Reviewer's report

Title: History of global burden of disease assessment at the World Health Organization

Version: 0 Date: 09 May 2020

Reviewer: Niko Speybroeck

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The paper is well written, and dr. Mathers' viewpoint and insights are interesting, even if they may be a bit biased due to the WHO-background. The journal needs to decide whether they are willing to publish a historical & personal viewpoint (I would be in favour of it, even if I may not agree with all the statements in the paper).

Saying "on the author's extensive knowledge and involvement..." seems more an interpretation - even if correct - and may have to be reformulated if stated in the Methods Section.

Pg2: "... Institute of Health Metrics and Evaluation (IHME) was established to carry out new..." may be replaced by "... Institute of Health Metrics and Evaluation (IHME) was established to conduct new..." (carry out is used extensively, and could be replaced elsewhere as well, but this reflects just a personal preference, so no obligation)

Pg9: "Around the period 2011 to 2012, six of the external Core Team members withdrew from the 202 Core Team due to this and related issues." be more specific on what "this" is. You may also add (if it contributes) some more details on the 'related' issues.

Pg9: Highlight Lancet's historical and current role a bit more in the whole GBD story..., e.g. IHME GBD papers often published there.

Pg10: "There was strong criticism of the IHME estimates from some malaria experts [33]." would be interesting (as is done elsewhere for other differences) to explain the difference, given the big dissimilarity and given the importance of the malaria numbers... Further, you say: "The largest difference was for pneumonia deaths in 230 children aged under 5 years where CHERG/WHO estimated 1.4 million deaths in 2010". It would be good to give a little more details (summarised in a table?) with the main differences for health indicators... and discuss why IHME is away from the WHO and other numbers. Also, discuss this again in more detail when saying on Pg. 15: "although major differences remain in areas such as adult malaria mortality."

Pg12: flagship used twice close to each other: Combine sentences.

Pg13: "have become much more focused on cause-specific and total mortality rates" also add here what the focus was before (not clear here).

Pg17: "The new administration of WHO appears keen to increase WHO reliance on IHME statistics and reduce WHO's own activities in this area, which makes some sense in an era of declining funding and expanding mandates." The text that follows may need to be stronger and specify what the best way forward is, and who should take the lead. Should a young "open-data-open code - open access" philosophy (adapted to current open society), so that the scientific community and other stakeholders participate in bringing the best data, best methods, etc. together, not be the best way forward? IHME may claim they are doing this, but the paper seems to highlight that the IHME-process may be less transparent than one would believe. The author is in a better position to judge on how to deal with these and other questions, but needs to provide a better viewpoint on the best way forward.
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**Quality of written English**
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