Reviewer's report

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

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Reviewer: Qi Sun

Reviewer's report:

1. Abstract: No information regarding the final sample size and # of diabetes cases among never smokers.
2. The Introduction section was poorly organized and thus confusing. For example, the last sentence in the first paragraph came from nowhere, and did not integrate the contents before/after it.
3. The authors did not emphasize the necessity of investigating the associations of interest among never smokers, whereas in the Abstract they did so. If never-smokers are of interest, the authors shall clearly state so in the Introduction.
4. It’s unclear how the sample size ended up with 6392 from a total of 8047.
5. Define RBG at line 103.
6. It is interesting to know how many never smokers at 1st follow-up reported smoking at baseline. This is evidence for the validity of self-reported smoking status.
7. It’s unclear exactly how ETS was defined in the current study. What is the question(s) for assessing ETS status? Was this question(s) validated?
8. It’s unclear how the interaction terms were constructed and how the interaction tests were performed (LRT)?
9. Table 2, Line 540: Unadjusted model includes smoking status. It’s unclear in this stratified analysis, whether the authors further adjusted for smoking history in each stratum?
10. Table 4: it’s very confusing what the OR (95% CI) for “Interaction” meant? The authors stated that “The association between ETS and DM in never smokers was highly strengthened by older age and COPD [Table 4]. Associations were also strengthened (albeit less strongly) by female sex, obesity, physical inactivity, hypertension, high serum triglyceride and low serum HDL, and post-menopausal status in women [Table 4].” However, the 95 CIs overlap between strata, making it hard to understand how the interactions are significant. Actually, it may be very helpful if the authors can justify using a mixed logistic regression model rather than the ordinary logistic regression model.
11. In the dose-response analysis, the authors should evaluate whether the dose-response curve is linear or non-linear. In addition, why >=3hr ETS at home is different from >=3hr ETS at somewhere else in terms of the “dose” of ETS?
Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

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

Declaration of competing interests: None