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.

The paper is concerned with the prediction of Ebola Virus disease by a scientific model to control its outbreak by a mathematical model with a convex incidence rate. Expectedly, the goal is to focus on an optimal control strategy by reducing the number of infected individuals in the population and increasing the number of recovered through treatment by the assist of tracing of contacts, lock-down and treatment mechanisms. Numerical simuations are performed on the given mathematical model from which the findings reveal that the most expensive strategy involve imposing lock-down.

The work is recommendable for publication in the **Qeios,** since the work falls within the scope of the journal. However, the following concerns must be clarified beforehand;

A) – Language is fluent and fine overall, with some random typos.

B) – There are too many authors whose contributions may be biased.

C) – The model in 2.1 is new or previously used? If so, provide proper references.

D) – I am not sure, but the model 2.1 can be simplified by reducing some compartments.

E) – Authors are interested in peak values in Ebola disease. Therefore, the following relevant works would attract the interest of the researchers in the field “An extended epidemic model with vaccination: Weak-immune SIRVI (DOI: 10.1016/j.physa.2022.127429)” and “Explicit formulae for the peak time of an epidemic from the SIR model (DOI: 10.1016/J.PHYSD.2021.132902)”.

F) – Check the endemis equilibria.

G) – How do you write the objective function? Which parameters are more significant?

H) - Some figures should be rechecked for correctness. Decay in time of illness should be observable.