Reviewer’s report

Title: The accuracy of parent-reported height and weight for 6-12 year old U.S. children

Version: 0 Date: 06 Dec 2017

Reviewer: Jennifer Protudjer

Reviewer's report:

Thank you for the opportunity to review the manuscript titled, 'How accurate is parent-reported height and weight for 6-12 year old children?' In this manuscript, the authors sought to examine concordance between parent-reported and investigator-measured heights and weights of children involved in Neighbourhood Impact on Kids Study, and if non-concordant, to develop regression models to predict corrected heights, weights and BMI estimates. The authors reported poor concordance between the two forms of measurement. Subsequent to development of correction factors, concordance improved, whereas specificity did not. Given the frequent reliance on self-/parent-reported anthropometry, the objectives the authors attempted to address are interesting. That said, I some concerns about the manuscript.

1. The greatest concern that I have is that the study population herein is largely homogeneous, and not necessarily representative of those (a) at greatest risk of overweight or obesity in America, and/or (b) in other high income nations where social disparities - and thus the risk for overweight and/or obesity - are not as substantial. Although this homogeneity is unavoidable in this particular study, the study would be much more generalizable if the data were pooled with those from another cohort.

2. The authors may wish to consider revising the title of the manuscript from a question into a sentence. Respectfully, the running title is much better than the current title.

3. Abstract: The objective section of the abstract does not, in fact, state the objective of the study.

4. Abstract: There is limited constructive agreement between the different sections of the abstract.

5. The manuscript contains several grammatical- and spelling errors. Although none of these errors alter the meaning of the text, they do warrant correction.

6. Lines 89-90: Here, the authors mention that parent-reported child height and weight may be biased by factors such as presence of other children in the home. This is an interesting concept, both in terms of parental attentiveness and household income adequacy, which may influence parents’ perceptions of child height and weight. It is a pity then, that the authors do not return to this idea in their analyses.
7. Lines 125-126: The authors converted weight and height to pounds and inches for reporting purposes. Respectfully, the imperial system is not widely used or understood outside of America. Further, as healthcare professionals typically understand the metric system, the authors are encouraged to not make such conversions, but rather report in metric.

8. Lines 170-171: Parents underestimated height for 10-12 year old by 3.76 inches. This is a lot. Was there any reason as to why there was such a substantial underestimation.

9. Lines 167-178: One wonders why the authors did not analyse these data stratified by gender? This becomes particularly important in the older age group, 10-12 years old.

10. Line 262: What do the authors mean by 'numeracy issues'?

11. Table 2: Please review the figures in the 'total' column.

**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.

Unable to assess

**Are the conclusions drawn adequately supported by the data shown?**
If not, please explain in your comments to the authors.

No

**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

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Please indicate the quality of language in the manuscript:

Needs some language corrections before being published
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