Reviewer's report

Title: The relationship of body composition with physical fitness in the 14 years adolescents residing within the Tlokwe municipality, South Africa: The PAHL-Study

Version: 3  Date: 24 February 2012

Reviewer: Amina Khambalia

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Concluding statement in Abstract is weak and vague and needs improvement. The significance and impact of the study on future research and policy is lost.

Background is improved.

Methods is improved; however, the second and third paragraphs under “Study Area” detailing climate and employment sector can be removed as the study relates to 14 years old enrolled in school and the first and fourth paragraphs detailing the general area and diet provide adequate and relevant detail in regards to the study setting.

Investigators did not satisfactorily address previous concern about how demographic data (race and locality) were collected. Were these variables collected from teachers, students or parents? Were students in the study only White and Black South Africans? Were there no Asians or Coloured students?

Importantly, the authors did not satisfactorily address previous concern that the response rate of students was not reported. Written informed consent forms were sent home, so the authors must have an indication of what proportion of eligible 14 year-olds participated in the study. This is important for the interpretation of findings and generalisability of results. Were participants’ representative of 14-year olds in the study area or were respondents more likely to be students from a certain locality or race? The investigators state that low and high SES pupils were represented in the schools selected. Was the response rate different from low and high socio-economic circumstances of pupils?

Not satisfied with investigators’ rationale for not including date on % body fat. It is fine that they present data on BMI and the rationale for using BMI in the introduction is also fine, but the authors need to state why available data on %body fat was not reported in the study.

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

**Declaration of competing interests:**

'I declare that I have no competing interests'