

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.

This paper delves into the determinants of stillbirths through logistic regression analysis of data spanning from 2008 to 2019 in Siaya County, Kenya.

Major Comments:

- The analysis reveals that stillbirths account for 2% of the cases within the logistic regression framework, signifying a notable data imbalance. To effectively address this imbalance, employing logistic regression techniques tailored for such conditions is advisable. Consulting the methodology suggested by King and Zeng (2001) and/or implementing bootstrap techniques is recommended to alleviate the bias introduced by the disparity in positive and negative case counts in the regression outcomes.
- To enhance the generalizability of the findings, comparing Siaya County's characteristics with those of a similar county could aid in drawing broader inferences about potential interventions.

Minor Comments:

- **Reference Update:** The citation concerning the global incidence of stillbirths needs revising to include more recent statistics, as the early 2000s data may no longer provide an accurate picture.
- **Clarity and Precision:** The manuscript benefits from its succinct and straightforward presentation. However, the qualitative descriptors "small" and "high" would gain in precision by being accompanied by explicit numerical values, thereby enhancing the clarity of the findings.
- **Nature of the Statistical Operation:** Clarification is needed regarding whether the Health and Demographic Surveillance System (HDSS) operates as a census, a sample survey, or an administrative record. The HDSS covers approximately 262,000 individuals visited bi-annually, which raises questions about the logistical feasibility and classification of the data collection process.
- **Focus on ANC Visits:** Narrowing the dataset to include antenatal care (ANC) visits represents a sound analytical strategy. Elaborating on the odds ratios derived from this subset could enrich the analysis, offering a clearer perspective on the magnitude and directionality of the risk factors identified.

These suggested revisions and clarifications would strengthen the paper's contribution to understanding the determinants

of stillbirths in Siaya County.