Reviewer’s report

Title: Trends in maternal and neonatal mortality in South Africa: A systematic review

Version: 1 Date: 14 Jan 2019

Reviewer: Mary-Anne Ramis

Reviewer's report:

The paper reports trends of mortality and neonatal mortality in South Africa using systematic review methods. My comments only pertain to general methodological and/or presentation aspects of the review.

The abstract states, "...maternal and neonatal mortality appear to increase sharply up to 2009, followed by a gradual decrease…", this is not reflected in the figure for neonatal mortality. I suggest rewording this sentence slightly to more accurately reflect the data representation.

The abstract (results section) states, 14 studies on neonatal mortality were found, however figure 4 (page 17) presents 16 sources.

The risk of bias criteria is clear however does not seem to take into account the different types of publications being assessed. For example were reports by government or other agencies assessed with the same criteria as empirical studies? Additionally, page 20, line 16-17 suggests that data obtained from vital registration, household surveys and census are 'subject to misclassification and under-reporting', which suggests they are at a higher risk of bias, yet these sampling techniques have been assigned 'low' risk of bias according the assessment criteria on page 8. Some further explanation around this decision would be helpful.

Please revise the added sentence on page 14 (line 6-7) for clarification.

Taking into consideration the limitations and issues with data collection methods and reporting of data that have been identified and discussed, it would be beneficial to include additional comment on the implications of or recommendations following the review findings. The abstract mentions the capture-recapture method for estimation techniques which does not seem to be included in the discussion section.

Please check the reference list for consistent formatting and citation details. There are also some corrections required in the reference list - e.g. reference 65 and 73 seem to be the same, as do references 64 and 76.
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