

Author's response to reviews

Title: Assessing the repeatability of verbal autopsy for determining cause of death: two case studies among women of reproductive age in Burkina Faso and Indonesia

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Author's response to reviews: see over

Response to reviewers

Reviewer 1

1. - we have changed the title as suggested.
- we have rephrased this statement to “it is likely that similar findings would apply to other population groups”
2. We disagree that our assessment of repeatability is “biased” for these reasons – though it is absolutely true that they are factors within the operationally realistic conditions of our studies that may have reduced repeatability. We have added the phrase “under operational conditions” to the overall aim of the paper, to make clear that we were measuring repeatability “as is” rather than trying to optimise the VA process to demonstrate repeatability. It is likely therefore that our findings may well underestimate the inherent repeatability of VA under more ideal circumstances. We would also dispute the uselessness of men as respondents – we had a number of very successful and detailed interviews with men whose wives had died.
3. page 7 describes that up to 3 possible causes of death per case are generated by the model, each with a particular likelihood. We have now added a clarification as to how these have been handled, referenced to a previous paper.
4. Although it is true that these studies happen to be based on work that was interested in maternal causes, in this paper, as stated on page 5, we are not trying to come to conclusions about mortality patterns, etc. As stated on page 6, references 15 and 16 contain more information on the maternal outcomes studies. Similarly the very interesting question of who may be an appropriate (and available) respondent for a VA interview is beyond the scope of this paper. Here we have used the operationally realistic option of taking the best available respondents.

Page 11: we have rephrased this to make it clearer that we are indeed not expecting “understanding” of causes of death by respondents.

Page 12: there is evidence presented on page 9 that kappas were lower in Burkina for recall periods over 26 months. Of course shorter recall is likely to be preferable, but not always possible.

Page 12: we have rephrased here in accordance with the comment, although again we would stress that we were setting out to measure, not to optimise, repeatability here

Page 13: again we have rephrased here

Page 14: this is exactly our point, “it is not generally argued that VA should be used as a direct replacement for medical certification”

Page 14: again we have rephrased here

Figure 1: to some extent this reflects changing approaches to publishing in on-line electronic environments, where figures are not such a big deal as they used to be. It’s

not essential, but we think it conveys a clear and helpful summary of the study design to the reader, in addition to the textual description.

Table 2: these comments are related to point 3 above, where we have clarified our handling of fractional likely causes. We are most grateful to you bringing to our attention the serious clerical error in the third column, where the first column had been accidentally duplicated.

Table 3: this has to be taken in the context of the InterVA-M model as previously described.

Table 4: although it is true that the reader could construct table 4 themselves from the information given in table 3 (and hopefully avoid the now corrected error which you helpfully point out), we feel that table 4 is an important “proof of principle” in terms of demonstrating the public health aspects of cause of death repeatability, and so does add to the overall paper.

Reviewer 2

Major revisions

1. We have followed Reviewer 1’s suggestion here (these are strictly deaths among women of reproductive age, not all maternal).
2. Repeatability of the overall VA process as discussed in the first sentence here is essentially what is shown in table 4 – in which both settings perform reasonably well. The following sentences go on to consider the interview and individual cause of death repeatabilities.
3. We have rephrased here accordingly
4. Within this paragraph we made the important assertion that the selections of cases taken for re-interview “approximately reflected the overall mortality patterns”. With this proviso, we do not feel that the selection procedure biased the results.
5. We agree absolutely that contact with health services may influence VA responses. But, as we have also clarified in response to some of Reviewer 1’s comments, we were setting out here to assess VA repeatability in an operationally realistic context, and this is another facet of that realism.
6. We have rephrased here

Discretionary revisions

1. This is important and we have added a comment that generally different interviewers undertook the re-interviews.
2. The annexes are largely included for the minority of readers interested in this level of detail, and we anticipate they will be published as electronic attachments. Thus we

did not want to include detailed discussion of them in the paper. It may well be that some of the obstetric indicators depend on information gained from health workers – though that is perhaps less an “artefact” than part of realistic VAs.

3. This is already depicted in Figure 2.