Reviewer’s report

Title: Incidence and associated risk factors for premature death in the Tehran Lipid and Glucose Study Cohort, Iran

Version: 1 Date: 25 Jan 2019

Reviewer: Reviewer 2

Reviewer's report:

PEER REVIEWER ASSESSMENTS:

OBJECTIVE - Full research articles: is there a clear objective that addresses a testable research question(s) (brief or other article types: is there a clear objective)?

Yes - there is a clear objective

DESIGN - Is the current approach (including controls and analysis protocols) appropriate for the objective?

Yes - the approach is appropriate

EXECUTION - Are the experiments and analyses performed with technical rigor to allow confidence in the results?

Yes - experiments and analyses were performed appropriately

Statistics - Is the use of statistics in the manuscript appropriate?

Yes - appropriate statistical analyses have been used in the study

INTERPRETATION - Is the current interpretation/discussion of the results reasonable and not overstated?

Yes - the author's interpretation is reasonable
OVERALL MANUSCRIPT POTENTIAL - Is the current version of this work technically sound? If not, can revisions be made to make the work technically sound?

Yes - current version is technically sound

PEER REVIEWER COMMENTS:

GENERAL COMMENTS: * What is your overall impression of the study?

This very well-written manuscript titled: "Incidence and risk factors of premature mortality among Iranian adults: a more than a decade of follow up" describes the incidence and risk factors premature mortality among Iranian adults and adds to the literature in this less-studied area of research.

* What the authors’ have done well?

The Introduction, Methods, Results and Discussion Sections of the paper are excellently-written, succinct and coherent. The authors reviewed the literature well, provided adequate justification for the study. Study design and data analysis were clear, and the authors provided enough information for authors who may want to replicate the study findings. The Results section was informative and Tables were well-presented. The Discussion section was well-written. The key findings of the study were convincingly discussed which led to interesting and accurate Conclusions. The Strength and Limitations of the study and its implications in terms of generalization of the findings to other settings was well-captured.

* In what ways does it not meet best practice?

I could not find any major weakness in the manuscript. However, there were some few sentences requiring either minor edits or clarifications. I have identified some minor revisions which will help the authors improve the quality of their manuscript.

ADDITIONAL REQUESTS/SUGGESTIONS:

INTRODUCTION

1) "Regarding risk factors for premature mortality events, smoking was demonstrated to the predominant risk factor for premature mortality"
Comment: Please, rephrase this sentence for clarity.

METHODS AND RESULTS

In the Methods Section: "The remaining 8063 participants (80.23% of eligible sample) were followed up until end of this study (20 March 2014)."

In the Results Section: "The study population consisted of 7245 persons (3216 men),"

Comment: Please, reconcile the differences between these numbers

DISCUSSION AND CONCLUSIONS

"Furthermore, about 50% of all-cause mortality was attributable to CVD mortality."

Comment: This was not a finding in this study. So, I don't believe that this conclusion should be reached.

Note: This reviewer report can be downloaded - see attached pdf file.

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
Quality of written English
Please indicate the quality of language in the manuscript:

Needs some language corrections before being published

Declaration of competing interests
Please complete a declaration of competing interests, considering the following questions:

1. Have you in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

2. Do you hold any stocks or shares in an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

3. Do you hold or are you currently applying for any patents relating to the content of the manuscript?

4. Have you received reimbursements, fees, funding, or salary from an organization that holds or has applied for patents relating to the content of the manuscript?

5. Do you have any other financial competing interests?

6. Do you have any non-financial competing interests in relation to this paper?

If you can answer no to all of the above, write 'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.

This reviewer has been recruited by a partner organization, Research Square. Reviewers with declared or apparent competing interests are not utilized for these reviews. This reviewer has agreed to publication of their comments online under a Creative Commons Attribution License attributed to Research Square and was paid a small honorarium for completing the review within a specified timeframe. Honoraria for reviews such as this are paid regardless of the reviewer recommendation.

I agree to the open peer review policy of the journal. I understand that my name will be included on my report to the authors and, if the manuscript is accepted for publication, my named report including any attachments I upload will be posted on the website along with the authors' responses. I agree for my report to be made available under an Open Access Creative Commons CC-BY license (http://creativecommons.org/licenses/by/4.0/). I understand that any comments which I do not wish to be included in my named report can be included as confidential comments to the editors, which will not be published.

I agree to the open peer review policy of the journal