Reviewer's report

Title: Correlates of exposure to tobacco smoke pollution (TSP) among non-smoking adults in Bangladesh: Findings from the ITC Bangladesh Survey

Version: 1 Date: 11 March 2014

Reviewer: Ute Mons

Reviewer's report:

The article explores correlates of exposure to secondhand smoke exposure in the home in order to inform tobacco control efforts in Bangladesh. It is well-written and methods are adequate. While only limited scientific knowledge is gained with this article, it provides important public health implications. I have a few comments and recommendations for clarification.

Major compulsory revisions

The construction of the exposure variable is described in para. 3 on p. 7. Non-smokers who reported having a complete home smoking ban were classified as ‘not exposed to TSP’. Non-smokers who reported having no home smoking ban and who shared a household with at least one smoker were classified as ‘exposed to TSP’. Now I’m wondering how those non-smokers were classified, who reported having no home smoking ban but do not share a household with a smoker (either because they live in a non-smoking household or because they live alone)? They could still be exposed to substantial amounts of TSP at home.

I am generally somewhat concerned with regards to the exposure variable, as it seems to be a mixture of self-reported home smoking rules and of household composition with regards to smoking status. It might be better to either choose one consistent concept, or – if a combination of both concepts is used – to additionally distinguish between more categories in the descriptive analyses (e.g. no home smoking ban + living with a smoker; no home smoking ban + living with non-smokers; no home smoking ban + living alone; home smoking ban).

Anyways, the limitations of the current measure for exposure to TSP should be mentioned in the discussion (para. 3 on p. 13). In contrast to what is written in the discussion (“TSP exposure was measured by self-report”) TSP exposure is actually not even self-reported, but a proxy measure constructed from self-reported home smoking rules and household composition, and might thus not always reflect real exposure to TSP at home. In addition, this measure does not provide information about dimensions of exposure such as frequency and intensity.

It is also not always clearly stated in the text that TSP exposure at home is the particular measure of interest (and not TSP exposure in general). Please state this clearly in the title of the paper, in the introduction and in the discussion.
Minor essential revisions

In para. 2 on p. 6, the sample size of the survey and its composition in relation to Wave 1 are described. According to these descriptions, 58 of Wave 1 non-smokers had started smoking by Wave 2. How many of the Wave 1 smokers had quit smoking by Wave 2?

There is some inconsistency of the text and table 4: For the odds for ‘concern that tobacco smoke harms children’, the ‘very/extremely concerned’-group is the reference group in the table, but in the text the reference for the odds presented seems to be ‘unconcerned/a little concerned’. Please choose one consistent reference.

In table 3, two variables are presented that have never been explained in the text (‘talk to friends before making a decision’ and ‘will give up activities if family disapproves’). Since these are not really self-explanatory, it remains unclear what these variables actually measure. Please either describe and explain these variables in the text or remove them from the table.

In table 1, I would first present the ‘married’-category and then the ‘otherwise’-category (same applies to religion).

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.

However, I have previously collaborated with some of the co-authors in projects within the context of the ITC consortium (GS, GTF).