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Paper: **“Benefit Incidence Analysis for Maternal, Newborn and Child Health Services in Kenya”**

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Corresponding Author: Urbanus Mutuku Kioko

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Peer review:

Reviewer 1: Georgios Farantos
University of West Attica, Greece

Reviewer 2: Silvere Paul Nuiro
Université des Antilles, Guadeloupe

Reviewer 3: Blinded

Reviewer A:
Recommendation: Revisions Required

The TITLE is clear and it is adequate to the content of the article.

The title is clear, concise, and accurately reflects the scope of the study, which focuses on evaluating the distribution of benefits for maternal and child health services in Kenya.

The ABSTRACT clearly presents objectives, methods, results, and conclusions.

Yes, the abstract is well-structured and clearly divided into distinct sections: Background, Methods, Results, and Conclusion. It effectively summarizes the core objectives, the data utilized, and the primary findings of the research.

There are a few grammatical errors and spelling mistakes in this article.

Yes, the manuscript requires proofreading for grammatical and typographical errors. There are subject-verb agreement issues, such as "Governments usually subsidizes". There are awkward phrasings, such as "for effectiveness cause" and "families' raises concerns". A glaring spelling error is the repeated use of "concertation" instead of "concentration" in the text, such as in the explanation of the index and the titles for Figure 6 and Figure 7.

The study METHODS are explained clearly.

The methodology is thoroughly explained. The authors clearly outline the research design, the dual data sources (KDHS 2013/14 and NHA 2013/14), and the classification of the population into five wealth quantiles. The analytical approach for computing the benefit incidence is also logically detailed.

The results are clear and do not contain errors.

The results are generally clear and systematically address the study's objectives. However, the presentation contains minor errors. As mentioned above, "concertation" is misspelled in figure titles. Furthermore, the formatting of the tables and graphs could be polished to enhance professional presentation.

The CONCLUSION or summary is accurate and supported by the content.

The conclusion is highly accurate and directly supported by the findings. The authors appropriately summarize the nuanced finding that while absolute targeting of benefits is pro-

poor, it is not progressive when measured as a proportion of total household expenditure, ultimately favoring the rich.

The list of REFERENCES is comprehensive and appropriate.

There are major fundamental flaws in the referencing system used in this manuscript. The introduction relies on an in-text numerical citation style using parentheses, such as (11), (5), (2), and (3). However, the reference list at the end of the document is unnumbered and sorted alphabetically. In the discussion section, the citation style abruptly changes to an author-year format (e.g., "Chuma et al., 2012", "Castro-Leal et al., 2000", "Ataguba et al., 2009"). Critically, some of the sources cited in the text, such as Ataguba et al., 2009, are completely missing from the final reference list.

Please rate the TITLE of this paper.

[Poor] 1-5 [Excellent]

5

Please rate the ABSTRACT of this paper.

[Poor] 1-5 [Excellent]

5

Please rate the LANGUAGE of this paper.

[Poor] 1-5 [Excellent]

3

Please rate the METHODS of this paper.

[Poor] 1-5 [Excellent]

4

Please rate the RESULTS of this paper.

[Poor] 1-5 [Excellent]

4

Please rate the CONCLUSION of this paper.

[Poor] 1-5 [Excellent]

5

Please rate the REFERENCES of this paper.

[Poor] 1-5 [Excellent]

1

Overall Recommendation!!!

Return for major revision and resubmission

Comments and Suggestions to the Author(s):

This is a valuable and highly relevant study that addresses an important public health policy issue in Kenya. The methodology is sound, and the dual-layered conclusion regarding the pro-poor absolute distribution versus the pro-rich proportional distribution is insightful. However, the manuscript requires major revisions primarily due to a completely inconsistent referencing system. You must standardize your in-text citations to match the target journal's guidelines and ensure every source cited in the text appears in the bibliography (and vice versa). Additionally, please proofread the document carefully to correct typographical errors (e.g., "concertation curves") and grammatical inconsistencies before resubmitting.

Reviewer B:

Recommendation: Revisions Required

The TITLE is clear and it is adequate to the content of the article.

The title "Benefit Incidence Analysis for Maternal and Child Health Services in Kenya" is clear and adequately reflects the content of the article. It succinctly conveys the focus of the study, which is the analysis of how benefits from maternal and child health services are distributed across different socioeconomic groups in Kenya.

The ABSTRACT clearly presents objectives, methods, results, and conclusions.

The abstract is well-structured and effectively summarizes the main elements of the study: the context, objectives, methods, results, and conclusions. It highlights the importance of equity in the distribution of subsidies for maternal and child health services in Kenya. However, it could be enhanced by concrete recommendations for policymakers, which would strengthen its completeness.

a. Strengths:

- Clear objectives and results.
- Good structure.

b. Areas for improvement:

- Place greater emphasis on the practical implications of the results for public policy.

There are a few grammatical errors and spelling mistakes in this article.

The article is generally well-written, but there are a few minor grammatical and stylistic issues that could be improved for better readability and clarity. Here are some examples:

P1 - L7 from the top - Suggestion : "The subsidies should therefore be targeted efficiently to ensure that only the poor receive them."

P2 - L1 from the top - Suggestion : "Governments usually subsidize services that the market does not provide or provides inadequately, such as pure public goods, where the marginal cost of additional utilization is zero (11)."

