data was not undertaken due to logistical and time constraints.

RESULTS

Tables: The tables are still very extensive. They are easier to understand now, with consistent OR’s. However, this brings out that most confidence intervals were overlapping. When writing for instance (p8 §1) “as income decreased so did the odds of reporting time loss” – was this statistically tested?

As seen in Table 2, each group is statistically different than the reference group (p<0.05) however post hoc comparisons between the groups were not undertaken.

Table 1: there is still no option for those = high school. “Frequency of seeing dental professional”: the options should preferably be placed in ascending or descending order.

The variable of “Frequency of seeing dental professional” has been reordered. Yet as previously mentioned, education was dichotomized for analysis and interpretation in order to remain consistent with Statistics Canada’s technical report on the CHMS findings. Unfortunately, changes to the coding of this variable would require a new application to Statistics Canada to re-access the data, which is not currently feasible.

Table 2: I acknowledge that the epidemiological measures are now commented on. However, it is still unclear how there can be exactly the same numbers for the primary and the permanent dentitions.

We acknowledge that having the same weighted sample sizes for the primary and permanent dentitions is perplexing; this value is nonetheless reflective of those who reported time loss and who were clinically examined.

Table 4: according to the answer to my question all the variables were included in one single regression model. This must be explained in the heading of the table.
The headings for Tables 4 and 5 have been changed to reflect that these were en bloc models.

Table 6: The answer to my question regarding Table 6 should preferably be included in the discussion.

We have included our response to this question into the discussion (p.11).

DISCUSSION

The low participation rate has been added to the results (just over 50%), but is not discussed. Also and perhaps related to this, the extension of the questionnaire is an issue. The authors refer to a paper describing the validation process, thank-you. Nonetheless, the risk of having less engaged answers, or a reason of denying to participate, when asking a high number of questions (722) could not be disregarded.

We have added information on the low participation rate and have also incorporated this into the limitation section of the discussion (p.13).

We appreciate these comments and look forward to your response.

Sincerely,

Alyssa Hayes, BDS, MSc, FRCDC