Author’s response to reviews

Title: Body composition variables as predictor of NAFLD in obese children and adolescents

Authors:

Paula Alves Monteiro (paulinha_1003@hotmail.com)
Barbara de Moura Mello Antunes (bah_tunes@hotmail.com)
Loreana Sanches Silveira (loreana_loly@hotmail.com)
Diego G. Destro Christofaro (ddcleite@yahoo.com.br)
Romulo Araújo Fernandes (ronmyromuloaraujo@hotmail.com)
Ismael Forte Freitas Jr (ismael.freitas@pq.cnpq.br)

Version: 3 Date: 12 November 2013

Author’s response to reviews:

Dear Editor-in-chief of BMC Pediatrics

I would like to make some comments regarding to the revised version.

Reviewer’s report #1

Reviewer: Wagner Prado

Reviewer’s report:

Major Compulsory Revisions

The authors should avoid terms such as diagnosis or identify NAFLD in the whole manuscript (mainly in the aims). The cross-sectional design does not see predictors of NAFLD, the authors should change the terms, it’s can be made only in prospective studies.

Answer: The changes were made as suggested, but we keep the term “identify” followed by the term “the occurrence of NAFLD”.

Once NAFLD diagnosis is a dichotomous variable (absence or presence), in my opinion the Spearman’s correlation coefficients is not the appropriated approach to verify relationship between variables (Did you conducted this analysis with the continuous values of IAAT with anthropometric values?). I am not a statistical expert, but a logistic binary regression seems to be more adequate to this analysis.

Answer: As solicited, the relationship between NAFLD and anthropometric variables was carried out separately by sex. All coefficients have still significant in both sexes. The use of Spearman’s correlation can be properly used to demonstrate the association between a categorical variable (occurrence of NAFLD) and a continuous variable (IAAT, WC and TFM). It is not necessary to use the logistic regression.

The analyses were conducted in all volunteers or separated by gender? Why table 1 presents the results separated by gender? If gender is an intervenient
outcome, the authors should conduct the analyses in this way.
Answer: As solicited, the ROC curve analyses were carried out separately by sex
and the results were similar.

Would be helpful a professional language edition in the manuscript.
Answer: The manuscript was reviewed by a native in the English language as
suggested by the reviewer.

Discretionary Revisions
The authors should describe more in deep the procedures to assessment of
Intra-abdominal adipose tissue. The information regarding what muscle was
assessed is essential to the interpretation of the data.
Answer: The changes were made as suggested.

Table 3 is not necessary, figure 1 do a great job.
Answer: So for that the results would not be repetitive with the reviewer said, I
decided to keep the table 3 and remove the figure 1.

Minor Essential Revisions
There are some missing references, mainly in the introduction.
Answer: They were inserted more recent references, mainly in the introduction.

Level of interest: An article of outstanding merit and interest in its field
Quality of written English: Needs some language corrections before being
published
Statistical review: Yes, and I have assessed the statistics in my report.
Declaration of competing interests:
I declare that I have no competing interests

Reviewer's report #2
Reviewer: Piers Blackett
Reviewer's report:
The paper has practical use and warrants publication.
Major compulsory:
Title should contain "NAFLD by ultrasound"
Answer: The changes were made as suggested.

Also state "by ultrasound" in the tables and "for diagnosis of NAFLD by
ultrasound" in table 3.
Answer: The changes were made as suggested.

2nd paragraph of background should state that liver biopsy is considered the
gold standard and most specific followed by magnetic resonance imaging. Then
make the argument that ultrasound is a practical and economic alternative (not
"interesting").
Answer: The changes were made as suggested.
The first paragraph should state that NAFLD was defined by ultrasound.
Answer: The changes were made as suggested.
The authors need to comment on the epidemiology in Hispanic youth and whether this is comparable in their population.
Answer: The changes were made as suggested.
At the end of the 4th paragraph comment that the waist and IAAT was higher in boys.
The comments in the 5th paragraph are incorrect. Race-specific waist percentiles have been published
Answer: The changes were made as suggested.
Discretionary revisions:
L8. of 145
L13. ROC curves were used for prediction and sensitivity....
L17 ....."for" WC
L18. "show" for point out
L19. "an" anthropomorphic
L20. adolescents
Background
L1. results
L2 energy
L4 such as nonalcoholic..........delete comma after NAFLD
L7. adipocyte for cellular
L10 increase
L12 diagnose
Nonalcoholic Fatty Liver Disease
L2 were
Statistical analysis
L9 significance
Answer: All discretionary revisions were made according to the suggestions