P2 - L4 from the top - Suggestion : "Governments are consequently required to subsidize some of these services for reasons of effectiveness (5)."

P6 - L2 from the bottom - Suggestion : "The mean maternal and child health services subsidy was pro-poor, although ..."

P13 - L3 from the bottom - Suggestion : "The utilization of outpatient services was significant in government and private facilities in urban areas, indicating that outpatient services were largely pro-urban. Higher-income groups were more likely to use outpatient services than lower-income groups."

P15 - L6 from the top - Suggestion : "The targeting of benefits from government spending on

maternal and child health services in Kenya was pro-poor. This was evidenced by the concentration curves for the poorer segments of the population being least dispersed from the 45-degree line of equality, while the concentration curves for the richer segments of the population had the largest dispersion from the line of equality."

The study METHODS are explained clearly.

The article is based on a robust methodology well-suited to its primary objective: to assess the distribution of benefits from grants for maternal and child health services in Kenya. The authors used the Benefit Incidence Analysis (BIA) approach, a method widely recognized in studies on health equity. This approach measures the distribution of benefits from public spending across socioeconomic groups, taking into account their use of health services.

a. Relevance of methodological tools

1. Benefit Incidence Analysis (BIA):

- BIA is a relevant tool for assessing equity in the distribution of public resources. It helps determine whether subsidies reach the most disadvantaged populations, which is essential in the context of public health policies in Kenya.
- Using this method, the authors were able to quantify benefits in monetary terms for different socioeconomic groups, providing a clear perspective on disparities in access to health services.

2. Use of Reliable Data:

- The data come from two robust sources: the 2013/14 Kenya Demographic Health Survey (KDHS) and the 2013/14 Kenya National Health Accounts (KNHA). These databases are recognized for their quality and representativeness, which strengthens the credibility of the results.
- Data on wealth quintiles, health service utilization rates (inpatient and outpatient), and types of care providers allow for a detailed and nuanced analysis.

3. Concentration indices:

- Concentration indices and concentration curves are powerful statistical tools for assessing equity in the distribution of subsidies. The authors used these tools to demonstrate disparities between socioeconomic groups and geographic areas (urban and rural).
- The use of these indices makes it possible to quantify the extent to which grants favor the poor or the wealthy, which is essential for formulating policy recommendations.

b. Analysis of practical implementation

The implementation of the methodological tools is generally satisfactory, but a few points are worth highlighting:

1. Clarity and transparency:

- The authors clearly explain the steps of their analysis, particularly how subsidies were calculated based on service utilization rates and wealth quintiles. This allows for an understanding of the process and enables the study to be replicated in other contexts.
- The graphs and tables are well-designed and facilitate understanding of the results. Concentration indices are accompanied by their standard errors, which enhances statistical rigor.

2. Data analysis:

- The authors used reliable and representative data, but they did not sufficiently discuss the potential limitations of this data. For example, the data from the KDHS and the national health accounts date from 2013/14, which could limit the relevance of the results in the current context.
- The methodology could have included a qualitative analysis to complement the quantitative

data and provide a richer perspective on non-financial barriers to access to care.

3. Practical recommendations:

- Although the methodological tools are relevant, their implementation could have been supplemented with more concrete recommendations for policymakers. For example, the authors could have proposed specific strategies to improve equity in the distribution of subsidies, such as more precise targeting mechanisms or reforms in the financing of health services.

The results are clear and do not contain errors.

The results are well presented and the analyses are detailed, but some sections lack depth. For example, the authors mention that the subsidies are pro-poor, but they do not sufficiently elaborate on the reasons underlying this observation or the mechanisms that could be put in place to improve the progressivity of the subsidies. There are no apparent errors in the presentation or analysis.

The CONCLUSION or summary is accurate and supported by the content.

The conclusion effectively summarizes the study's findings and highlights the policy implications. The authors emphasize that, although the distribution of subsidies is generally pro-poor, it remains non-progressive, which is a crucial point for policymakers. However, the conclusion could be strengthened by more specific and actionable recommendations to improve equity in the distribution of subsidies.

a. Strengths:

- Clear summary of the results.
- Highlighting of policy implications.

b. Areas for improvement:

- Provide concrete recommendations for policymakers.

The list of REFERENCES is comprehensive and appropriate.

Toutes les références mentionnées dans la section "Références" sont bien citées dans le texte. L'article est cohérent dans son utilisation des sources pour appuyer ses arguments et ses conclusions.

The article's bibliography generally meets the standards of international journals through the use of reliable, relevant, and recognized sources. However, it could be improved by adding more recent references and greater geographic diversity. These adjustments would strengthen the study's scientific quality and broaden its impact in the field of public health.

Please rate the TITLE of this paper.

[Poor] 1-5 [Excellent]

Please rate the ABSTRACT of this paper.

[Poor] 1-5 [Excellent]

4

Please rate the LANGUAGE of this paper.

[Poor] 1-5 [Excellent]

4

Please rate the METHODS of this paper.

[Poor] 1-5 [Excellent]

5

Please rate the RESULTS of this paper.

[Poor] 1-5 [Excellent]

5

Please rate the CONCLUSION of this paper.

[Poor] 1-5 [Excellent]

3

Please rate the REFERENCES of this paper.

[Poor] 1-5 [Excellent]

3

Overall Recommendation!!!

Accepted, minor revision needed

Comments and Suggestions to the Author(s):
