Reviewer's report

Title: Trend and causes of adult mortality in Kersa Health and Demographic Surveillance System (Kersa HDSS), eastern Ethiopia: verbal autopsy method

Version: 0 Date: 22 Feb 2017

Reviewer: Erin Nichols

Reviewer's report:

Informative and timely study; solid addition to existing literature, as not many studies focus on adult deaths.

Comments to Author

In Abstract:

Methods- clarify how cause of death through VA was ascertained;

Results: include total number of deaths; the second half of the results sections is a bit awkward; specify age of "young age adults"; clarify what "prominent" means for CLD and NCDs

Conclusion: mentions increasing TB, but this pattern is not mentioned in results.

Background:

Line 13, Consider a more recent source for reference 1; try WHO/World Health Statistics 2012

Line 15, add "well-functioning" in …"largely due to the absence of a well-functioning vital registration system…"

Line 28, change "ensuring" to "determining"

Line 52, The first sentence is vague and unclear.
Data analysis:

General: add comment that no uncertainty intervals were calculated because this was a census, not a sample.

Line 46/General: were causes of death based on a particular tabulation list? This would facilitate comparability. Specify/consider WHO VA cause list (latest example: WHO 2016, manual and guidelines, appendix 1; also see tabulation notes in section 4.10; ICD-10 Volume 2, Chapter 5 also has useful tabulation notes)

Results:

General: suggest adding cause by sex in existing or new table.

Section b—reference Table 4.

Line 47, specify Figure 3.

P12, lines 8-22: consider only listing % to be consistent with other sections.

Discussion:

General: good comparisons to various other sources.

Suggest also reviewing general criteria for mortality data and commenting on how these data compare against expected patterns. See "Mortality Statistics: a tool to improve understanding and quality" on University of Queensland Health Information Systems Knowledge Hub, WP13, Nov 2010 by AbouZahr et al; also available as guidance/help document through WHO's ANACoD (Analysis of Cause of Death tool).

P15, lines 12-17—The comparison to results from Malawi does not seem relevant as currently drafted; remove or add clear justification for comparison.
Given conclusions about TB, need to add comment in discussion. Suggest adding more comment on p15, line 33-34.

Conclusions and Recommendations

General: add comment on epidemiologic transition—this part of Ethiopia is not yet there; what are implications?

P16, lines17-43; avoid repeating results.

Strength and limitation

General: this section should be added to the Discussion section

Add comment on the 30% undetermined/unspecifed causes.

Tables/Figures

Table 5: suggest adding n for each age group

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None

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