Reviewer’s report

Title: Immigrant mortality differences in Norway by reason for migration, length of stay and characteristics of sending countries. An observational study

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Reviewer: Elisabetta Chellini

Reviewer’s report:

The study is really interesting, well conducted and presented. I think it will be of interest for the readers of the BMC Public Health. Anyhow, I have few comments:

- Abstract, last sentence: why only long term immigrants' health and welfare need to be further studied? Also short term immigrants' health and welfare need to be further studied also in relation either to the development of migration in the last decades either to the changes in welfare policies in host countries. I suggest to deleted the sentence.

- Background, page 4 line 96: a reference would be useful for HDI

- Background, page 5 lines 99-102: the sentence does not provide an additional contribution to that expressed in the previous sentence and I suggest to delete it.

- Data and methods, page 5 line 118: the HDI index is a composite index measured each year since 1990 for the vast majority of countries and since more recent years for others. Please clarify which HDI the author used: the most recent, the one measured at the year of immigration, or other?

- Data and Methods, page 5 line 122: Table A1 and Table A2 include a description of the variables used and this is interesting in itself in order to have an overview on the studied population. I suggest to include in the text a table referring no. of death and person-years by immigrants’ characteristics, as reported in table A1, at least by calendar period

- Results, page 9 lines 195-197: reading the sentence it seems that this phenomenon is well known, please insert at least a reference. Furthermore it would be better reported in Discussion.

- Figure 4A and 4B are a further evaluation of data presented previously on figure 3 and figure 2 respectively. I suggest to produce only two figures instead of four, including ORs by age at migration and length of stay for all immigrants together with ORs by reason of migration.

- Results, page 13 lines 292-298: re-migration could be important for those who arrive from Muslim countries for their specific funeral ceremonies that maybe are not available all over the Norway, as reported in previous paper by Khlat M.
Discussion, page 16 lines 371-373: is the information on causes of death really not available? An analysis on causes of death and reason of migration has been reported for Denmark (Norredam M et al., Inj Prev. 2013 vol.19:100-5). It would be interesting to evaluate the risk for specific causes of death that appears higher in immigrants, as homicides in male immigrants (see papers written by Norredam, 2013 and by Ikram UZ et al, Eur J Epidemiol. 2016 vol.31:655-65) or infectious diseases in immigrants from specific region of the world (Ikram, 2016).

Are the methods appropriate and well described?  
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?  
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?  
If not, please explain in your comments to the authors.

Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?  
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

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Please indicate the quality of language in the manuscript:

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