

Title: ON STABILITY ANALYSIS OF CO-INFECTION MODEL ON MALARIA AND ZIKA VIRUS

Journal: Journal of Advances in Mathematics and Computer sciences

In this study, the author proposed a deterministic model for the dynamics of Zika and Malaria . Moreover, they obtained the equilibria points of the model and established local and global stability condition is established. The authors also developed Zika only and Malaria only models .

The title of the paper is interesting and this kind of co-infection model is appreciable to be studied . But the standard of the write up is very low and have a lot of technical problems. I recommend another round of review before publication.

Comments.

1. It have a lot of typos.

Eg. Please let me tell you some lines that have errors either fullstops or comma or space after fullstops.

Line 32, 33, 34, 35, 42, 46, 47,48, 49, 50, 54, 62, 83, 85, 87, 88, ...

Line 61- 62 it is not clear please re-phrase it.

1.1 In section 2 all fullstops and commas are not correct.

- Please label the flow chart for zika and malaria.

- please write the name of the flow chart below the graph not at the top.

- the designation of symbols in the description of the model and in the flow chart is not the same.

Please make it uniform, eg S_h is not the same with S_H .

-Line 126 at the beginning of the paragraph is it he or The? Please sort out it.

2. In Section 3.2 I am surprised. The section title says about stability but the body is on finding DFE. Please re-name the section as “Disease free-equilibrium ”.

In this section on line 151 it says equation (5). Are you sure is it (5) or (3)?????

In section 3.4 Please make a space after 3.4.

On line 209 Are you sure is it (5) or (3)?????

In section 3.6, the title of the section is mixed with body of the section.

Conclusion

The paper is written carelessly with poor English grammar. Before considering for publication I recommend to be written in this way.

After introduction and description of the model please write in the following order.

1. Zika only model

2. Malaria only model

3. The full model (co-infection of zika and Malaria diseases model)

3.1 Boundedness of the solution

3.2 Positivity of the Solution

3.3 DFE

3.4 Basic Reproduction

3.5 Local stability of DFE

3.6 Global stability of DFE

3.7 EE

3.8 local stability of EE

3.9 Global Stability of EE

Then after include sections which I didn't include and that is written in the paper.