Reviewer's report

Title: The association of education with body mass index and waist circumference in the EPIC-PANACEA study

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Reviewer: Pedro Marques-Vidal

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An interesting article on the relationships between obesity markers and educational level, conducted in several countries with an impressive sample size. The text is adequately written, the data presented is well commented and the references adequate. Still, there are some minor inconsistencies that should be addressed.

Major compulsory revisions

In the methodology, the authors state that educational level was classified into four (4) groups (primary school or less; vocational secondary education; other secondary education and university). Still, in table 1, the educational level is presented in five (5) categories. For clarity, all data should be presented using the initially defined four categories.

Also in the methodology, the authors state that a “missing” category for physical activity was created. Still, in table 1, the “non-missing” categories add to 100, while for smoking (which also includes a “missing” category) it is indicated that the percentages do not add to 100 due to missing data. Again, for clarity, it would be better to state in table 1 the percentages corresponding to the missing data for smoking and physical activity, as it was made for marital status.

It is somewhat strange that relatively “neutral” data such as physical activity is missing, while other data such as drinking has no missing data. This should be clarified.

In the methodology, alcohol consumption was divided in six categories for women and seven for men, but in table 2 only two categories (0-6 and #6 g/day) are presented. Also, in table 3, were the data adjusted for the 6/7 categories or the two categories of alcohol consumption?

In the results (line 2), it would be better to state “men having completed primary school ONLY ranged…” as all subjects with an University level (for example) have also completed primary school. Similar comment for women.

In table 1, the authors should explain the 0 (zero) percent of women with educational level 2 in France.

Minor essential revisions

In table 1, some percentages add to 100.1 instead of 100 (Italy, the Netherlands,
German women) or to 99.9 (Greek men). Also, some percentages are presented with two decimal figures (Germany and Sweden men); one decimal would be enough.

In table 2, is alcohol consumption for all subjects (including nondrinkers) or drinkers only?

Figures 1-4: it would be good to draw a line at the zero (0) level, so the reader can see if the difference is significant or not (which is the case of waist in France). Also, indicate in the figure legends that the results shown are (I think) adjusted differences and 95% confidence intervals.

In the references, please include accents in the names of the authors (ref. 13: Mäkinen, Prätällä; ref. 15: Pérez-Rodrigo, etc.)

**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 I have no competing interests