Reviewer’s report

Title: Prevalence of the metabolic syndrome among children from six cities of China

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Reviewer: Mehmet Agirbasli

Reviewer’s report:

The authors investigated the prevalence of metabolic syndrome among children from 6 cities in China. Authors concluded that obesity increases the prevalence of metabolic syndrome. They compared obese, overweight and normal weight Chinese children.

1) Even though the article is interesting, the study does not add new information to the literature

2) They authors studied metabolic syndrome in Chinese children according to the IDF definition. As authors indicated IDF definition comes with major flaws particularly when applied to different ethnic groups. Adhering to the adult values for hypertension, glucose intolerance, dyslipidemia is misleading for 7-11 year old Chinese children.

3) Puberty is an important factor in determining lipid levels among children and adolescents. Even though 11 years old girls were included in the study, no assessment for puberty were reported.

4) IDF definition exists for children 10-16 years of age, however in the study metabolic syndrome was assessed from 7-11 years old children. Therefore, assessing cardiovascular risk factors based on adult levels for < 10 yr old children should be cautiously interpreted as indicated by the authors.

5) The authors checked blood pressure at 3 different intervals separated by 2 minutes. This way, they can not make the diagnosis of hypertension which requires 3 separate occasions.

6) The authors should also comment on methodological differences for instance, they used homogenized methods for HDL-C, on the other hand precipitation method is used in the US which can affect the results.

7) They collected data from 6 different provinces. Certainly they should comment on the socioeconomical differences between the provinces.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Needs some language corrections before being published

Statistical review: Yes, but I do not feel adequately qualified to assess the
Declaration of competing interests:

I declare that I have no competing interests

statistics.