

## **Reviewer's report**

**Title:** Dynamics of growth and overweight transitions in a pediatric cohort from South India.

**Version: 2 Date:** 12 August 2009

**Reviewer:** Pamela J Salsberry

### **Reviewer's report:**

Recommendation:

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

This research has the potential to add to the current knowledge about weight transitions in rapidly developing economies, but there are problems with the current draft. I detail my concerns below and believe each is addressable.

1. Because this will be read by an international audience the authors need to make clearer their thinking regarding the measures on socioeconomic status. They have used government and private schools, and urban and rural as important subgroup parameters. These need more description. For example, is the urban group in this study a reflection of the urban "rich" or urban "poor". This is not clear from the manuscript. The urban group is getting taller and heavier, and more are overweight, but is this because of poverty or affluence? Same concern is raised about the government vs. private schools. This confusion made reviewing the discussion section difficult.

2. I have two measurement concerns:

a. The first is a technical point but important when working with children data and determining weight states. Age of child when measured is not described. I am assuming that age in months (that is, interview date minus the birth date) was used in the determination of BMI percentiles and Z scores as that is what is required in the CDC program. The authors need to address this in the methods section. I would like to see mean BMI percentiles included on table 1.

b. The analysis should include underweight as a group. Part of the transition that may be occurring in the z scores is a movement in children from underweight to normal weight (a good thing). The fact that heights are not increasing in the rural and government groups may speak to poor nutrition; some recognition of this should be included.

**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.