Reviewer's report

Title: Using mortality follow-up of surveys to estimate social inequalities in Healthy Life Years

Version: 1 Date: 29 August 2013

Reviewer: Nayu Ikeda

Reviewer's report:

Major compulsory revisions

1. Background, fourth and fifth paragraphs:
Please describe more clearly what kind of problem arises from use of an administrative census and why you expect mortality follow-up of surveys to be a good alternative. Having a few more sentences in addition to the citation of the EU's technical report would help the readers to understand it.

2. Methods, first paragraph, fourth sentence:
Please address reasons for the difference in the follow-up periods between the two surveys. Why could the Commission allow you to follow up mortality only until 2009 for the SILC?

3. Methods, second paragraph:
Please describe in more detail how different educational indicators were between the two surveys and how each survey team developed and standardized the indicators. Were response categories different? If so, how did they recode responses into the four categories?

4. Methods, fifth paragraph:
Please explain how you came up with these three criteria and discuss if they are sufficient for the purpose of this study.

5. Methods, fifth paragraph:
Regarding the third criteria, why did you look at only LE? Is it possible that you examine differences in HLY between the Census and the two surveys? I think that this directly answers to the research question of this study on HLY, but I understand that the past study by Deboosere and colleagues examined only LE from the Census. If it is not feasible for you to do an analysis on HLY for this criteria, please address it as a limitation of the study and discuss whether or not you think that the results may change with HLY.

6. Results, first paragraph, second sentence:
Please add in Table 2 confidence intervals or any statistical value to support this statement.
7. Results, second paragraph, fourth sentence:
Please describe clearly how you assessed that the width of confidence intervals was “acceptable” for “enough” precision. Did you have a specific numerical threshold?

8. Results, fourth paragraph, second sentence:
Please describe clearly how you assessed that the differences were “not substantial.” Did you have a specific numerical threshold?

9. Please add a paragraph on limitations of this study in Discussion.

Minor essential revisions

Abstract
1. Please delete “The indicator” in the beginning of Background.

Text
3. Please insert “(HIS)” after “the Health Interview Survey” in the first sentence of the fourth paragraph of Background, and delete the full names of HIS and SILC from the first sentence of the first paragraph of Methods as they are already mentioned in Background.
4. Please replace “socioeconomic status” with “SES” in the first sentence of the second paragraph of Methods.
5. Please insert “and sex” after “by educational level” in the first sentence of the first paragraph of Results.
6. Please insert “of” after “absence” in the first sentence of the third paragraph of Discussion.
7. Please replace “socioeconomic status” and “Health Interview Survey” with “SES” and “HIS,” respectively, in the eighth sentence of the third paragraph of Discussion.

References
8. Please complete the reference #2.
9. Please double-check if the journal title of the reference #8 is correct.
10. If the reference #11 is not published yet, please see the section on references in the instructions for authors to refer to it appropriately in the text.

Table 3:
11. Please give a reference of the European standard population.

**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, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:

I declare that I have no competing interests.