

Review of: "Factors Associated With Hospital Outcomes for Cases of Anemia in Pregnancy at a Regional Level in Burkina Faso"

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Potential competing interests: No potential competing interests to declare.

General - The manuscript needs editing for language and grammar

Specific section wise comments

Title

- Authors should specify the study design in the title

Abstract

Methods

- Authors should explicitly specify the study design; merely mentioning a retrospective study won't help the readers make sense of what was done
- The study is more of a retrospective cohort design rather than a cross-sectional study, as the criteria for formation of study groups was on the basis of exposure, i.e., level of anaemia, and the outcome "unfavourable hospital outcome" happened at a later time point with a clear temporal relationship maintained. The authors should report it as a retrospective cohort study rather than a cross-sectional study

Results

As the study befits more into a retrospective cohort design, it is desirable if authors undertake survival analysis and report hazard ratios instead of odds ratios

Keywords

- Kindly include more keywords, preferably MeSH terms.

Main manuscript

Methodology

Sample size estimation and power calculation

- As authors have not mentioned anything about the sample size estimation, it is desirable if they undertake a post-hoc power analysis and report it for various comparisons made, at least for the primary outcome of “unfavourable hospital outcome” for the mother and fetus entities
- Authors should report the manuscript using the STROBE guidelines for cohort studies

Variables

Including ongoing pregnancy as a favourable outcome doesn't make sense. Authors should think of excluding those cases where the pregnancy was ongoing from the study. Or at least undertake a sensitivity analysis in terms of reporting the robustness of results while including and excluding the ongoing pregnancy cases.

Data analysis

- As the study befits more into a retrospective cohort design, it is desirable if authors undertake survival analysis and report hazard ratios instead of odds ratios
- The authors should even think of undertaking a survival analysis for death as the outcome along with the reported primary outcome of “unfavourable hospital outcome,” with anaemia being one of the independent variables, as death is a more hard outcome.

Ethical considerations

- Reference letter number and date of IRB approval should be mentioned in brackets

Results:

The reported overall maternal mortality ratio seems very high. Authors should kindly confirm the same and discuss it with the population-based maternal mortality ratio in the discussion section.