Reviewer’s report

Title: Prenatal exposure to cooking gas and respiratory health in infants is modified by tobacco smoke exposure and diet.

Version: 1 Date: 11 July 2013

Reviewer: Tanya Turnovska

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The author must respond to these before a decision on publication can be reached:

1. The positive subordination between gas cooking at home during pregnancy and respiratory problems in children during their first year of life is pointed out, but the survey data refer only to gas cooking during pregnancy (1st and 3rd trimester, page 7). The more realistic possibility, namely that respiratory problems during the first year of child’s life are due to ongoing pollution caused by gas cooking is excluded in practice. Even if we assume that in this case NO2 is marked as gas pollution indicator, the impact of the remaining pollutants may not be ignored. In my opinion, the work will be much more persuasive if it included even a limited number of real measurements.

2. The residential environment is specified only as “urban” or “rural”, but there are no data reflecting air pollution monitoring in support of this statement. Why the possibility that rural regions may also be polluted is excluded? Even if they do not have their own sources of pollution they may be influenced by the transfer of air pollutants.

3. It is claimed that deteriorated respiratory health in children during the first year is related to the lower consumption of fruits and vegetables by the mother during her pregnancy, but there are no data on the consumption of fruit/vegetable juices and purees by the child during his/her first year - influence which is more likely to have the strongest impact on the obtained results.

Furthermore, what makes a strong impression is the significant difference between the relative shares of the exposed persons residing in various regions (table 1). I think that it will be more correct if statistical analyses show comparative results among the regions having a low relative share of gas application at home or if they are focused only on the regions where exposure exceeds 60%.
Level of interest: An article of importance in its field

Quality of written English: Acceptable

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

Declaration of competing interests:
I declare that I have no competing interests' below