Reviewer’s report

Title: Acculturation and Gestational Weight Gain in a Predominantly Puerto Rican Population

Version: 1 Date: 2 June 2012

Reviewer: Lorraine Walker

Reviewer’s report:

Overall, this is a well written manuscript that develops the case for assessing the impact of acculturation upon gestational weight gain among Hispanic women. A strength of the study is using several measures of acculturation.

Analysis and presentation of data are clear with adjusted and unadjusted outcomes presented.

Discretionary Revisions (which are recommendations for improvement but which the author can choose to ignore)

Although expectations for reporting reliability and validity of psychometric and related instrument vary by discipline, it would helpful to readers if the authors would briefly report whether these properties are well established for the PAS and perceived stress scale.

- Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

Data for Hispanic women giving birth between 2006 and 2011 are derived from one health care system, Baystate Medical Center in Massachusetts. To give some context to the study, it would be helpful to know in brief (in the description of the setting) something about the nutrition education or gestational weight gain advice that was routinely given to pregnant women in this setting, if this is known. If not, this could be cited as a study limitation.

More detail is needed in regard to several other measures: Were the interview items on language preference, place of birth, and generation taken from established sources such as the BRFSS or were these investigator developed? Also, has the Pregnancy Physical Activity measure been validated in some way?

- Major Compulsory Revisions (which the author must respond to before a decision on publication can be reached)

In first paragraph in Results, the estimated amount of moderate physical activity per week seems high at 6 hours per week. This is more than double the recommendation of 30 minutes per day (often translated to a minimum of 150 minutes per week). Is there any explanation for this?

The Discussion could be strengthened by commenting on the study findings for
prenatal care services such as WIC and nutrition education.

Under the study limitations, it would be important to add that the study did not include what information, if any, women received about how much weight to gain during pregnancy.

A final methodological point: the IOM guidelines changed in 2009 so applying these retrospectively to cases before 2009 is more an exploratory endeavor than a practical assessment of compliance with these guidelines. This should be noted somewhere in the manuscript.

Minor issues not for publication:

1. In the second paragraph on Assessment of Gestational Weight Gain, the authors refer to the new IOM guidelines for gestational weight gain and cite reference number 33, which should be the IOM 2009 document, but instead is a study by Ferrara.

Table 3, inconsistent font for rate of weight gain in unadjusted model for birthplace.

**Level of interest:** An article whose findings are important to those with closely related research interests

**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