

## PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form (<http://bmjopen.bmj.com/site/about/resources/checklist.pdf>) and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below.

### ARTICLE DETAILS

<b>TITLE (PROVISIONAL)</b>	Self-Reported Oral Health among a Community Sample of People Experiencing Social and Health Inequities: Cross-sectional Findings from a Study to Enhance Equity in Primary Health Care Settings
<b>AUTHORS</b>	Wallace, Bruce; Browne, Annette; Varcoe, Colleen; Ford-Gilboe, Marilyn; Wathen, Nadine; Long, Phoebe

### VERSION 1 - REVIEW

<b>REVIEWER</b>	Lindsay McLaren University of Calgary Canada
<b>REVIEW RETURNED</b>	30-Aug-2015

<b>GENERAL COMMENTS</b>	<p>Self-Reported Oral Health among a Community Sample of People Experiencing Social and Health Inequities: Implications for the Primary Health Care Sector</p> <p>Thank you for the opportunity to review this manuscript.</p> <p>The issue that the authors are tackling is an important one – oral health problems amongst socially and economically vulnerable populations.</p> <p>My main comment is that I am not entirely sure of the paper's contribution. Overall it feels like a prevalence study, but to succeed in that way it needs more detail about the denominator – what exactly is the target population and how well does the sample represent that target population? More information is needed on how the clinics were selected – I see that authors reference another paper but I think some brief detail is needed here so the reader can interpret results such as “almost half” reported poor oral health. The stated aim of the study is to examine associations between oral health problems and various inequities, but considering that the sample is already restricted to persons experiencing social and economic vulnerability I am not sure of the meaning or value of those associations. Based on the title the authors wish to draw implications for primary health care, but I feel this could be better developed and perhaps labeled differently (they seem to go beyond the primary health care sector). The authors make several good points such as the limitations of a charitable approach and the inability of even a greatly improved “dental care system” to address these problems, but these comments are not well developed. Why exactly is a charitable approach insufficient and how might we get around this? Tackling the social determinants of health directly via ‘proportionate universalism’ sounds great but what specifically do the authors mean by this?</p>
-------------------------	--

	<p>Other comments:</p> <ul style="list-style-type: none"> <li>-The inclusion criteria of English-speaking seems like quite a limitation, particularly in the clinics that serve new immigrants. Was there not potential to have translators / use translated materials?</li> <li>-Related to my main comment above, I think the manuscript could be tightened up considerably. The introduction section in particular contains material that – while interesting – feels a bit peripheral to the study itself.</li> </ul>
--	---

<b>REVIEWER</b>	Alissa Levine McGill University Canada
<b>REVIEW RETURNED</b>	02-Sep-2015

<b>GENERAL COMMENTS</b>	<p>I have only minor suggestions for modification of this compelling and well-written study:</p> <ol style="list-style-type: none"> <li>1. I accept your argument for collapsing poor and fair oral health into one category, but would prefer to see it renamed something other than 'poor' as this term was subsequently used to (presumably) refer to the new, collapsed category at times while at other times the poor or fair distinction was retained. You could also get rid of the ambiguity by stating that 'poor' refers to both and then consistently using only the term 'poor' if you indeed are referring to the new collapsed category.</li> <li>2. One sentence needs to be rewritten so as to provide a smoother transition between the problems of simplistic models and charitable dentistry (page 15, lines 10-12).</li> <li>3. The difference between participant reported problems and interviewer observations could have been presented in a systematic way. Instead, we learn in the bullet points at the outset that "visible decay was commonly noticed by interviewers with participants reporting non-problematic oral health" but not further alluded to; later, in the discussion, the implications of missing teeth were a source of intriguing speculation not linked to the earlier point about similar visible signs such as decay.</li> <li>4. Define EQUIP at first mention, or specify that it will be defined in the following paragraph (as is the case).</li> </ol>
-------------------------	---

### VERSION 1 – AUTHOR RESPONSE

Referee #1:

1. Overall it feels like a prevalence study, but to succeed in that way it needs more detail about the denominator – what exactly is the target population and how well does the sample represent that target population?

Our response:

Under Design and Settings, we have stated that the combined client population served by the four clinics was approximately 12,000 people.

