

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

Jonas Etougbétché¹

¹ Université d'Abomey-Calavi

Potential competing interests: No potential competing interests to declare.

Revision of manuscript intitled ‘Misdiagnosis of Dengue Fever as Malaria and Typhoid Fever and Their Co-infection in Rural Areas of Southwest Nigeria’

Appreciation :

This is an interesting study that assessed the misdiagnosis of major tropical infectious diseases and co-infection patterns which could lead to fatal consequences for patients.

The manuscript is well written and well illustrated, but I suggest that it must be proofread and corrected by a scientific English speaker. The most notable concern I raise is the fact that the study didn't focus on the public health importance of misdiagnosis and co-infection deeply.

Comments:

The lines were not numbered, which did not make revision easier.

Abstract

The abstract is not very clear and comprehensive, since the background is too long and the methodology and results are not developed enough to make it easier for readers to understand. So :

- The nature of samples wasn't specified ?
- Provide at least one or two more sentence(s) to describe the methodology, especially how data were analysed.

Keywords

I think you can add « **Infectious diseases ; Nigeria** » to the keywords list

Introduction

The objectives of the study were not clearly defined, so clearly set out the objective(s) of the study.

Methods

I think that for a good understanding of the article, the methodology must be restructured. And I propose the following :
Ethical statement, study design, sample collection, serological examination, molecular detection, statistical analysis.

Study design

Why is the future tense used in line 5?

Sample collection

Specify the year of collection and the origins of the samples.

RT-qPCR procedure

What are the positive and negative controls used for qPCR-based detection ?

What threshold value did you consider to identify positives? And how did you proceed to avoid contamination?

Référence bibliographique

Ref 4 : provided the consultation date of the web page.

Results

The titles of the subsections do not reflect the objectives pursued by the study. I suggest putting:

- Seroprevalence of....
- Molecular prevalence of...
- Co-infection prevalence
- Misdiagnosis
- Age and sex distribution
- Temporal distribution

Figure 3

Reduce the number of digits after the decimal point on the x-axis to one digit

Figure 6

Figure 6 would be more informative if the data were presented as curves instead of a bar chart

Discussion

The implications of misdiagnosis and the potential effects of co-infections on patient health have not been discussed in depth, in my opinion.

