



**SDI Review Form 1.6**

**PART 1:**

|                          |                                                                                                                                  |
|--------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| Journal Name:            | <b><u>British Journal of Mathematics &amp; Computer Science</u></b>                                                              |
| Manuscript Number:       | <b>2013_BJMCS_4682</b>                                                                                                           |
| Title of the Manuscript: | <b>ANALYSIS AND MODELLING OF PREVALENCE OF HEPATITIS B USING DIFFERENTIAL EQUATIONS: A CASE STUDY OF THE TANO NORTH DISTRICT</b> |
| Type of the Article      | <b>Research paper</b>                                                                                                            |

**General guideline for Peer Review process is available in this link:**

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

- This form has total 7 parts. Kindly note that you should use all the parts of this review form.



## SDI Review Form 1.6

### **PART 2:** Review Comments

|                                               | <b>Reviewer's comment</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <b>Author's comment</b> (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) |
|-----------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b><u>Compulsory</u></b><br>REVISION comments | This paper to explore the impact of hepatitis B vaccination using the mathematic model in Tano, it is poor written and has many questions to be clarified. In the results, author got a data that only 0.44% of the susceptible population should be vaccinated, if the susceptible population is lower as 0.44% in this district, I would say this population is immunized, I will not worry about the outbreak of HBV infection. Finally, author could not have a right conclusion to study population, since the data analysis should base on the epidemiology characteristic in this district, which is missed in the paper.                    |                                                                                                                                                                                      |
| <b><u>Minor</u></b><br>REVISION comments      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                      |
| <b><u>Optional/General</u></b> comments       | <ol style="list-style-type: none"> <li>1. Background: Author talked lot hepatitis and liver disease, not very focusing on hepatitis B and vaccination, does not address the purpose of this study, that is to say, not any words to say the case for action to this study.</li> <li>2. Reader may want to know where Tano, what the background in this district, but the information is missed in background.</li> <li>3. Author cited some words from lead ship in Ghana, which may not appreciated to this paper.</li> <li>4. There is a track of the thesis; does author want to publish a result of a thesis research? Line 91, "The</li> </ol> |                                                                                                                                                                                      |



**SDI Review Form 1.6**

|  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |
|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
|  | <p>purpose of this study is to investigate....” And Line 100,”The purpose of this thesis is to .....” all these does not make any sense.</p> <p>5.Mathematical modeling: author used many literatures to support his paper, but not well matched, seems to me that author is not a hepatitis specialist or Epidemiologist, does not familiar with hepatitis B.</p> <p>6. Line 139-147, author should tell the reader where the data from, the accuracy of the data is.</p> <p>Dose author know the Markov model which is common used for modeling the hepatitis B and its impact?</p> <p>7. There are so many calculations, but difficult to understand how these calculations come from.</p> <p>8. The literature format is not consistent in this paper, should be changed. Some literatures author cited has good example, but the output is much differ from one of this modeling.</p> |  |
|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|

**Reviewer Details:**

|                                  |                                                                                                            |
|----------------------------------|------------------------------------------------------------------------------------------------------------|
| Name:                            | <b>Cui Fuqiang</b>                                                                                         |
| Department, University & Country | <b>National Immunization programme (NIP), China Center for Disease Control and Prevention (CDC) China.</b> |