Author’s response to reviews

Title: Comparison of Various Anthropometric Indices in predicting abdominal obesity in Chinese children: A cross-sectional study

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Author’s response to reviews:

Response to the Reviewers’ Comments

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Title: Comparison of Various Anthropometric Indices in predicting abdominal obesity in Chinese children: A cross-sectional study.

Authors: Gengdong Chen, Huanchang Yan, Yuting Hao, Shiksha Shrestha, Jue Wang, Yan Li, Yuanhuan Wei, Jialiang Pan, Zheqing Zhang
Dear Professor Deepa Nath,

We have carefully revised and checked our manuscript and answered the reviewer’s questions point by point. Please kindly refer to the manuscript and see Response to the Reviewers’ Comments for the details. We greatly appreciate the reviewer’s thoughtful advice and comments to help improve our study. We assure that all of the authors have read and approved the final submitted manuscript, that no portion of the work has been or is currently under consideration for publication elsewhere, and that no portion of the manuscript has been published or posted on the Internet.

Please kindly let me know if you have any questions. I look forward hearing from you soon. Thank you again for your assistance!

Sincerely,

Zheqing Zhang

RE: reviewer #1, or reviewer #2; AU: the authors

Reviewer #1:

RE: The authors presented a potential, interesting and relevant study regarding the reference percentile curves for abdominal fat percentage and compared various anthropometric indicators in predicting abdominal obesity among children aged 6-9 years in China.

The manuscript it is easy to follow, is well written and provides an important contribution to the field and the conclusions agree with the data presented.

The study is very timely as the growing concerns of the epidemic percentages of obesity among children and adolescents. The findings are certainly of interest to the readers of BMC Pediatrics.

AU: Thank you for your kind comments. We really appreciate it.

RE: Use always the abbreviation of a given term that you have chosen: for example, the authors have defined BMI as an abbreviation for "body mass index" - but BMI is not always used - please check it throughout the manuscript.
AU: Thank you for your kind suggestion. We have carefully checked the problem throughout the manuscript, and revised it in the manuscript with highlights.

RE: Page 8 line 42 - The sub-title "Correlations..." is not suitable, in my opinion, instead the authors could used the word "relationship" because the authors presented a Regression coefficient (β) not correlation coefficients (r).

AU: We agree with the comments, and have revised it in the manuscript.

RE: Table 3 - The title is not suitable, its not a correlation but a relationship. Please, correct it. Moreover, legend is not complete, i.e., what is the meaning of βb?

AU: Thank you for reminding. We have changed the title of Table 3 as “Relationships of age-adjusted physical indicators for assessing abdominal fat percentage in boys and girls”. βa refers to the unstandardized regression coefficients, and βb refers to the standardized regression coefficients. The legend of the Table 3 was completed as follows:

Table 3. Relationships of age-adjusted physical indicators for assessing abdominal fat percentage in boys and girls.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Boys</th>
<th></th>
<th></th>
<th>Girls</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>β a (%)</td>
<td>β b (%)</td>
<td>P value</td>
<td>β a (%)</td>
<td>β b (%)</td>
<td>P value</td>
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</tbody>
</table>

Per one standard deviance increase of anthropometric indicators.


a: unstandardized regression coefficients . b: standardized regression coefficients.

RE: Page 9 line 26 - Please correct the sentence some word is missing.

AU: Thank you for reminding. We have corrected the sentence as “For both boys and girls, WHR performed were poorest in predicting abdominal obesity by providing least AUC values (0.744 in boys and 0.605 in girls) which were significantly lesser than those observed for BMI or WHtR (P<0.001).”
Reviewer #2:

RE: Positive: apply anthropometry (effective, safe method) to diagnose obesity., Another point to propose. Roc curve (for points of cut in relation to a specificity and sensibility) better accuracy of their data. What is it that the authors have to do a neck circumcision, as they were used a lot in conjunction with the anthropometric methods that he used. a criticism: could have made a classification of the classification of sexuality, because the law is chronological, by itself, can not give us an effective answer.

Suggestion;

To analyze the circumferential anthropometric measurement of the neck, as an alternative to the CC, studies of the suggested use of Neck Circumference (CP) as an anthropometric indicator in the assessment of body capacity, since it is a more simple, practical, standardized, not influenced by postprandial abdominal distension or by respirators, and that is monitored consistently to indicate the accumulation of the subcutaneous in the upper part of the body

AU: Thank you for your valuable suggestion. However, the measurement of neck circumference and sexual development assessment were not performed in our study. The data were not available and irreparable since the study had been done. Therefore, we could not carry out further analysis on these fields, and this contributed to certainly shortness of our study which we admit and have carefully discussed in the “limitations in our study” as shown below: “Lastly, the measurement of neck circumference and sexual development assessment were not performed in the study. Therefore, we could not perform further analyses on these fields, which were encouraged to be involved in further studie