Reviewer’s report

Title: The association between passive smoking and the risk of developing acute coronary syndromes, among non-smokers, under the presence of several cardiovascular risk factors: the CARDIO2000 case-control study

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Reviewer: Dr Stanton Glantz

Level of interest: A paper whose findings are important to those with closely related research interests

Advice on publication: Other (see below)

The manuscript is improved, but there are still some points that require further clarification.

Replace the terms environmental tobacco smoke or environmental smoke with secondhand smoke throughout the manuscript.

Abstract, last sentence of Results. I do not understand what the authors are trying to say here. The previous sentence summarizes the adjusted OR after controlling for the confounders. Are you talking about the increase in OR depending on the number of other risk factors present (Figure 1)? If, so you need to state this more clearly.

Abstract, first sentence of Conclusion: What do you mean when you say "other risk factors prevail"? Do you mean "when other risk factors are present"?

Page 3, first paragraph. This paragraph still makes it sound like there is much more controversy about the basic premise that passive smoking causes heart disease than there is. The statement that there is not much known about the effects of workplace exposure is also not accurate (see your reference 5). The introduction needs to be focused on the things that are new about this study: the relationship between passive smoking and acute coronary syndromes, the effects of relatively light exposures, and the interaction between passive smoking and other risk factors for ACS shown in Figure 1.

Page 4, middle. The use of the plus or minus symbol is ambiguous. From the context here it appears that you are presenting ranges, but on the next page you say the number following the plus or minus is a SD.
Page 6, line 18: What does "by design" mean? I think you can just delete these words.

Page 7, line 3. In the exponential model of the effects of exposure time you are not including the effects of other risk factors or confounding variables. Why not? You need to present the quantitative results of this analysis in the Results section.

Results, first line. Given the high smoking prevalence in Greece, these exposure rates seem low.

Page 8, end of line 3. Change "by" to :with."

Page 8, last 4 lines. These statements do not make any sense, since the people exposed at work only are not exposed at home and vice versa. Please clarify.

I would make a much bugger deal about the effects of less than three times a week exposures. Where are the lightly exposed people exposed? Do these exposures tend to be in restaurants and bars? If so, you should make this point, in both the text and the abstract.

Another limitation is that you are not correcting for the high background exposures in a place like Greece, which has a high smoking prevalence and few restrictions on public smoking. This means that your "unexposed" group is not really unexposed, which will bias the resultst towards the null. This is probably a bigger problem than the ones that you address in the limitations.

**Competing interests:**

None declared.