

Review of: "Using a Health and Demographic Surveillance System to Assess Stillbirths Trends and Risk Factors in Siaya County, Kenya between 2008 and 2019"

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Potential competing interests: No potential competing interests to declare.

The title could be improved as follows:

Stillbirth Trends and Risk Factors in Siaya County, Kenya between 2008 and 2019: Using a Health and Demographic Surveillance System

Abstract: in the method section, the authors should include the total pregnancy in the period.

Abstract:-----Across the years, the prevalence of stillbirths reduced from 3.69% to 1.77% from 2008 to 2019-----is this significant decline? Indicate the 95% confidence level.

Method and materials:

Study population should be replaced by study setting.

Study design: what specific study design does the survey employed, specify it. All the points are about data analysis and processing as well as data extraction. Hence, revise the points and give subsections.

Independent variables table should be stated in the form of paragraph but not in the table form.

What about independent variables like infectious disease, non-communicable disease like diabetes mellitus, HTN and others, substance abuse and food security status etc. is there data about these exposures in the original data? Say something about these.

Statistical analysis:

.....Pearson's chi-square test was used to assess associations between the two outcome groups.....why you choose this? Better to use un-variable logistic regression to assess one exposure with outcome variable.

Result:

In the first paragraph, better to explain the demographic characteristic of pregnant women and the still birth in its subheading.

Determinants:

Age greater than 36 is not significant but borderline significant. Check this one.

Was the trend of stillbirth significant? Check this one too.

It is difficult capture the time effect here. A single mother might get pregnant multiple times since 2008 till 2019. Mothers might give to two, three or four births till 2019. Hence, there could be repeated measures for same mothers over time. If repeated measures are there, it could be better to follow “repeated measures analysis” rather than “logistic regression analysis” to assess determinants. In this case, time will be included in the analysis. Check for this first?