Reviewer's report

Title: An ecological comparison of diabetes in five black populations: Data from Modeling the Epidemiologic Transition Study (METS).

Version: 2 Date: 21 March 2015

Reviewer: Shervin Assari

Reviewer's report:

Very interesting paper.
The paper is showing place and context is important in social and behavioral correlates of obesity indicators in diabetes. The study has used 5 countries, and looks at gender specific patterns of associations in these countries.
But needs major improvement.

My comments:
1- Page 22, numbers for total Waist are wrong for both men and women. Please correct.
2- Multiple regressions should be added to the tables. Many hypotheses are being suggested by descriptive tables, but authors do not test them later in regression. For instance, role of education seems to be only important for women (Table 2a). This is EXTREMELY important!
3- Gender differences should be also discussed.
4- The recent literature on cross-country differences in social and behavioral correlates of health in diabetes should be discussed. Some of these work include: PMID: 24393171 and PMID: 24559091.
5- There are two major type of conclusions. One, comparing US and other countries. Two, comparison of countries within Africa. Discussion of US differs from other countries and African countries vary themselves should be clearly separated.
6- Cross-country comparisons in correlates of manual labor should also reported.
7- In a series of new tables, authors should compare cross country comparisons with laboratory outcomes. How countries are different in effect of education, BMI, etc on glucose, insulin, and other lab data?
8- Finally, the interactions between place and factors on BMI are also important. Is sex * U.S significant in table 3? What about income * US?

Level of interest: An article of outstanding merit and interest in its field

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.
Declaration of competing interests:

'I declare that I have no competing interests' below.