



SDI Review Form 1.6

Journal Name:	Journal of Advances in Mathematics and Computer Science
Manuscript Number:	Ms_JAMCS_48982
Title of the Manuscript:	MATHEMATICAL MODEL OF THE TRANSMISSION DYNAMICS OF LASSA FEVER WITH SEPARATION OF INFECTED INDIVIDUAL AND TREATMENT AS CONTROL MEASURES
Type of the Article	Short Research

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', 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:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)



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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	<p>Parameter β is not used in the equation. Justify.</p> <p>β_1 and β_2 in Table 1 are not clearly mentioned.</p> <p>In the mathematical model why the author has not considered the removed/recovered compartment. Justify.</p> <p>References 2,3 4, 6, 11 - 19 not cited in the paper. Proper care should be taken.</p> <p>Initial conditions are chosen from reference 19 but cited as 20.</p> <p>Graphs does not match the initial condition. He has taken initially there are 2000 infected individuals so the variation either increase/ decrease should be from 2000.</p> <p>In all the graphs same problem. Graphs have to be rework and checked the feasibility.</p> <p>The control measure namely isolation of infected seems not much effective. From the graph, we are not inferring a significant difference in the infected population, if the separation rate is increased.</p> <p>Author can show the variation of susceptible, exposed, infected, treated human and susceptible and infected rodent with respect to time as he is trying to control the disease by isolating the infected and giving treatment for the same.</p>	<p>β is not considered because it is not an effective contact rate of susceptible human</p> <p>Noted</p> <p>We didn't consider remove compartment since is unnecessary to let some infected individuals leave the system by way of removal but we considered all the individuals in the compartment as going for treatment except those who die as a result of both natural and death due to Lassa fever. Furthermore, recovered compartment was not considered since treated individuals move directly to the susceptible class.</p> <p>Noted</p> <p>That's due to re arrangement of the reference without adjusting the affected areas in the work that seems the mistake in citing the 20 instead of 19.</p> <p>The scale for the graphs are main representation of the initial value</p> <p>Actually separation rate is a decreasing function of the infected because when the infected are separated they have no other direct contact with other class except the treatment class where they are expected to be treated and then return to susceptible class in finite time</p>
Minor REVISION comments	<p>In line 125, the equation (7) should read for rate of change of infected rodents</p> <p>In line 222, it should be rewriting (35)...</p> <p>In line 229, it should be equation (38) ...</p> <p>In line 235, it should be rewriting (41)...</p> <p>In line 248, use (36)and (42)</p> <p>Spelling mistake in line 265</p> <p>In line 257, it should be evaluating (55)...</p>	NOTED
Optional/General comments		

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)
Are there ethical issues in this manuscript?	<p>(If yes, Kindly please write down the ethical issues here in details)</p>	<p>The reporter consent is one of the major ethical issue, by this means the right of the patients are highly protected which carefully deals with respect for privacy. However our informed consent for discussions and interviews was obtained orally and recorded.</p>