Reviewer's report

Title: Socioeconomic status, urbanization and risk behaviours in Mexican youth: an analysis of 3 cross-sectional surveys

Version: 3  Date: 18 April 2011

Reviewer: Joanna Stewart

Reviewer's report:

Major
1 Table 1 should simply be a presentation of the data. It is important to report the characteristics of the sample however the tests of significance should be removed from this table. It is not appropriate to test all the individual comparisons of subcategories of variables separately. Also the different locality sizes were sampled in different surveys with different methods of selection based on deprivation. All comparisons of locality size differences need to control for deprivation as well as other confounders. The hypotheses of interest are tested more correctly in the multivariable analysis that is reported later. At present the table is very difficult to read. The confidence intervals could be removed as well. This would aid clarity considerably. They are meaningless for the combined samples and of questionable use within sample given the different sampling methods for different samples and the restrictions on who was sampled.

2. Table 2. It is unclear why the results of the two interactions of interest are reported differently. The overall effect of the interaction is reported for marital status/gender but does not seem to be for SES/locality size. However the odds ratios of the outcomes for locality size are reported within SES strata implying that an overall interaction of SES and locality size was found. Given this was the case it is appropriate to report the odds ratios within SES strata as has been done. However for gender/marital status it is unclear what the odds ratios reported are. Have they been reported split in both directions? If this is the case one should be removed. In line with the SES/locality size results, they should be split on marital status or gender with an odds ratio for, say males compared to females presented for single and for married.

Minor essential
1. Requires editing for English, in particular the abstract and background section.
2. On the assumption that the analysis of condom use in table 2 was restricted to those that were sexually active this should be noted.

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

**Declaration of competing interests:**

I declare that I have no competing interests