Reviewer's report

**Title:** Population attributable risk for diabetes associated with excess weight in Iranian adults: A population-based cohort study

**Version:** 1  **Date:** 22 July 2007

**Reviewer:** Aristofanis Gikas

**Reviewer's report:**

General

This paper describes the magnitude of the association of excess weight with the risk of developing diabetes in the adult population of Iran. The fact that this study is in accordance with what has been previously reported and, most importantly, is dealing with a community-based sample of a developing country constitutes it an important contribution in the relevant literature. However, some revisions are needed for the further clarification of the findings of the study.

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

The authors should provide more and clear information on the exact period of screening and data collection (eg, the questionnaire) regarding both surveys: at baseline and follow-up. Also, the participation rates and the proportion of subjects that was submitted to the glucose tolerance test during the follow-up phase should be referred.

In the statistical analyses section, it is not clear to me if for the calculation of ORs the logistic regression analysis or another test was used. Additionally, in the same section, the statement “Population attributable risks were calculated with the use of formula \( \frac{P(OR-1)}{P(OR-1)+1} \times 100 \), where …” should accompanied with the respective reference.

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

In the first category of the limitations should be included the lack of data regarding the socio-economic status and the dietary habits of the population.

There are a few grammar errors which should be addressed:
- page 3, paragraph 2, the sentence of line 8 is uncompleted.
- page 5, first paragraph, “… with known or newly diagnosed type 2 diabetes ” should be corrected to “… those with known or newly diagnosed
The present study shows that the prevalence of obesity is significantly higher among women than in men. Accordingly, it would be of interest to calculate ORs and estimated PAR for diabetes -contributed to overweight/obesity- separately among women and men; the derived results should to be presented in another table. In that manner, the comparison with other studies (eg, Hu FB et al, N Engl J Med 2001;345:790-7) would be facilitated and, simultaneously, the authors have the opportunity to discuss about the possible differences on the contribution of obesity in developing diabetes in both sexes.

What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

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' below