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

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Reviewer's report

This study formulated and analyzed a mathematical model with a convex incidence rate for an optimal control model of Ebola Virus Disease. An optimal control strategy which aims at reducing the number of infected individuals in the population and increasing the number of recovered through treatment is evaluated. Three control measures: tracing of contacts, lock-down and treatment have been considered. A qualitative analysis and numerical experiments are performed on the model and the findings reveal that the most expensive strategy involved imposing lock-down and contact tracing of the infected while the cheapest alternative was lock-down and treatment of the infected. Hence, policy makers should concentrate on treatment and lock down to combat the disease.

* The content of the paper is good. But, I would like to see the following modifications in the revised version which would increase the strength of the paper.

1. Please be consistent with words you used such Ebolavirus and ebola virus.

2. Define the words used before using abbreviated form.

 You used EBV and EVD interchangeably but you did not define EBV.

3. Give more discussions about the root of the model (2.1) and the positivity of its solution.

4. Analyze the stability of the equilibrium points.

5. Increase the size of your graphs to make them more visible.

6. English is generally good; I think it needs to be polished further and some typos need to be revised.

7. Effect corrections on the manuscript.