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.

This paper establishes the SEIR COVID-19 epidemic model of susceptible people with basic medical histories. They obtains the basic reproduction number of this model and proves the existence of the equilibria of the model. Furthermore, they demonstrate the global stability of the disease-free equilibrium. In the end, they carry out several numerical simulations.

Overall, this article proves to be of some academic sophistication in the stability analysis section. English writing skills maybe need to be improved. Moreover, the article is not sufficiently innovative and lacks explanatory biological significance. This manuscript can be published after the following comments revised.

Below are some comments and suggestions.

1. On Page1 Line12: "Numerical simulation" should be "Global stability".

2. On Page4 Line-7: "$m = \gamma + d + a$" should be "where $m = \gamma + d + a$".

3. On Page5 Line3: "$x = (I, S_1, S_2)^T$" should be "$x = (S_1, S_2, I)^T$".

4. On Page5 Line6: Note the writing of $V(x)$.

5. On Page5 Line-4: "point" should be "points".

6. On Page6 Line-4: "$\frac{A}{d}$" should be "$\frac{d}{A}$".

7. On Page7 Line9: the font size of "the equation can be deformed into:" should be larger.

8. On Page7 Line-5: "the equilibrium" should be "equilibra".

9. On Page9 Line-7: "$\begin{pmatrix} U \\ V \\ W \end{pmatrix} = \begin{pmatrix} c_1 \\ c_2 \\ c_3 \end{pmatrix} e^{\lambda \tau}$" should be "$\begin{pmatrix} U \\ V \\ W \end{pmatrix} = \begin{pmatrix} c_1 \\ c_2 \\ c_3 \end{pmatrix} e^{\lambda t}$".

10. On Page9 Line-4 --- -7: "S_1, S_2, I" should be "S_1^*, S_2^*, I^*".

11. On Page10 Line-5: "$[0, +\infty]$" should be "$[0, +\infty)$".

12. On Page11 Line5: "$(S_{10}, S_{20,0})$" should be "$(S_{10}, S_{20}, 0)$".

13. On Page12 Line-7: "e0" should be "E^*".

14. On Page15 Line13: "endemic disease" should be "endemic".

15. Attention needs to be paid to the division of paragraphs throughout the text.

16. Introduction needs to be improved and representative references added.

17. I suggest to add about bifurcations or optimal control theory to analyze the model.