Reviewer's report

**Title:** Lean mass, muscle strength, and physical function in a diverse population of men: a population-based cross-sectional study

**Version:** 4  **Date:** 11 April 2010

**Reviewer:** Soham Al Snih

**Reviewer's report:**

Manuscript # BMC Public Health-2009-12-11
Title: “Lean mass, muscle strength, and physical function in a diverse population of men: a population-based cross-sectional study”.

General: This is a well-written manuscript and logically organized.

Abstract: Concise and specific.

Introduction: The literature used is pertinent to the study and the purpose of the study was clearly stated.

Methods The study design was appropriate to achieve the objective. Study population was well described. However, I have a few concerns:

1-It will be useful to report the validity of the PASE scale in young adults, since this scale measures physical activities in older adult population. The age participants in this study ranges from 30 to 74 years.

2-Were measures of muscle strength adjusted by body weight?

3-Were statistical tests applied to findings reported on Table 1? I don’t see any p-value there and I’m not sure if the differences seen by race/ethnic group are statistically significant.

4-I don’t see any data related to fractures. The introduction of the study focused on the importance of non-skeletal and skeletal risk factors for fractures. The design of this study is not appropriate to answer this question. No data is available prior fracture of these measures.

Results: Two Tables and one Figure (6 Panels). Well presented. Please provide p-value for each Panel.

Discussion:

1. In the first paragraph the authors state that there was evidence of age and racial/ethnic differences in measures of lean mass and lean mass index. However, I don’t see that there were statistical significant differences by age (No p-values on Table 1 were presented) and analyses presented on Figure 1 didn’t show any significant differences by age on these measures.

2. Previous pertinent literature was mentioned.

3. Study limitations and implications were identified.

References: There were 56, all appropriate.
**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.