

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

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Potential competing interests: No potential competing interests to declare.

The paper reports information about co-infection by malaria, typhoid, and dengue fever in rural areas of Nigeria. The objective is good. However, the presentation of the design of the study needs a huge correction. Here are a few comments if the authors wish to submit in the future.

Abstract

The method stated in the abstract is incoherent with those stated in the study design and inclusion criteria.

Case definition of positive dengue infection was not defined.

Introduction

The introduction is well written; however, it would be worth describing vectors of malaria as done for dengue.

"This study is not aware of any study that investigated DENV, malaria, and typhoid co-infection and misdiagnosis in Nigeria."

Methods

This part is difficult to understand. E.g., study design and inclusion criteria seem contradictory.

Malaria:

Authors are advised to present all diagnostic tests; RDT for malaria is for which marker and species (*falciparum*, *vivax*...?)

Are diagnostic tests concerned with direct or indirect diagnosis? Interpretation is different.

Dengue diagnostic- RNA extraction

According to the authors, RT-PCR was done only for samples tested positive on NS1, IgM, and IgG. Why? As these markers do not have the same kinetic, this design is not pertinent.

“The primers were sent to Inqaba Biotech, South Africa, for synthesis.” Authors are advised to revise this sentence.

Statistical analysis

The t-test is mainly used to compare quantitative variables between two groups (negative and positive groups). It seems that information about ELISA should be considered as a quantitative variable.

This paper needs a huge correction on statistical methods.