Reviewer's report

Title: Prevalence of metabolic syndrome in Murcia Region, a Southern-European Mediterranean area with low cardiovascular risk and high obesity

Version: 1 Date: 21 March 2011

Reviewer: Bjørn Hildrum

Reviewer's report:

http://www.biomedcentral.com/imedia/2022095280518658_article.pdf
Title: Prevalence of metabolic syndrome in Murcia Region, a Southern-European Mediterranean area with low cardiovascular risk and high obesity

Version: 1 Date: 22 March 2011
Reviewer: Bjorn Hildrum

Major compulsory revisions:

General comments:

Generally, the present study is well written, the questions posed by the authors are well defined, and the methods are appropriate and well described.

1. The authors have used data from a health study that was carried out in 2001 – 2003 in the Murcia Region in Spain. In the Methods (Study Population), the authors should shortly make clear that a total of 2562 subjects were selected by stratified random sampling and a that the survey was carried out by telephone, together with a physical examination and biochemical determinations (ref 6).

2. The authors have used the 2005 NCEP and IDF criteria for MetS. In recent years, these criteria have been widely used in epidemiological studies. However, in 2009, the International Diabetes Federation and the American Heart Association/National Heart, Lung and Blood Institute made an attempt to unify criteria (Alberti et al, Circulation 2009;120:1640-45). This should be mentioned in the Background section.

Some specific comments:

Abstract

Conclusions:

3. The authors found the prevalence of the MetS in Murcia to be comparable of what has been found in the northern part of Europe (for example: ref 25), a fact that perhaps might be included in the abstract.

Results
4 a. Table 1 and 2: The focus on overweight in all definitions of MetS has been on abdominal obesity estimated with a measurement of waist circumference. Although some studies have used BMI as a surrogate measure for lack of data on waist circumference, when information on the latter is available, the BMI gives no further information which is relevant to this study. I would remove height, weight, and BMI from the manuscript.

4 b: I would suggest that the authors stick strictly to the aims of the study. Therefore, they should also consider whether total cholesterol and LDL cholesterol might be removed from the manuscript as these components are not included in the definitions of the MetS.

5. Paragraph 5, Figure 2: In the text, the authors report that the proportion of women practising the recommended 2.5 hours of weekly physical exercise was extremely low both in obese (9.9%) and non obese (19.8%). However, in Figure 2 these figures seem to be 7% and 12%. Please cheque and make necessary corrections.

Minor essential revisions

6. Results, paragraph 4 (“Figure 1 shows…”) line 3: I think it might be easier to understand the phrase “uses more restrictive criteria for waist circumference” if it be replaced by “uses lower cut offs for waist circumference”.

**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.