Reviewer's report

Title: Estimating the prevalence of obesity in Canadian preschool children using WHO, IOTF and CDC growth references

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Reviewer: Mohsen Maddah

Reviewer's report:

This study compares three different standards for estimating obesity in a non-representative group of Canadian preschool children.

In the background (Introduction) the problem of overweight among Canadian children has been pointed out and the aim of the study was said to be to estimate the prevalence of overweight/obesity in this population by three different standards. However, this study could not be a descriptive one showing the prevalence of overweight/obesity in Canadian children. Having a limited sample size and focusing on only two regions could not be statistically acceptable and the study population is not a representative sample of Canadian children. Moreover, the sampling was not random and it is a great pitfall.

However, the authors could have said that they were only comparing three growth references regarding defining overweight and obesity in a group of Canadian preschool children. This means that the title and introduction of this manuscript should be changed to address the issue of inconsistency of data in this field. Discussion only focused on comparing these standards and how they differ in their estimation and not the problem of obesity in Canadian children and how big the problem might be. I believe Discussion is more relevant and it has been better written than Introduction. However, the authors are asked to suggest that one of these standards may be more justified to use regarding ethnicity and race of the study population e.g., CDC might be one expected to be used for Canadian population.

I suggest part of the data analysis showing the prevalence of overweight/obesity be removed and authors focus on those data showing the difference of these standards. In this regard, figures clearly showed the differences.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:

I declare I have no competing interest