Reviewer’s report

Title: Cardio-metabolic and socio-environmental correlates of Waist-to-Height Ratio in German primary schoolchildren: A cross-sectional Exploration

Version: 0 Date: 17 Oct 2017

Reviewer: Catherine Christie

Reviewer's report:

This paper is important for the determination of socio-environmental correlates of abdominal obesity in primary school children. The findings of a correlation between health parameters such as blood pressure, lower HDL and higher LDL cholesterol have been reported elsewhere. The waist to height ratio as a screening tool for abdominal obesity in children was well described. It would be beneficial to see more discussion of the finding that almost 40% of the abdominally obese children were normal weight. The finding of a correlation between children with a migration background and abdominal obesity needs more discussion. What are the potential factors associated with migration in this population that might have related to abdominal obesity?

The abstract was unclear; What does "controversial messages of childhood obesity emerge" mean? Where and when and what exactly are you referring to? Also "focus should be put on children with migration background of obese parents with lower educational level" is unclear. Do the children and/or parents need an intervention, health education, behavior modification or something else? More discussion is needed about the final statement that "participation by the parents of these children on a voluntary basis may not be satisfactory".

It would have been helpful to add the age range for the children examined rather than simply the average age and it was hard to tell when the data was collected but it appears to be several years old since the protocol was approved in 2006. I would like to see a discussion of whether there have been changes in that time frame that might affect the data presented.
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.

Yes

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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