

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.

1. "Ebola Virus disease (EVD) is an emerging and re-emerging zoonotic disease which mostly occur in Africa." - The word "occur" should be "occurs" as it refers to a singular disease.
2. "Both prediction of the next EVD and controlling an ongoing outbreak remain challenging to disease prone countries." - "prediction" should be "predicting" for grammatical consistency.
3. "Depending on previous experiences to curb an outbreak is subjective and often inadequate as temporal socioeconomic advances are dynamic and complex at each disease." - "at each disease" should be "for each disease" for clarity.
4. "We hypothesize that a scientific model would predict EVD disease outbreak control." - "EVD disease outbreak control" should be "the control of EVD disease outbreaks" for better phrasing.
5. "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." - "increasing the number of recovered" should be "increasing the number of recoveries" for correct grammar.
6. "Three control measures: tracing of contacts, lock-down and treatment have been considered." - "lock-down" should be "lockdown" for consistency with the rest of the text.
7. "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." - "imposing lock-down and contact tracing" should be "imposing lockdown and contact tracing" for consistency. Also, "lock-down and treatment of the infected" should be "lockdown and treatment of the infected".
8. "Hence, policy makers should concentrate on treatment and lock down to combat the disease." - "lock down" should be "lockdown" for consistency. "policy maker" should be one word: "policymaker".
9. "Since it was first discovered in Africa was in 1976 [2]." should be "Since it was first discovered in Africa in 1976 [2]."
10. "and economic cost of \$ 2.8 billion (\$ 600 million for Guinea, \$ 300 million for Liberia, and \$ 1.9 billion for Sierra Leone) [5]." should be "and an economic cost of \$2.8 billion (\$600 million for Guinea, \$300 million for Liberia, and \$1.9 billion for Sierra Leone) [5]."
11. "On 25th June, 2020, World Health Organization (WHO) announced the world's second largest Ebola outbreak in Northern Kivu/Ituri, DRC in which over 3481 cases were recorded with 2299 fatalities. [6]" should be "On June 25th,

2020, the World Health Organization (WHO) announced the world's second largest Ebola outbreak in Northern Kivu/Ituri, DRC in which over 3481 cases were recorded with 2299 fatalities [6]."

12. "Chronology of previous EVD outbreaks include 18 countries since the first outbreak with the 2021 (Guinea and DRC) ongoing, over 8 and 7 outbreaks in DRC and Uganda respectively of Zaire and Sudan ebolavirus species [7]." should be "The chronology of previous EVD outbreaks includes 18 countries since the first outbreak, with the 2021 outbreaks in Guinea and DRC ongoing, and over 8 and 7 outbreaks in DRC and Uganda respectively, caused by Zaire and Sudan ebolavirus species [7]."
13. "On the 26th October 2022, the World Health Organization (WHO), declared an Ebola outbreak caused by Sudan EbolaVirus (SUVD) in Uganda [8]." should be "On October 26th, 2022, the World Health Organization (WHO) declared an Ebola outbreak caused by Sudan EbolaVirus (SUVD) in Uganda [8]."
14. "By 18th November 2022, 114 cases EBV has reportedly been" should be "By November 18th, 2022, 114 cases of EBV have reportedly been."
15. "The outbreak of EBV is attributed to the transmission from humans, animals, on objects or surfaces contaminated by body fluids of an infected person for example clothing of or bedding of a sick person that have not been cleaned [9]." should be "The outbreak of EBV is attributed to the transmission from humans, animals, or objects or surfaces contaminated by body fluids of an infected person, for example, clothing or bedding of a sick person that have not been cleaned [9]."
16. "The EBV is a very contagious disease with signs and symptoms including severe fever, headache, muscle pain, weakness, fatigue, vomiting, diarrhea, stomach pain, and bleeding from all body openings." should be "EBV is a very contagious disease with signs and symptoms including severe fever, headache, muscle pain, weakness, fatigue, vomiting, diarrhea, stomach pain, and bleeding from all body openings."
17. "The incubation period for Ebola can be anywhere from 2 to 21 days." should be "The incubation period for Ebola can range from 2 to 21 days."
18. "Since it was first discovered in Africa was in 1976 [2]." should be "Since it was first discovered in Africa in 1976 [2]."
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26. "The incubation period for Ebola can be anywhere from 2 to 21 days." should be "The incubation period for Ebola can range from 2 to 21 days."
27. Overall the article should be revised for its grammatical errors.
28. The explanations of the model parameters should be explicit with their physical meanings.
29. The introduction should be rewritten with a clear motivation for the models.
30. References appears not to be aligned with statements. Recheck the references.