

Review Form 1.7

Journal Name:	Asian Research Journal of Mathematics
Manuscript Number:	Ms_ARJOM_112120
Title of the Manuscript:	Mathematical Modelling and Computational Dynamics of Quasi-Lockdown Control of COVID-19 Pandemic in Akwa Ibom State, Nigeria
Type of the Article	

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PART 1: Review Comments

	Reviewer's comment	Author's comment (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)
<p>Compulsory REVISION comments</p> <ol style="list-style-type: none"> Is the manuscript important for scientific community? (Please write few sentences on this manuscript) Is the title of the article suitable? (If not please suggest an alternative title) Is the abstract of the article comprehensive? Are subsections and structure of the manuscript appropriate? Do you think the manuscript is scientifically correct? Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form. <p>(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)</p>	<ol style="list-style-type: none"> History says that Mathematical Modeling has always played an instrumental role in curtailing diseases spreading in the population whether it was Cholera, Flu, Ebola, or Covid-19. Hence this manuscript is going to help the scientific community for future studies and improvements in different pandemic-related strategies. I find the title appropriate. The abstract is comprehensive and nicely written to showcase the idea of the manuscript. The whole manuscript is sectioned well. The subsections are also appropriate and bifurcated well to address different points. Scientifically, the manuscript is mostly correct. Only one point to be noted. Page-12 (points i, ii, iii, iv) In all the points the author has written: “..... when $\phi < 0$ with $\phi < 1$.....” . If the symbol “\ll” is used to state “much less than” then it needs a little more mathematical explanation. In my opinion the references are sufficient. 	
<p>Minor REVISION comments</p> <ol style="list-style-type: none"> Is language/English quality of the article suitable for scholarly communications? 	<p>I have observed some grammatical and typing errors which are as below.</p> <ul style="list-style-type: none"> Page-6: The last line in the Remark (after theorem-1) “The following lemma guides the prove of this theorem.” Corrected: “The following lemma guides to the proof of this theorem.” Page-7: In the Remark (after lemma-3) “.... Continuous function.....” Corrected: “.... Continuous functions.....” Page-8: Line-2 “Hence the prove is complete.” Corrected: “Hence the proof is complete.” Page-8: In the Remark (after corollary) “Since a uniformly continuous functions is ultimately bounded.” Corrected: “Since a uniformly continuous function is ultimately bounded.” Page-10: In the line-2 in the Proof of theorem-3 “.....endemic equilibrium point exitst.” Corrected: “.....endemic equilibrium point exists.” Page-11: Line-2 in section-3 A typing error is found in the notations. “E0” and “E1” need to be replaced with E_0 and E_1. Page-11: Line-2 in subsection 3.1 “.....is an equilibrium point of the system ??2.8.....” Corrected: I guess that the author wants to place a reference but due to some typing error ?? is printed. Page-11: in the last line “.....local dynamics of the system ?? around.....” Corrected: I guess that the author wants to place a reference but due to some typing error ?? is printed. Page-14: In the first line of subsection 4.1 “The observed dataset from NCDC are.....” 	

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	<p>Corrected: "The observed datasets from NCDC are....."</p> <ul style="list-style-type: none"> Page-20: Section-5 Line-5 ".....Its seeks to investigates....." Corrected: "It seeks to investigate....." Line-8 ".....the model were established....." Corrected: ".....the model was established....." Line-15 "....quazi-lockdown policy was among the most....." Corrected: "....quazi-lockdown policy was the most....." 	
<p>Optional/General comments</p>	<ul style="list-style-type: none"> The manuscript is mathematically sound. The author has used real-time data adapted from NCDC. Theoretical results are validated and showcased using diagrams. The introduction is well written with extensive information on coronavirus, its variants, COVID-19, symptoms, etc. I found the script a little weak from a grammatical and language point of view. 	

PART 2:

	Reviewer's comment	Author's comment (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)
<p>Are there ethical issues in this manuscript?</p>	<p><i>(If yes, Kindly please write down the ethical issues here in details)</i></p>	

Reviewer Details:

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