Dear Dr. Smith-Greenaway,  
  
Following review of your article to BMJ Global Health, we invite you to submit a major revision.  
  
- ‘’Main Document’’ - This is a clean copy (without tracked or highlighted changes) of your revised article. Please delete your original submission file.

- “Main Document - marked copy” - This is the edited version of your original article, including edits to address the peer review comments. Any changes have been highlighted using a track change function or bold or coloured text.  
  
  
Please submit your revised article by 24-Feb-2021. If we have not received it by this date, the opportunity to submit a revision will expire and your article may be treated as a new submission. If you need to request an extension, please contact the Editorial Office as soon as possible.  
  
**Reviewer: 1**  
  
This manuscript provides the country-level estimates of the cumulative prevalence of mothers bereaved by a child’s death, specifically it provides three indicators according to the child’s age at death, for 170 countries and territories. This manuscript is a thoughtful and elegant - if somewhat obvious - addition to the literature. However, I have a few concerns:  
  
○ The estimation is based on three different surveys, which have different sampling methods and this might lead to some bias in the interpretation. I believe that that this is a further limitation of the study and I suggest the authors acknowledge it.

For example, the NSFG is a nationally representative survey of ever-married women, but this means that lone mothers are not computed in the calculation, leading to a possible conservative estimation for the U.S. Or while the DHS stratifies the sample for the urban and rural area this appears to be not the case for MICS – unless I overlook it.

**Thank you for making this point. You are correct that the sample frames differ in ways that could bias the estimates. We now explicitly note this as a study limitation.**

○ The conclusive section covers mainly findings and limitations, whereas the discussion of the policy relevance of these findings is very limited (I would say particularly puzzling given that it has been submitted to BMJ Global Health). I would encourage the authors to extend this part.

**We have extended our discussion of the policy-relevance of the findings. Specifically, we now make note of:**

1. **Need for bereavement leave from work and school commitments**
2. **Need for monitoring studies to carefully track the relational, social, and health implications of loss for parents and draw cross-contextual comparisons.**
3. **Corresponding policies that pay mind to the differential consequences of bereavement. Even as we treat bereavement as a homogenous experience here, need to recognize it as a heterogenous wone, and that the circumstances of child death can lead to variable implications.**

**Reviewer: 2**  
  
This is an excellent paper, that extends prior work on the under-studied topic of maternal bereavement. I believe it is an important contribution to global health research. I only have a few comments.  
  
1) in calculating these indicators across countries, it seems some difference mIM, mOM etc... could be driven by differences in age structure of the 20-44 populations (e.g., these indicators should be higher in older populations). Could the authors calculate age-standardized mIM, mOM etc...?

2) on page 3, the authors state that the MICS collects "reproductive history calendars". I'm not sure if they use this to refer to "birth histories" or "pregnancy histories" that are collected in the MICS? "Calendars" might refer to a certain type of data collection method, e.g., used to assess contraceptive rates, which is not used by the MICS to collect data on child deaths. It would be good to clarify.

**Thanks for pointing this out. We have appropriately labeled this survey module as birth histories.**   
  
3) I would really love to hear more re: reasons to exclude the 15-19y from these calculations. It's very unclear to me why they should be excluded because they are "highly selective". Does if affect the results? if so, in what ways?

**Thanks for pointing this out. We opted to not include this age-group given how few women of these ages have had at least one child in several countries. Note that we have now included estimates of infant loss among this age-group in the supplemental table, and direct readers to those estimates (while providing the caveat that the estimates are based on the small share of this population that have become mothers.**   
  
4) while it is true that "child deaths can be underestimated in survey", i find it very speculative to suggest child mortality is "more accurately measured in model life tables" in some contexts. I'm also not sure that this is needed to make the argument on pages 6-7. I would suggest removing this statement.

**We agree that we do not have enough evidence to support this speculation. We have removed this statement.**

5) I also find that the paper does not sufficiently discuss the completeness and accuracy of the birth histories collected during the DHS/MICS, as a potential limitation. A validation study in Guinea-bissau recently found that a significant % of neonatal deaths experienced by women 15-49y were left out of birth histories (either due to omission or misclassifications as stillbirth). This also happened, at a lower rate, for post-neonatal deaths. On the other hand, some women who experience stillbirths might misclassify such events (that should not count towards mIM) as neonatal deaths. It would be interesting to hear more from the authors about this measurement issue.

**It was a mistake to overlook this recent work on birth histories, and we now appropriately cite this research. We now discuss this as a measurement issue and a possible study limitation.**   
  
6) The statement "we extend the Goodman-Keyfitz-Pullum kinship equations from mathematical demography28,29 to non-stable populations with changing demographic rates" is unlikely to mean much to a global health audience, and should be clarified (possibly in an appendix to show this extension to the interested demographers).