Reviewer's report

Title: Environmental Tobacco Smoke Exposure and Diabetes in Adult Never-Smokers.

Version: 1 Date: 21 July 2014

Reviewer: Bin Jalaludin

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Major Compulsory Revisions

1. Pg 5, ln 96 - The authors use a number of variables to define DM with some of these being self-reported. How valid is it to use self-report? Will there be under- or over-reporting? How might this affect the results?

2. Pg 5, ln 95 – I am not clear about the definition of diabetes. The diagnosis of diabetes was ascertained from a series of questions at the first follow-up. Was such information also available at baseline? If so, an analysis of the incident cases could be more useful in terms of assigning causality.

3. Pg 5, ln 108 – the definition of smoking status needs clarification. I assume that if participants were current smokers at first follow-up and either former smokers or never smokers at baseline, then they were current smokers. Similarly, if participants were former smokers at first follow-up then they were classified as former smokers regardless of the status at baseline.

4. Pg 6, ln 119 - Why was ETS exposure categorised into 0, <3 and >=3 hours. What was the reason for this? How accurately does self-report reflect actual exposure?

5. Pg 6, ln 125 - I would like to see physical activity, consumption of fruit and vegetable and alcohol consumption better defined. For example, for physical activity, is this referring to mild, moderate or vigorous physical activity? Does alcohol consumption refer to standard drinks? For the consumption of fruit and vegetables, does the question indicate the amount to be eaten e.g. three servings per day, etc. It would be useful if the authors provided the questions used in the questionnaire either in the paper or as an appendix.

6. P6 6, ln 130 – the authors go to some trouble to provide information on the quality of the air pollution measurements. However, the effect of air pollution on outcomes is not discussed in the paper at all. Why was the 2010 dispersion models used to estimate home outdoor exposure for baseline and follow-up? What is the rationale for adjusting for PM10?

7. Pg 7, ln 136 – BMI category <=25 also includes underweight. Does including underweight subjects lead to any potential bias?

8. Pg 8, ln 180-182 – it is not clear to me that Table 1 gives the ETS exposure rates by the variables listed in the Table. It seems to me that the table presents the column percentages rather than row percentages.
9. In Table 4, I do not understand why the ORs for interaction terms are presented.

10. Pg 224, ln 225 – the authors say that there was a positive non-linear dose relationship for ETS exposure at home. The data suggest there may be a threshold effect. In any case, I think it is difficult comment on a dose-response relationship with only three data points.

11. Tables 3 and 4 – why are the results for hypertension presented in these two tables? As I understand it, the full model does not include hypertension.

Minor Essential Revisions
1. Pg 5, ln 88 – is there a reference for SAPALDIA.
2. Pg 8, ln 168 – what does ‘complementary’ diabetes mean?
3. Pg 8, ln 180-182 – the authors need to be more specific about ‘lower social status’, ‘less healthy lifestyles’.
4. Pg 8, ln 182 - I am also not sure what is meant by “…ETS exposure was higher …..diabetes rates”. This needs clarification.
5. I assume ETS <3 hours/day is actually ETS 0 to <3 hours/day.
6. Add T1DM and SE to the abbreviation list.

Discretionary Revisions
NIL

Level of interest: An article of limited interest

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.