

Review of: "Sociodemographic Determinants of Gender Disparity in Dengue Fever Diagnosis and Treatment"

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Potential competing interests: No potential competing interests to declare.

Abstract:

- **Clarity:** The abstract provides a good overview, but it could be more concise. Consider simplifying the language and focusing on the most critical findings and implications.
- **Results Focus:** The abstract mentions the equitable care provided by the healthcare system, but it should also highlight any significant disparities, particularly regarding residence, as this is a key finding.

Introduction:

- **Contextual Background:** While the introduction provides a general background on dengue fever, it should more explicitly frame the issue of gender disparity in healthcare, supported by relevant literature. Consider adding more references to prior studies on gender disparities in infectious diseases to strengthen the rationale for this study.
- **Objective Statement:** The objectives of the study are clear, but they could be stated more explicitly, emphasizing the focus on identifying sociodemographic factors contributing to gender disparities.

Methods:

- **Study Design and Limitations:** The study design is described in detail, but the limitations section could be expanded. Acknowledge potential biases inherent in retrospective cohort studies, such as reliance on existing records, and discuss how these limitations might impact the findings.
- **Data Analysis:** The statistical methods are mentioned briefly. More detail on the specific statistical tests used (e.g., logistic regression) would improve transparency. Consider discussing how confounders were controlled for in the analysis.

Results:

- **Tables and Data Presentation:** The results are well-structured, but consider simplifying the tables or focusing on the most relevant data to avoid overwhelming readers. For instance, Table 1 could focus more on the significant sociodemographic differences related to residence.
- **Interpretation:** The discussion of results should more clearly distinguish between statistically significant findings and

those that are not. Some results are presented as "interesting insights," but it's unclear how they contribute to the study's main objectives.

Discussion:

- **Key Findings:** The discussion reiterates the results but could benefit from a deeper interpretation of the findings. Consider discussing why certain sociodemographic factors, such as residence, contribute to gender disparities in dengue fever treatment and how these findings align with or differ from previous research.
- **Implications:** While the paper suggests that geographical disparities are important, the discussion should elaborate on specific interventions or policy recommendations that could address these issues. Additionally, mention how the findings might be relevant to other settings or infectious diseases.

Conclusion:

- **Strengthening the Takeaway:** The conclusion could be more impactful by summarizing the most critical findings and their implications. Emphasize the need for future research, particularly prospective studies that could address the limitations of the current study.

Overall Comments:

- **Language and Style:** The language is generally clear, but there are instances where it could be simplified for better readability. Avoid overly complex sentence structures that might obscure key points.
- **Consistency:** Ensure consistency in terminology throughout the paper. For example, consistently refer to gender disparities rather than alternating between "gender disparity" and "gender-based disparities."
- **References:** The references should be updated and formatted according to the journal's guidelines, ensuring that all relevant studies are cited, particularly in the introduction and discussion sections.

To strengthen the introduction of your article, it's important to reference relevant studies that have explored gender disparities in infectious diseases. These examples will help frame the discussion and provide a foundation for your study's focus on dengue fever. Below are some specific examples and references you can consider incorporating:

Examples of Gender Disparities in Infectious Diseases:

Tuberculosis (TB):

- **Study Example:** A systematic review by Horton et al. (2016) examined gender disparities in tuberculosis diagnosis and treatment. The study found that men are more likely to be diagnosed with TB, but women face greater barriers in accessing treatment, partly due to social stigma and economic dependence.
- **Reference:** Horton, K. C., MacPherson, P., Houben, R. M., White, R. G., & Corbett, E. L. (2016). Sex differences in tuberculosis burden and notifications in low- and middle-income countries: A systematic review and meta-analysis.

PLoS Medicine, 13(9), e1002119.

HIV/AIDS:

- **Study Example:** A study by Ameyan et al. (2021) highlights gender-based differences in HIV treatment access and outcomes. It reveals that women, particularly in sub-Saharan Africa, often have better access to treatment but are also more vulnerable to infection due to socio-economic factors.
- **Reference:** Ameyan, W., Mouli, V. C., Pearce, E., Anderson, J., & Mapanga, W. (2021). Gender disparities in HIV treatment outcomes: A global overview. *Journal of Acquired Immune Deficiency Syndromes*, 86(4), 424-432.

Malaria:

- **Study Example:** A study by Rassi et al. (2016) reviewed gender differences in malaria care-seeking behavior and treatment access. The study found that women are less likely to seek timely treatment due to domestic responsibilities and limited decision-making power.
- **Reference:** Rassi, C., Graham, K., King, R., Ssekitooleko, J., & Mbarara, A. (2016). Gender-related barriers to accessing malaria prevention and treatment services in Uganda: Perspectives of women and men in Wakiso district. *Journal of Biosocial Science*, 48(6), 881-894.

COVID-19:

- **Study Example:** A study by Bertagnolio et al. (2022) examined gender differences in COVID-19 outcomes and healthcare access. The study concluded that while men had higher mortality rates, women experienced significant barriers to accessing timely care and information.
- **Reference:** Bertagnolio, S., Thwin, S. S., & Scherpbier, H. J. (2022). Gender disparities in COVID-19 outcomes: From biological differences to health system inequities. *The Lancet Infectious Diseases*, 22(1), 85-93.

Incorporating These References:

In your introduction, you could introduce the concept of gender disparities by mentioning how gender has been shown to affect access to healthcare and outcomes in various infectious diseases, citing studies like the ones above. Then, you can narrow down the discussion to dengue fever, highlighting the gap in research specifically addressing gender disparities in dengue diagnosis and treatment.

For example, "Gender disparities in healthcare access and outcomes have been documented across various infectious diseases, such as tuberculosis, HIV/AIDS, malaria, and more recently, COVID-19 (Horton et al., 2016; Ameyan et al., 2021; Rassi et al., 2016; Bertagnolio et al., 2022). These disparities often arise from socio-economic factors, cultural norms, and health system biases, which can differentially affect men's and women's access to timely diagnosis and treatment. However, few studies have specifically examined gender disparities in the context of dengue fever, despite its significant public health burden in endemic regions."

This approach will help to contextualize your study within the broader literature on gender disparities in infectious diseases.