Reviewer’s report

Title: Association between ambient particulate matter concentration and fetal growth restriction stratified by maternal employment

Version: 0  Date: 31 Jan 2019

Reviewer: Tao Liu

Reviewer's report:

This study assessed the modification effects of maternal employment on the association between outdoor PM exposure and fetal growth restriction. They observed that maternal employment can modify the association between PM and fetal growth restriction. However, I have several major concerns:

Generally, I prefer to handle the employment status as a potential confounding factor rather than a modification factor, since the employment is related to maternal seriocomic status and exposure misclassification, as the authors stated, which may lead to confounding bias to their results. Although the authors have observed significantly different associations of PM10 with fetal growth restriction between pregnant women with and without employment, the tiny differences (OR: 1.01 vs 1.02; SGA: 11.2% vs 11.2; LBW: 1.5% vs 1.6%) have very weak public health significance, and the statistical significance may be due to by chance because they included a very large sample size. In addition, they did not observe the significant effects of PM2.5 on fetal health, which is inconsistent with many previous studies which have found more toxic effects of PM2.5 than PM10.

Minor comments
1. In the abstract, the authors stated that the PM2.5 data was selected during 2008-2012. However, the duration was changed to 2007-2012, which is contradictory.
2. The explanation on the modification effects of employment in the discussion is not convince.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.
Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

Quality of written English
Please indicate the quality of language in the manuscript:

Needs some language corrections before being published

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