

**Review Form 3**

Journal Name:	<a href="#">Journal of Advances in Mathematics and Computer Science</a>
Manuscript Number:	Ms_JAMCS_125058
Title of the Manuscript:	Effective Management of COVID-19 in Nigeria: Investigating the Impact of Treatment and Prevention
Type of the Article	Original Research Article

**Review Form 3**

**PART 1: Review Comments**

<b>Compulsory</b> REVISION comments	Reviewer's comment	<b>Author's Feedback</b> (Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Please write a few sentences regarding the importance of this manuscript for the scientific community. Why do you like (or dislike) this manuscript? A minimum of 3-4 sentences may be required for this part.	Mathematical models are useful for devising strategies, implementing appropriate measures to mitigate epidemics, especially in countries like Nigeria. In the manuscript a mathematical model has been developed which would help in the management of the epidemic and can be used to draw conclusions regarding the management of the epidemic. However, there are some important issues in the text that should be addressed.	
Is the title of the article suitable? (If not please suggest an alternative title)	The title is suitable.	
Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here.	In the abstract is mentioned that "Covid-19 can be contained and eliminated from the population in a finite amount of time if $R_{eff} < 1$ , which indicates the existence of a disease-free equilibrium that is locally and globally asymptotically stable. If $R_{eff} > 1$ , on the other hand, the illness infiltrates and becomes endemic in the population", but is not analyzed or discussed anywhere in the rest of the manuscript.	
Are subsections and structure of the manuscript appropriate?	Yes	
Please write a few sentences regarding the scientific correctness of this manuscript. Why do you think that this manuscript is scientifically robust and technically sound? A minimum of 3-4 sentences may be required for this part.	<ol style="list-style-type: none"> <li>1. The theorems presented have not been applied to the specific model in question. Instead, well-known theorems of uniqueness and existence of the solution are merely mentioned. I believe that simply referencing these theorems serves no purpose unless they are directly applied to the specific model. Therefore, they should either be applied or omitted altogether.</li> <li>2. The values of the model parameters have not been presented anywhere. It is unclear whether the model has been fitted with real data or how the sensitivity analysis was conducted. The same issue applies to the simulations that follow. Without the values of key parameters, it is impossible to assess the robustness of the results.</li> <li>3. The results of the simulations are not analyzed anywhere in the text, nor what is investigated through these simulations. Also, the caption on image 5 and 6 does not match the image.</li> </ol>	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.		
<p><b>Minor</b> REVISION comments</p> <p>Is the language/English quality of the article suitable for scholarly communications?</p>	There are some technical issues, such as spaces, font size difference, and bold writing	
<b>Optional/General</b> comments	In general, I consider it necessary to add text that analyzes the parameterization of the model and the results of the simulations.	

**Review Form 3**

**PART 2:**

	<b>Reviewer's comment</b>	<b>Author's comment</b> <i>(if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
<b>Are there ethical issues in this manuscript?</b>	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

**Reviewer Details:**

Name:	<b>Sofia Liossi</b>
Department, University & Country	<b>School of Medicine, National and Kapodistrian University of Athens, Athens General Hospital, Greece</b>