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: 29 Oct 2018

Reviewer: Terrence E. Murphy

Reviewer’s report:

This is a very nicely written paper and quantifies an important consideration in the study of aging persons, that of disability adjusted life years (DALYs).

It is certainly acceptable for publication as is, but I would like to challenge the authors to improve the paper in two ways. I have suggested these as discretionary changes, because if they don't make sense to you, then I don't want to foist them upon what is already a nice paper.

1. We are all aging, and most of us have one or more chronic conditions, most commonly HTN. Therefore, when these techniques ascribe the highest burden to HTN, i.e., the most people live the longest amount of time with that condition, it seems somehow off mark in terms of the message. We are living longer, and as our bodies and minds fall apart, we take meds to help us manage this process. HTN is one of the best examples in that so many people take it because it helps prevent or delay cardiovascular disease. Therefore in your first paragraph you talk about how alarming this is. I don't see it as alarming, merely a consequence of a population successfully stretching its own longevity. What I'm asking is difficult, I know, and I wouldn't ask it if I weren't already convinced of your talent and sophistication with this area of study. Can you find a way to spin our tendency to live longer with more disability in a positive light?

2. Can you provide a clear and compelling example of how this measure (DALYs = sum of YLDs and YLLs) answers a pressing social concern? You’ve given some examples to illustrate how it might be used, but it is based on the idea that the longer you have a condition the more lifetime of perfect health you are deprived of, which strikes me as a not entirely honest premise. We are all aging and eventually moving toward death. How can this measure be used to answer a pressing policy or social issue that hasn't otherwise been answered? I realize this is a tough request and maybe not easily achieved, but after reading this very nice paper you left me wondering how this might really be used to better answer questions that exist than from using some of the more traditional tools in the epidemiological toolkit?

Anyway, I enjoyed reading the paper and learned a few things, thanks for this nice contribution.

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:

Acceptable

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.

I declare that I have no competing interests.
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