

# Review of: "Qualitative Analysis of a Time-Delay Transmission Model for COVID-19 Based on Susceptible Populations With Basic Medical History"

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Potential competing interests: No potential competing interests to declare.

The manuscript is of scientific importance and looks very interesting. However, some of the following notes should be taken into account:

1. It is important to address in the summary the importance of the criterion used in epidemiology, which is the basic reproduction number ( $R_0$ ) and its relationship with the local and global stability of the proposed model.
2. In order to motivate this work, it is preferable to include recent and reliable statistical data in the introduction, and try to improve the introduction of your manuscript.
3. in equation (3), the author excluded E. But exposure is an endemic compartment and has a significant impact on the dynamics of the disease
4. Try to find and cite the sources of the model parameter values (numerical simulations).
5. Try to add more Matlab numerical simulations regarding overall stability to enrich the results.
6. There are grammatical errors and a few typos that need to be checked and corrected throughout the document.

Conclusion: I recommend the publication of this work in the journal, taking into account the comments cited above to improve the quality of the paper.