Review Form 1.6

Journal Name:	Asian Research Journal of Mathematics
Manuscript Number:	Ms_ARJOM_80976
Title of the Manuscript:	Mathematical analysis for an \SEIR" epidemic model
Type of the Article	Original Research Article

General guideline for Peer Review process:

This journal's peer review policy states that <u>NO</u> manuscript should be rejected only on the basis of '<u>lack of Novelty'</u>, provided the manuscript is scientifically robust and technically sound. To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

(https://www.journalarjom.com/index.php/ARJOM/editorial-policy)

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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)
Compulsory REVISION comments	 General Comments: Generally, an article is well written and have contribution in the field of Epidemiology and diseases in particular. Sections are well identified and worked through with complete ideas. All computations are well done unfortunately, the author(s) did not show the sources of data in the simulation part of the manuscript. Specific Comments: Title should reflect the introduction. Try to restructure the title to reflect COVID-19 as mostly seen in your introduction part. Remember different diseases have different transmission dynamics. Also, remove "" signs from the title. Which disease obeys this mode of transmission? Is the disease not cause death? why? What parameter associate the disease induced death? Are d_s, d_e, d_i, and d_r, differ? why? I think all represent the natural death rate of susceptible population. Check them all clearly. Is this theorem valid "Theorem2"? Is the endemic equilibrium point unstable for R>1? What is the origin of the model parameter values? Are the parameters assumed or estimated? What methods have been used to estimate your parameter values? Observe critically, why do susceptible population increasing without any control? After identifying the disease, looking for data related to the disease, author(s) can draw again the graphs. The conclusion part is ok. 	
Minor REVISION comments	Accept the manuscript and consider it for publication after the suggested Major corrections.	
Optional/General comments	Generally, an article suites the Asian Research Journal of Mathematics (ARJOM)	

PART 2:

		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)
Are there ethical issues in this manuscript?	(If yes, Kindly please write down the ethical issues here in details)	

Reviewer Details:

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Department, University & Country	University of Dar es Salaam, Tanzania

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