Reviewer’s report

Title: Developmental delays and dental caries in Head Start children in Washington State: a pilot cross-sectional study and preliminary explanatory model

Version: 1 Date: 25 September 2013

Reviewer: Tegwyn Brickhouse

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Major Compulsory Revisions

1. It seems that the p-values for several covariates in the model such as: communication difficulty, being 4 or 5 years old, having fluoride in the water, caregiver education, etc. are more significant than the p value for having developmental delay. Was the sample size large enough to have 10 covariates in the model? It states that there was not collinearity between developmental delay and communication difficulties but may be helpful to include Goodness of fit tests for the model. The bivariate analysis showed little no significance.

2. Developmental delay group was rather small N=20, and how do you know that kids with developmental delay have caries because of their developmental delay and not because their parents are not well educated or unemployed, etc. It may be helpful to emphasize where the significant findings and covariates fall under the theoretical model of Ascribed, Proximal, Immediate, and Distal factors in the text to supplement the tables.

3. Under “Methods”-“dental home was assessed by asking caregiver whether they needed assistance finding a dentist”, I feel that this question adequately represent the existence of a dental home.

4. Under “Results” In regards to “caregivers” being employed/educated, is that one or both parents?

Minor Essential Revisions/Minor issues not for publication

1. Under “Introduction”. First paragraph, sentence reads, particularly is regards to the U.S…Replace is with in.

2. Under “Methods”. First paragraph, tense discrepancy. “The median household income is $42,769 and 22.3% of individuals were below the Federal Poverty Level.” Either use past or present tense is/are or was/were?

3. Under “Conclusions”. #2. I believe authors meant to say “living in a community with fluoridated water were associated with significantly lower dental caries prevalence.” Not non-fluoridated water, as the manuscript reads.

4. Under “Discussion”. Third paragraph, second sentence, “There is an extensive literature…Take out the word an.

5. Under “Results” last sentence “children with a caregiver in school had
significantly lower caries prevalence”. Should “in school” be “employed”? 

6. Under “Discussion”, last paragraph “Second the data were cross sectional and there is no…” should the sentence read, “Second the data is cross sectional”

7. Under “Discussion”, last paragraph, “Longitudinal studies are needed to identify to better understand how risk factors...Take out to identify.”

8. Under “Introduction” last paragraph, “We adapted....”, perhaps use a word other than we, the investigators, for example.

Discretionary Revisions

1. Under “Abstract”, results section, consider taking out the word about in “About, 17.4%....

2. Under “Introduction” “12% of Headstart enrollees had an IEP [16]”, then under “Methods” under predictor variable, the same study is referenced [16] and you state “which approximates the 15% of Headstart with an IEP [16]. Is it 12% or 15%?

3. Under “Introduction” second to last paragraph, second to last sentence, “enabling services to the caregivers of Headstart enrollees improved dental use for children but did not improve oral health status.” Not sure what this means.

4. Under “Discussion”, third paragraph, the “potential explanation” for why a child, whose caregiver is in school, has caries seems weak

Level of interest: An article of importance in its field

Quality of written English: Acceptable

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

Declaration of competing interests:

I declare that I have no competing interests