

Review of: "An Optimal Control for Ebola Virus Disease with a Convex Incidence Rate: Imputing from the Outbreak in Uganda"

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Potential competing interests: No potential competing interests to declare.

I thoroughly read the manuscript and found it an excellent work and the theoretical analysis is also good.

- 1. Typos and grammatical errors should be corrected. For example,
- 2. The authors represented Q(t), d0, d1, d2,... several times in the manuscript. Please, summarize the whole thing under one equation and cite throughout the manuscript.
- 3. There is no information that describes why the authors used S* in the first and second equations of Eq. (2.2). Please, provide detail information for Eq. (2.2).
- 4. Right after Eq. (2.6) there is a phrase that says, "Rearranging equations in system (3.1) to get solutions... .Adding equations (1) and (2) of system (3.2) we get...". Double check the way you cited the equations.
- 5. In section 3.1 the authors should state and prove some theorems on the existence of optimal control.
- 6. The difference between figures 1 and 2 is not clear. Please, elaborate it.
- 7. Almost all parameter values in Table 1 are cited from other related papers. There is no indication that you used real Ebola cases in Uganda to fit the data and compare your findings with what was existing in the literature. Why you want to impute the outbreak of Ebola virus in Uganda?
- 8. What is the biological implication of your model?