Reviewer's report

Title: Smoking, alcohol and dietary choices: evidences from the Portuguese national health survey

Version: 3 Date: 7 November 2006

Reviewer: Aage Tverdal

Reviewer's report:

General

There is some interesting results in the paper, but I find the presentation to be suboptimal or insufficient on some points.

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

There are some limitations of the study, as stated in the first paragraphs of the discussion: a) No quantification of nutritional intake and limited number of food items, and short time registration (the day before or during last week), b) missing information on education, c) not taking the dependency of life-style choices within household into consideration, d) classification of smokers. I will comment on b) and c)

The point b) on missing information is just mentioned in the discussion. No attempt has been made to assess the implication of this. If one weights together the non-smoking prevalence in educational groups one gets 67.7%, which may be compared with 69.3% (Table 1, men). Similar exercise for women gives a non-smoker prevalence of 90.2% among women with known educational status, as compared with 91.8% in the total female study population. This means that there is a higher smoking prevalence among people where the length of education is unknown. Is it the same with alcohol use: higher intake among those with unknown education? The reader is not given the possibility to assess this point as the number of people with missing information on alcohol is not given. Furthermore, it is mentioned that from table 2 it can be estimated that the question on milk has been answered by 34700, which can be compared with 38225 in the total study population. This means 10% missing. Is this the reason for excluding milk in table 4?

Point c) is not addressed beyond being mentioned. This could and probably should have been taken into account. It is likely that persons within a household are more similar with respect to many of the variables studied than persons between households.

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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)

It is room for linguistic improvements.

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Discretionary Revisions (which the author can choose to ignore)

A comment on how many of the non-smokers that had been previously smokers would be wellcome.

It is hard to disentangle the effect of age. Age is strongly related to smoking and when adjustments are made for age some of the smoking gradient is removed. Some stratified analyses would have improved the presentation.

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 limited interest

Quality of written English: Not suitable for publication unless extensively edited

Statistical review: Yes

Declaration of competing interests:
I declare that I have no competing interests.