

Review of: "Misdiagnosis of Dengue Fever as Malaria and Typhoid Fever and Their Co-infection in Rural Areas of Southwest Nigeria"

Maryam Arfaatabar

Potential competing interests: No potential competing interests to declare.

Overall, the text appears to be grammatically correct. However, some sentences and phrases can be improved. For example, in the sentence "Malaria remains one of the deadliest infectious diseases in Africa, and its parasites belong to the genus Plasmodium," you can use "their parasites" instead of "its parasites." Additionally, in the sentence "In addition, the mosquito vectors for the two diseases have different habitats; the malaria mosquito vector has its habitat in the forest [16], while the dengue mosquito vector's main habitat is in the city [19]," you can use "the malaria mosquito vector primarily inhabits forested areas" instead of "the malaria mosquito vector has its habitat in the forest" to make the sentence flow better.

This research provides valuable insights into the prevalence of malaria, dengue, and typhoid infections in the study area, indicating that individuals suffering from these infections may be exposed to hazardous factors such as hemorrhagic dengue fever and even fatal outcomes.

Strengths of this study include:

Research Methods: The use of diverse methods for simultaneous detection of infections, including ELISA and RT-PCR, has been comprehensive and thorough. These methods ensure precise and reliable results.

Sample Size: By collecting over a thousand blood samples, this study has yielded significant and reliable results that can be representative of the study area.

Statistical Analysis: Utilization of appropriate statistical analyses to interpret the data and relationships between variables demonstrates the accuracy and comprehensiveness of the analyses conducted.

Comprehensive Representation of Infection Status: Providing information on distribution by gender, age groups, and monthly distribution of infections demonstrates the precision and completeness of the data analysis.

Weaknesses of this study may include:

Sampling Limitations: The study might suffer from bias due to sampling from a specific community, potentially overlooking the general population.

Lack of Comparison with Data from Other Regions: The research is limited to data from the studied area and lacks



comparison with data from other regions, which could diminish the quantity and quality of the results.

Failure to Provide Recommendations and Solutions: The study lacks recommendations and suggestions for improving conditions and preventing infections in the future, which could slightly reduce the value of the work.

Overall, this study is valuable and provides useful information regarding the prevalence and co-occurrence of malaria, dengue, and typhoid infections in rural communities. However, there is room for improvement to enhance the accuracy and applicability of these findings.