Reviewer’s report

Title: Correlation between mean body mass index in the population and prevalence of obesity in Brazilian capitals: empirical evidence for a population-based approach of obesity.

Version: 4 Date: 28 January 2015

Reviewer: Ruth Kimokoti

Reviewer’s report:

Major Compulsory Revisions

1) Line 2: Cite a more recent publication for Reference #1.

2) Background: Provide some information and data on obesity in Brazil.

3) “Methods” section.
   a) Structure this section. Suggested format for subheadings:
      • Study population
      • Exposure
      • Outcome
      • Statistical analysis
   b) Provide the following information under the appropriate sub-sections:
      • How were the participants dressed?
      • Criteria for BMI values and obesity.
      • While sex-specific analyses are appropriate, explain the rationale.
      • How were the age groups determined?

4) Add Table 1 which shows the Brazilian States, their capitals, and the mean BMIs of men and women for each capital.

5) Lines 92 and 97: The sentences beginning “When obese…” and “No significant associations…” are contradictory. Please clarify.

Minor Essential Revisions

6) The terms “gender” and “sex” do not mean the same thing. Please use “sex”.

7) Abstract
   a) Methods section: Indicate the sample size.
   b) Add the p value to the correlations.

8) Line 43: For the digital scale, indicate the manufacturer in parentheses.
Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests.