

PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form ([see an example](#)) and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below. Some articles will have been accepted based in part or entirely on reviews undertaken for other BMJ Group journals. These will be reproduced where possible.

ARTICLE DETAILS

TITLE (PROVISIONAL)	Children, smoking households and exposure to secondhand smoke in the home in rural Australia – analysis of a national cross-sectional survey
AUTHORS	Longman, Jo; Passey, Megan

VERSION 1 - REVIEW

REVIEWER	Gartner, Coral University of Queensland, Australia, Centre for Clinical Research
REVIEW RETURNED	07-May-2013

GENERAL COMMENTS	<p>This manuscript provides a comparison of the prevalence of children's household smoke exposure in urban and rural areas and examines some of the potential drivers of the difference observed (socioeconomic status, household structure). The manuscript is well-written.</p> <p>I have only very minor comments to suggest on how the manuscript may be improved.</p> <ul style="list-style-type: none">• I recommend replacing the tobacco industry term "Environmental Tobacco Smoke" with Secondhand Smoke throughout.• Page 3, line 29: The two studies might be best described as "North American" studies.• Page 3, line 50: The first sentence of the paragraph appears to have a word missing, perhaps "conducts" should be after AIHW?• Page 4: lines 21 to 27: A reference should be provided for the ASGC. I also feel the 'rural' category might be better described as 'regional and rural areas'. I'm not sure what areas are included in the 'major cities' category, but I suspect there may be many areas that would fall under the inner regional and outer regional categories would include very developed cities. The descriptor 'rural' suggests agricultural areas, which may not be an accurate representation of some major regional cities. More information on this variable could assist readers to better understand what is meant by 'rural' vs 'urban'.
-------------------------	--

REVIEWER	Rumana Huque, PhD Associate Professor Department of Economics University of Dhaka Bangladesh
REVIEW RETURNED	21-May-2013

THE STUDY	In line 17, authors suggest that they have drawn effective sample size from the data set using weighting. A further explanation on
------------------	--

	<p>weighting and how the effective sample size has been calculated will strengthen the article. At this moment it says only 'what has been done', but not 'how it has been done'. Also the total sample size can be moved from 'results' section to 'methodology' section.</p> <p>In line 21, the authors mentions that one third of population lives outside major cities. Do they mean that 'rurality' is defined as cities outside major cities? The exact definition and characteristics of rurality can be linked to the confounding factors. The authors classified 'rurality' as a combination of inner regional, outer regional and remote/very remote. It is not clear on what basis they have considered all of these as 'rural', while 'inner regional' can be peri-urban. This classification needs to be justified with reference and further explanation.</p> <p>This is not clear whether National Drug Strategy Household Survey defines children as per national Australian Law. This would therefore be useful to mention the national Australian definition of 'children' by law, and then explain in the light that whether this article has considered that definition, why or why not, with justification.</p> <p>Confidence intervals can be calculated, where applicable.</p> <p>English needs attention. For example, sentence 27 have an extra 'such', 'and' is missing in sentence 50.</p>
RESULTS & CONCLUSIONS	Though evidence is limited on the issue, a comparison with international situation (USA, China) would be interesting.

VERSION 1 – AUTHOR RESPONSE

Reviewer: Coral Gartner

- I recommend replacing the tobacco industry term “Environmental Tobacco Smoke” with Secondhand Smoke throughout.

Thank you for this suggestion. We have adopted this term throughout.

- Page 3, line 29: The two studies might be best described as “North American” studies. We have made this change.

- Page 3, line 50: The first sentence of the paragraph appears to have a word missing, perhaps “conducts” should be after AIHW?

Thank you we have made this change.

- Page 4: lines 21 to 27: A reference should be provided for the ASGC. I also feel the ‘rural’ category might be better described as ‘regional and rural areas’. I’m not sure what areas are included in the ‘major cities’ category, but I suspect there may be many areas that would fall under the inner regional and outer regional categories would include very developed cities. The descriptor ‘rural’ suggests agricultural areas, which may not be an accurate representation of some major regional cities. More information on this variable could assist readers to better understand what is meant by ‘rural’ vs ‘urban’.

We have added to our description of ‘rural’ in the methods section and provided the reference, to address this concern.

Reviewer: Rumana Huque, PhD

- In line 17, authors suggest that they have drawn effective sample size from the data set using weighting. A further explanation on weighting and how the effective sample size has been calculated will strengthen the article. At this moment it says only 'what has been done', but not 'how it has been done'. Also the total sample size can be moved from 'results' section to 'methodology' section. We have expanded this section with more detailed explanation of how we did the weighting.

- In line 21, the authors mentions that one third of population lives outside major cities. Do they mean that 'rurality' is defined as cities outside major cities? The exact definition and characteristics of rurality can be linked to the confounding factors. The authors classified 'rurality' as a combination of inner regional, outer regional and remote/very remote. It is not clear on what basis they have considered all of these as 'rural', while 'inner regional' can be peri-urban. This classification needs to be justified with reference and further explanation. We have provided further explanation of our definition of rural (and see comments above), and references.

- This is not clear whether National Drug Strategy Household Survey defines children as per national Australian Law. This would therefore be useful to mention the national Australian definition of 'children' by law, and then explain in the light that whether this article has considered that definition, why or why not, with justification.

Our concern in this paper was with defining children based on the data available to us in the survey. This was available in 2 year blocks with the last block being 15+. As explained in our methods section, we did not include this last category as it may have contained substantial numbers of dependent children over 18. Our definition of children for the purposes of the study was therefore 0-14 years. In Australian law children are aged under 18.

- Confidence intervals can be calculated, where applicable.

We have added confidence intervals where applicable in the text and abstract. We have also removed the p-values where the confidence intervals are provided, to improve readability.

- English needs attention. For example, sentence 27 have an extra 'such', 'and' is missing in sentence 50.

We were unable to find these suggested typographical errors as we do not have access to the line-numbered version this reviewer used. Hopefully these errors will be picked up at the proofing stage.

- Though evidence is limited on the issue, a comparison with international situation (USA, China) would be interesting.

We have attempted to do this comparison work in the discussion section (in Home secondhand smoke exposure) as well as in the Introduction, although as this reviewer comments, the evidence internationally is limited and mixed.