Reviewer's report

Title: Identifying causes of adult death in rural populations

Version: 1  Date: 16 November 2004

Reviewer: Abla Sibai

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General

Using the verbal autopsy (VA), the paper identifies causes of death in a district in the central-southern part of Ethiopia, consisting mainly of rural areas. The authors presented their findings across two main co-variates, namely sex of the deceased and urban-rural classification of place of death. Being relatively inexpensive, simple and easy to administer by lay interviewers to lay respondents, the VA can aid policy makers in identifying major health problems in rural underprivileged populations and consequently provide evidence-based data for interventions.

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Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

1. Rational of the study

This is in the main a descriptive study, which aims at demonstrating the utility of the use of VA in areas where death certification is deficient or lacking. One main concern for this paper lies in the main objectives for conducting the study. The rational and objectives of the study and its findings should be restricted to the utility of use of a simplified version of the VA as developed by the authors in settings where routine of sources of information is lacking and in areas where communicable diseases are believed to account for the major causes of death.

Firstly, the manuscript should avoid the use of the terms valid/validity wherever these appear as there was no attempt in the study to examine the validity of the instrument compared to a gold standard.

Secondly, the limitation of the use of the VA as developed by the authors in settings different from those prevalent in Ethiopia should be highlighted in the discussion. This is essential for providing the reader with a perspective in which the study is to be evaluated and study results to be generalized.

2. Perceived primary causes of deaths

In the results section, the analysis regarding perceived primary causes of deaths stick out all unexpectedly. Similarly the authors discuss these findings and compare them with the VA-based classification of deaths. There was no apriori preparation for the reader in the methods section on how or why was this data was collected. The manuscript should include a description of the significance/rational (in the background) and of the approach by which this piece of information was collected (in the methods section).

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Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

1. Target population: adult deaths in the age group 15-49 years

Perhaps the main concern for this paper is the restriction of study target population to adult deaths. The proportion of deaths occurring in the age group 15-49 out of all deaths may vary considerably depending on the setting and overall development of the country. In certain settings, this proportion may not be considerable. Hence the utility of adding this rather simple tool (the VA as developed by the authors) in population-based health surveys becomes limited. The authors need to acknowledge this limitation in their discussion and additionally should provide an overall presentation of the life expectancy in Ethiopia (rural vs. urban areas) and presents some information on the proportion of deaths constituted by this age group. This possibly brings to the surface the question, why ‘Cancer’ was not included in the causes of death or in the algorithm used.

2. Missed cases
A larger proportion of cases were missed for those deaths that occurred in the first couple of years of the study, and the authors present the implications of this on study results in the ‘Discussion’ section. For a more valid representation of the consequences of this limitation, the authors need firstly to compare those lost to follow-up with those for whom appropriate respondents were identified and hence a cause of death was assigned. Secondly, they may need to analyze the results across two time periods (the first two and half years vs. the latter two and half years) to check the consistency/ or inconsistency of their findings over time. If the results proved consistent, then this may indicate non-differential loss of follow-up by cause of death, and vice versa.

3. Maternal mortality

The WHO place maternal mortality with communicable disease rather than with non-communicable disease classification. For comparability with published literature, we suggest that the classification follow the WHO approach.

4. Editorial changes
The introduction/background starts with an overall description of the standard of living in Ethiopia focusing on the lack of health information for adult health. I would suggest that the paragraph (on p. 3) starting with (In Ethiopia low standards of livingâ€¦) and ending with (â€¦for those living in the rural areas (4-6)), be moved towards the end of the introduction and be incorporated within the last paragraph in the background (p.5) starting with â€˜In Ethiopia, due to the presence of vital event registrationâ€¦ rural underserved populationsâ€™.

Discretionary Revisions (which the author can choose to ignore)

1. The title should include further details to reflect more closely the content of the manuscript. One suggestion would be (The use of Verbal Autopsy in identifying causes of death in rural and urban populations in Ethiopia)

2. Specify the meaning of Kebeles

3. Give a reference for the WHO questionnaire used to develop the VA

4. How was the algorithm developed?

5. Operationalize the use of the term ‘appropriate’ respondents (p.9- second line) in the Results Section
What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No

Declaration of competing interests:

I declare that I have no competing interests