Reviewer's report

Title: Cooking fuel choices and garbage burning practices of Accra households as determinants of birth weight: a cross-sectional study

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Reviewer: Patrick L. Kinney

Reviewer's report:

This is a well-written manuscript describing important new findings on indoor air pollution and birth weight.

Major comment:

Since both charcoal and garbage burning may contribute to the health outcome, it is important to show some results for each, controlling for the other. As it stands, for example, it is hard to interpret the garbage burning results because we don't know how many used charcoal among the garbage + and - groups. Multivariate or stratified analyses would be needed to clarify.

Residual confounding by social class may be a problem here and should be acknowledged, even though the authors controlled for it. Social class effects are so strong on health outcomes that it may be difficult to fully control for it. Should note this caveat in the discussion at end of first paragraph of page 17.

Page 18, end of first paragraph: it is stated that current findings are consistent with literature. However, in fact the effect size estimated in the present study is quite a bit larger than any previously reported. This requires comment. Is charcoal possibly more potent than mixed biomass and wood? Is it residual confounding here? some discussion is needed I think.

I have several minor comments:

page 7, end of first paragraph: explain how ranking was determined. Also re-write sentence to make it clear to the reader that each of the three exposure categories (e.g., charcoal etc) was further broken down into three subcategories.

Table 3: give units for the beta column. I assume it's grams, but this is not stated.

page 16, line 5: change "not possible" to "reduced"

page 16, five lines from the bottom: delete "choices"

page 19, end of first paragraph. Should acknowledge that no air measurements were used here, so exposure misclassification may be present.

Level of interest: An article of importance in its field
Quality of written English: Needs some language corrections before being published

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

none