Reviewer’s report

Title: Population tobacco control interventions and their effects on social inequalities in smoking: placing an equity lens on existing systematic reviews

Version: 1 Date: 22 January 2008

Reviewer: Lindsay Stead

Reviewer’s report:

1. Is the question posed by the authors well defined? Yes
2. Are the methods appropriate and well described? Yes
3. Are the data sound?
   Few data are presented but what there are seem sound
4. Does the manuscript adhere to the relevant standards for reporting and data deposition?
   Yes, but I would like to know the references for the 6 reviews that addressed a relevant intervention but were excluded because they did not mention any sociodemographic data
5. Are the discussion and conclusions well balanced and adequately supported by the data? Yes
6. Are limitations of the work clearly stated? Largely â## see comment below
7. Do the authors clearly acknowledge any work upon which they are building, both published and unpublished? Yes
8. Do the title and abstract accurately convey what has been found?
   See comments
9. Is the writing acceptable? Yes

I have no suggestions for compulsory or essential revisions. In addition to the those above I suggest the following Discretionary Revisions:

1. Abstract: In the first sentence of the background the authors use the term â##upstream interventionsâ##, but later the term â##population level interventionsâ##. I suggest using only the latter term in the abstract. It would be helpful if space allows in the abstract to list all the types of intervention for which reviews were found. Only price, youth access laws and bans are explicitly mentioned in the abstract which may hinder retrieval.

2. Unless there is a word limit for the abstract, more detail on the 19 included reviews would also be helpful

3. Results P9 line 16â## it would be useful to specify here the reference numbers of the 3 reviews that specifically addressed sociodemographic differences although it does become apparent later
4. In relation to check point 6 above: The authors consider that their findings support the further use of systematic reviews for addressing questions about equity effects of interventions. I agree that a systematic approach has to be part of the process for attempting to identify whether there are existing data to answer these questions. But as they themselves note, the function of a systematic review in this context will probably be to identify primary studies that, individually, may have relevant data. It is less likely that a systematic review will add value by pooling or synthesising results from multiple studies, which might be the expectation. Indirect comparisons between studies that have been done in different sociodemographic settings, do not seem very likely to be able to answer the question about equity effects. Differences between studies in the populations studied will be confounded by multiple other differences in design and intervention characteristics. The critical issue is whether individual studies have included sufficiently varied populations and been large enough to report suitably powered subgroup analyses. The authors do, I think, make this point themselves but it could perhaps be more explicit.

**What next?:** Accept after discretionary revisions

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

**Quality of written English:** Acceptable

**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