Reviewer’s report

Title: The Burden of Health Conditions for Middle-Aged and Older Adults in the United States: Disability-Adjusted Life Years

Version: 0 Date: 03 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?

No - there are minor issues

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

No - there are minor issues

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

No - there are issues with the statistics in the study

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

No - there are major issues

OVERALL MANUSCRIPT POTENTIAL - Is the current version of this work technically sound? If not, can revisions be made to make the work technically sound?

Maybe - with major revisions
PEER REVIEWER COMMENTS:

GENERAL COMMENTS: This report originating from secondary data using self-reported morbidity 10 of them only were used to calculate the burden of disease measures namely incident cases, YLLs, YLDs and DALYs similar to GBD study capstone papers published in Lancet. Authors used a single source data and present results for just 10 conditions for entire USA whereas the same information is also available based on multiple, more comprehensive data sources, geographic and diseases/injuries covered in the GBD. From this point of view this paper does not add much to what is already known on this topic. Further, though the methods of estimation seem correct, they lack clarity on TWO areas. 1) how were estimates obtained for entire USA, 2) how robust are the estimated without 95 % credible limits being presented.

REQUESTED REVISIONS:

In addition to the above issues i raised the MS methods should improve to provide more information on number of participants selected, how they would be representative for entire USA for which the estimates are reported in this paper. How the sample studied was arrived via recruitment in successive Cohorts, what was number of deaths and attrition rates, to arrive at the sample that was analysed as a FLOW CHART would make the readers. Further analyses explain how estimated were drawn for entire USA based on sample studied here, and provide 95% CIs for readers to judge robustness of the estimates. The results are too BRIEF, since they lack any socio-economic or racial dis-aggregation, just purely description of 10 conditions is quiet drab particularly in discussion. Authors should discuss the results in the light GBD estimates, which data policy makers should use i.e. this report or GBD estimates available country level at http://ghdx.healthdata.org/ a brief note strengths of their study would add value to this paper. Results in table 2 and appendix 2 should be combined to single table by realignment of rows and columns. Appendix 1 could not be found. Figure 2 need to arrange the 10 conditions by their rank order w.r.t either of BOD measure and a legend be added for green and yellow. Present results for geographies or social class or racial groups would perhaps shed more important messages. Conclusion should highlight an important message to HCP and/or policy makers to improve health and prolong longevity.

ADDITIONAL REQUESTS/SUGGESTIONS:

none

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.

No
Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

No

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

No

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:

Acceptable

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