Reviewer's report

**Title:** The positive association between number of children and obesity in Iranian women and men: Results from the National Health Survey

**Version:** 2  **Date:** 13 February 2008

**Reviewer:** Juan L Gutierrez-Fisac

**Reviewer's report:**

The manuscript is aimed to investigate an interesting association between the number of children and obesity in couples, but it has fundamental limitations in the analysis carried out that make the research unable to test this hypothesis.

**Fundamental limitations**

1. Although the objective of the research seems to be the effect of number of children on obesity in couples, the analysis is not directed to couples, but to women and men separately. The effect of number of children on obesity in women has not interest, since there are many papers showing this very well known association. If the authors have information from couples (as it seems to be), I strongly suggest a new analysis defining obesity (dependent variable) in couples rather than in individuals; for example, at least one member of the couple as obese, one member obese and the other at least overweight, etc, and with this â##operative individualsâ##, investigate the effect of number of children on obesity.

At least, authors have to consider this other way to reanalyzed the data: investigating the effect of number of children in men accounting for personal characteristics (not only socio-demographic, and life style factors but also obesity) also for the women of the couple. This kind of models would include some new variables assigned to the individuals analyzed (men) but based on information from the women in their couples. This may have interest, since the association in men is less known than in women and this approach would be able (in same way) to account for the effect of couple.

2. Information on diet is not available for the analysis. The authors should discuss in detail the effect of that on the estimations.

**Minor points**

1. Methods section should explain in more detail the variables, their categories and the way in which they are included in the models (operative variables).

2. Numeric variables, such as age and especially number of children should be included in the models as categorical. The models run much better. The inclusion of quantitative variable is complementary and indicated trends.

3. Results presented (and discussion on its) have to focus on the association of
interest. Most of the results presented (and the discussion) are concentrated on variables of control (education, smoking, etc.) and its relation to obesity, which is not the objective of the manuscript.

4. The authors discuss the effect of fast-food on the association of interest, but they have no information on that.

5. The discussion should go deeply on the matter of the research.

6. Is information on age of children available? This may have strong influence on obesity of the couples and should be accounted for in the models.

7. Tables should show in more details the distribution of the main variables (dependent, the main independent and the control variables) in couples.