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#### **SDI Review Form 1.6**

Journal Name:	Journal of Advances in Mathematics and Computer Science
Manuscript Number:	Ms_JAMCS_48751
Title of the Manuscript:	ANALYSIS AN MODELING OF TUBERCULOSIS TRANSMISSION IN KENYA
Type of the 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: (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 agree highlight that part in the ma his/her feedback here)
Compulsory REVISION comments	THIS PAPER CONTAINS SERIOUS PROBLEMS THAT NEED TO BE ADDRESSED. WHEN READING THE TITLE ONE IS GIVEN THE INDICATION THAT THIS MODEL ADDRESSES THE MATHEMATICAL MODELING OF TUBERCOLOSIS IN KENYA. HOWEVER THE PAPER DOES NOT CONTAIN ANY DATA FOR KENYA. SO HOW DOES IT REFER TO KENYA ??? IT IS RATHER THE ANALYSIS OF A MODEL OF TUBERCULOSIS. THERE ARE NO REFERENCES IN THE MAIN TEXT OF THIS PAPER AND THE CONCLUSIONS ARE TOO SHORT. Additionally this paper has too many presentation and clarification issues that need to be improved and resolved. Some suggestions are included below. THE AUTHORS SHOULD READ Spatial Temporal Modelling of Tuberculosis in Kenya Using Small Area Estimation by	his/her feedback here)
	Hillary Kipruto et al. This paper uses information for Kenya and shows how a very good paper about tuberculosis modelling in Kenya can be presented properly.   Change title to ANALYSIS AND MODELLING OF TUBERCULOSIS TRANSMISSION IN KENYA   Or A MODEL OF TUBERCOLOSIS TRANSMISSION Or MODELLING TUBERCOLOSIS IN KENYA	
	Abstract (Corrections) A mathematical model that explains the transmission of Tuberculosis Consisting of four compartments; the susceptible, the infectious, the latently infected, and the recovered humans was developed. Then the disease free and endemic equilibrium points were analyzed. The basic reproduction number using the next generation matrix approach was computed . The Tuberculosis model is analyzed in order to give a proper account of the impact of its transmission dynamics and the effect of latent stage in TB transmission. If the basic reproduction number is > 1, TB will continue to persist in the environment. This is due to the fact that the rate of contact with the infectious is greater than the recovery rate. The findings show that as more people come into contact with infectious individuals, the spread of TB would increase. (similar corrections must be made for every part of the paper that is full of errors and mistakes!!! E.g. Reference should read as References, The references are not properly presented etc. etc.)	
	N(t)=S(t)+L(t)+I(t)+R(t), where; ??? what is this for kindly clarify	

### reed with reviewer, correct the manuscript and anuscript. It is mandatory that authors should write

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	Lines 37-50 Figure 3.1: Model flow chart showing the compartments Where was this figure obtained from? If from another source it needs to be properly referenced!! Even how was this model flow chart derived? What assumptions have been made? Why was this flowchart choosen? Kindly elaborate more.	
	Lines 53- 60 The Disease Free Equilibrium (are these the authors equations or not ? They must be referenced if they have been obtained from another source!!!) The authors need to recheck the equations and give a better explanation along with	
	Lines 91,92 what is DEE and EE kindly explain Kindly add more work and explanations to your conclusions. Kindly compare with	
	similar works! Lines 100 -110. This is too short. NO REFERENCES HAVE BEEN INCLUDED IN THE MAIN TEXT. THIS IS A SERIOUS OMISSION. More sub-topics need to be added to this paper. E.g. pictures of Kenva. Where is the	
	model applicable, which towns, is this a macro or micro model? What are its limitations? How does it compare to other models? A data set should be used to evaluate the model and it could be checked against real data. A full literature review and comparisons with other similar models etc is expected. These are missing from the paper.	
	The formatting of the paper is incomplete and not suitable for the journal where it is being presented! The authors are strongly encouraged to do more work and add more material as suggested before re sending this paper.	
Minor REVISION comments		
Optional/General comments		

# PART 2:

	Reviewer's comment	Author's comment (if agreed highlight that part in the manu
Are there ethical issues in this manuscript?	(If yes, Kindly please write down the ethical issues here in details)	

#### **Reviewer Details:**

Name:	Anthony Spiteri Staines
Department, University & Country	University of Malta, Malta

d with reviewer, correct the manuscript and uscript. It is mandatory that authors should write