Reviewer's report

**Title:** Prevalence of atherothrombosis in a general population sample of adults in Greece; An observational study

**Version:** 4 **Date:** 20 January 2011

**Reviewer:** Demosthenes Panagiotakos

**Reviewer's report:**

This is a well written paper by a respectable group of authors; congratulations for your efforts! Presentation of prevalence data is always important for any population, thus I believe that your work deserves publication following minor revisions.

1. In general, please correct several grammar and syntax errors throughout the paper, i.e., “However, for the evaluation of the economic burden of atherosclerotic disease in the country, ...” Table 3 presents ... A Table does not present anything, it should be ... in Table 3 ... are presented.

2. Abstract / Methods ... please report mean age +/- SD (using the weighted mean, since you have recorded age in classes), % of males of the study’s sample, participation rate (responders).

3. Abstract / Conclusion ... report the limitation of telephone reporting of clinical conditions, i.e., Despite the limitations may occur due to the sampling procedure, atherothrombosis affects a large portion of the ...

4. Methods ... Please report 3007 people out of ??? (i.e., participation rate).

5. On what basis the sample size was decided.

6. Was it computer-assisted telephone numbers selection? Please explain.

7. Any info about the non-participants (i.e., regional profile; reasons for not participating? etc); how long was the interview?

8. More details on the measurements are needed, i.e., you mention smoking habits were recorded i.e., smoker or non-smoker?, current, former? ... diagnosis of clinical conditions was self reported due to the nature of the study, but did the investigators asked about signs / symptoms / person who clinically diagnosed the health status? Was the definition of health status based on established guidelines? I assume yes, but it should be reported ...

9. The statistical analysis although correct, needs more advanced approaches to be followed, i.e., I suggest to the authors following a multivariate analysis, i.e., to cluster RFs by gender, age group, region etc and to compare these clusters based on their associated costs to the community ...

10. It is not surprising that the reported figures are in accordance with the results of the National Health Survey (Ref #4), since this was a telephone survey, too, with similar limitations. Thus, more discussion should be made based on this study and not on the EPIC, ATTICA, MetS etc that were based on direct clinical
evaluation. So, my last, but not least comment is a strong prompt to the authors to re-arrange their discussion based on the differences observed in surveys that followed procedures similar to the one presented here vs. face-to-face surveys … there are a lot of differences observed in the reported rates that could be explained by several behavioural mechanisms observed in telephone surveys, but also these differences could be modeled in order to provide a methodological basis for future similar studies. For example, the paper by A White on “Response rate calculations in RDD telephone surveys”, as well as similar methodological works on RDD telephone surveys should be included in a “good” methodological paragraph in the Discussion section. By this way the authors are encouraged to moderate their discussion about the actual rates of CVD RFs, which based on the sampling method could be misleading.

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: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

'I declare that I have no competing interests'