Reviewer's report

Title: Obesity and Hypertension in an Iranian Cohort Study; Iranian Women Experience Higher Rates of Obesity and Hypertension Than American Women

Version: 3 Date: 11 May 2006

Reviewer: Martin Lindström

Reviewer's report:

General comments

This study concerns investigates the prevalences of overweight, obesity and hypertension in a large cohort of Iranians and compared directly adjusted prevalence rates to the 2000 US standard population. The results show that the prevalence of obesity, overweight and hypertension in Iran is as high as in the USA. Iranian women are more obese and Iranian men less obese than their US counterparts, respectively. The age-adjusted prevalence was higher in Iranian women than in American women. The study is not theoretical but altogether empirical. It demonstrates that overweight, obesity and hypertension are just as big a health problem in Iran (at least in eastern Iran) as in the USA. The methodology is clearly described and, mostly, clearly relevant. The results are clearly presented, and the discussion section is also clear. Some further English examination may still be warranted. The main questions on this study concern the participation rate, sampling method and the generalisability of the results to the rest of the population of Iran, not only the northeastern part.

Specific comments

Abstract

Particularly the abstract might need some further English language examination.

Background

Very well written with relevant references.

Methods

Study population: Some further discussion of the results from the Golestan area to the rest of the Iranian population needed, also in the discussion section.

How high, or low, was the participation rate? This might have implications for the risk of selection bias.

How was the sampling conducted? This may also have implications for the question concerning selection bias.

Data collection: the measurement of BMI (height and weight) and blood pressure by the interviewers increases the validity of these measures. In contrast, the self report of diabetes mellitus clearly decreases the validity of that item.

Statistical analysis: last paragraph on page 3 indicates that a genealized linear regression model was used to estimate predictors of BMI. Was the relationship linear, otherwise some other regression model might have been more optimal.

Results

Clear presentation. Text and tables easy to follow. BMI cut-offs for underweight, normal weight, overweight and obesity correct. Hypertension cut-offs correct.
Discussion.

Clear, but might have included more on strengths and limitations of the study. Selection bias (response rate, sampling strategy), misclassification (see data collection above).

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

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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)

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Discretionary Revisions (which the author can choose to ignore)

What next?: Accept after minor essential revisions

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

Quality of written English: Needs some language corrections before being published

Statistical review: No