Reviewer’s report

Title: Poverty, Social Exclusion and Dental Caries of 12-year-old children: A cross-sectional study in Lima, Peru

Version: 1 Date: 30 March 2009

Reviewer: Kaye Roberts-Thomson

Reviewer’s report:

Review of “Poverty, social exclusion and dental caries in 12-year-old children: a cross-sectional study in Lima, Peru.”

Major essential revisions

Background

Seems appropriate.

Methods.

1. The sampling frame of underserved communities restricts the variability in the sample. A broader sampling frame or a comparative frame may have enhanced this study. Sampling method is appropriate. Sample size calculation would usually include an estimate of Type 1 error rather than confidence intervals, it would assist to have an explanation.

2. Data collection methods are clear. How have the social exclusion groupings been derived? Was factor analysis or another statistical technique used? If using a pre-existing grouping is it valid for this population?

3. Inter-examiner reliability refers to correlation between examiners, yet there is only one examiner listed. Please explain.

4. Use of prevalence of caries as a dependent variable is appropriate but the case would be stronger if mean caries experience was also tested (Bradford-Hill biological gradient criterion), although the sample size may not be sufficient.

5. Another analysis to improve the analysis would be to examine various components of poverty and the domains of social exclusion separately.

Results

6. There is no comment on response rates although it appears as though the response was 100%. Some comment in the results would be helpful.

Otherwise clearly presented.

Discussion

7. The comment on the sample size needs to be modified. In the methods it is stated that the sample size was calculated according to statistical measures, it then seems odd to say that it is small.

8. Issues related to the narrow sampling frame should be referred to.

Minor essential revisions
9. Last sentence in ‘study sample’ section: should read ‘Only those children who agreed to participate and whose ……’

10. Last paragraph in discussion: ‘excludes’ should be ‘exclude’ and ‘we considered appropriate’ should be ‘we considered it appropriate’.

11. In Table 1 under ‘Relational and participatory’ should read ‘depression and frightening thoughts’.

Discretionary revisions

12. Although odds ratios can be used to test associations, prevalence ratios may be more appropriate with a prevalence of >20%.

**Level of interest:** An article whose findings are important to those with closely related research interests

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

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I declare that I have no competing interests.