Reviewer's report

Title: Socioeconomic inequalities in smoking habits are still increasing in Italy

Version: 2 Date: 3 June 2014

Reviewer: Alessandra Lugo

Reviewer's report:

Comments to Authors

This manuscript presents results from a cross-sectional survey on smoking conducted in Italy between 2007 and 2010 (GEIRD study), and shows how socioeconomic inequalities are still increasing in Italy, comparing results with another Italian study conducted between 1998 and 2000 (ISAYA). The manuscript is well-written and the topic is relevant. However, authors should consider the following comments.

Comments:

• In the Methods section and in the Abstract, age range is reported to be 20-44, while in Tables and in the main text, age range is 20-47. Please, correct the mistake.

• Please, add more information about the ISAYA study. Authors included a relevant reference, but it could be helpful to include at least the number of study participants.

• Please, report the overall prevalence of current, never and ex-smokers, since only stratified results are provided in the Results section and in Tables.

• It is not clear to me the choice of including in the analyses the number pack years at age 30.

• Tables and Figures should be improved.
  - For example, authors should add more information to the caption and/or title of tables and figures, so that the reader doesn't need to look at the Methods and to the Results to understand, for instance, which study results refer to (GEIRD or ISAYA, in Figure 1), the year of the study, the adjustment of the model (Figure 1).
  - Authors reported that information on smoking is available in 10,289 subjects, thus the analyses are based on this number of participants. However, in Table 1, the sum of the number of participants in strata of different socio-demographic characteristics is different by 10,289 (e.g., 4903 men + 5383 women=10,286). Please, specify, for example in a footnote, whether there are some missing values in sex, age and other characteristics. This happens also in Table 2 with current smokers only.
  - Are p values in Table 1 for the comparison only between current and ex-smokers, or are they for the comparison between never, current and
ex-smokers (it would change the number of total subjects on which the test is based and the number of the degrees of freedom)? If this latter case is the one authors used, maybe it could be useful to include the column with the prevalence also of never smokers, in order to let the reader better understand.

- Table 2 provides incomplete results (e.g. interquartile range for cigarettes/day in men).

- Table 3: are p-values for age and occupation for the trend? If this is the case, please, specify it in a footnote.

**Level of interest:** An article of importance in its field

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

**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