In the version of the paper that was initially submitted for review, in the last sentence of the first

paragraph under Results, Description of Participants, we also noted that: “Comparisons with electronic medical records and administrative data, as well as consultations with clinic leads, suggest that our sample is representative of the overall client population at each site in terms of gender, age range, ethno-cultural background, and socioeconomic status.”

This, and the revisions outlined under item #2 below, clarify that the target population is people in the primary care sector who are disadvantaged by structural and social inequities.

2. More information is needed on how the clinics were selected – I see that authors reference another paper but I think some brief detail is needed here so the reader can interpret results such as “almost half” reported poor oral health. Under Design and Settings, we have clarified that the four clinics were selected to achieve diversity in five dimensions of context, specifically: the sites are located in diverse geographic areas, and have different staff complements, funding mechanisms, client populations and histories.

Our response:

In the version of the paper that was initially submitted for review, in the first paragraph under Results, Description of Participants, we also noted that:

“Clinics participating in this study have explicit mandates to serve populations which are disadvantaged by structural and social inequities, and this mandate is reflected in the sample demographics”.

By addressing items 1 and 2 above, we think this clarifies the points raised by Reviewer 1.

3. The stated aim of the study is to examine associations between oral health problems and various inequities, but considering that the sample is already restricted to persons experiencing social and economic vulnerability I am not sure of the meaning or value of those associations.

Our response:

Thank you for this comment. In the last paragraph of the Introduction, we have refined our purpose statement to be more reflective of the aims of this paper:

"The purpose of this paper is to describe the self-reported oral health issues among a community sample of primary care clients experiencing socioeconomic disadvantages."

4. Based on the title the authors wish to draw implications for primary health care, but I feel this could be better developed and perhaps labeled differently (they seem to go beyond the primary health care sector).

Our response:

We have expanded on this in the Discussion section to clarify one of the implications arising from this study is the need for more effective integration of dental services with primary care and public health in community-based care, particularly for underserved populations.

5. The authors make several good points such as the limitations of a charitable approach and the inability of even a greatly improved “dental care system” to address these problems, but these comments are not well developed. Why exactly is a charitable approach insufficient and how might we get around this? Tackling the social determinants of health directly via ‘proportionate universalism’ sounds great but what specifically do the authors mean by this?

Our response:

Further sources and explanations are now provided in these sections.

6. The inclusion criteria of English-speaking seems like quite a limitation, particularly in the clinics that serve new immigrants. Was there not potential to have translators / use translated materials?

Our response:

In the limitations section that follows the abstract, we have noted that:

"Due to the lack of availability of translation services, only those clients who could understand and speak English were eligible to participate in this study."

7. I think the manuscript could be tightened up considerably. The introduction section in particular contains material that – while interesting – feels a bit peripheral to the study itself.

Our response:

We have tightened the Introductory section accordingly, as per the track changes. However, to better set up the revisions made to the Discussion section, we have retained several of the key points in this section.

Referee #2:

1. I accept your argument for collapsing poor and fair oral health into one category, but would prefer to see it renamed something other than 'poor' as this term was subsequently used to (presumably) refer to the new, collapsed category at times while at other times the poor or fair distinction was retained. You could also get rid of the ambiguity by stating that 'poor' refers to both and then consistently using only the term 'poor' if you indeed are referring to the new collapsed category.

Our response:

As recommended by the reviewer, we retained the statement that poor refers to both fair and poor, and then made subsequent revisions to use only the term 'Poor' to refer to this collapsed category.

2. One sentence needs to be rewritten so as to provide a smoother transition between the problems of simplistic models and charitable dentistry (page 15, lines 10-12).

Our response:

This sentence has been rewritten and simplified.

3. The difference between participant reported problems and interviewer observations could have been presented in a systematic way. Instead, we learn in the bullet points at the outset that "visible decay was commonly noticed by interviewers with participants reporting non-problematic oral health" but not further alluded to; later, in the discussion, the implications of missing teeth were a source of intriguing speculation not linked to the earlier point about similar visible signs such as decay.

Our response:

The interviewer observations of decay in participants reporting positive oral health has now been included in the Findings.

4. Define EQUIP at first mention, or specify that it will be defined in the following paragraph (as is the case).

Our response:

We have removed the two references to EQUIP from the introduction, so that the larger EQUIP study is described when first mentioned in the first paragraph Methods section.

We have used the Track Changes feature to signal revisions to the originally submitted manuscript. Text is highlighted in yellow where additional references have been inserted.