

**Review Form 3**

Journal Name:	<a href="#">Journal of Advances in Mathematics and Computer Science</a>
Manuscript Number:	<b>Ms_JAMCS_126702</b>
Title of the Manuscript:	<b>Deterministic and Stochastic Nonlinear Schistosomiasis Model with Delay and Vaccination</b>
Type of the Article	<b>Original Research Article</b>

### Review Form 3

#### PART 1: Review Comments

<u>Compulsory</u> REVISION comments	Reviewer's comment	Author's Feedback (Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Please write a few sentences regarding the importance of this manuscript for the scientific community. Why do you like (or dislike) this manuscript? A minimum of 3-4 sentences may be required for this part.	The manuscript is written systematically and scientifically. It is well organized as per journal policy. I like the manuscript for its technically and mathematically presentation. The author has done a good job with including vaccination in the delayed SIR model, it make sense to approach for a solution of the disease spread.	
Is the title of the article suitable? (If not please suggest an alternative title)	Yes	
Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here.	<p>Yes , abstract is well organized and I have some suggestions to improve the readability and fluency.</p> <ol style="list-style-type: none"> <li>1. "Then, we will alter some of the coefficients to create a new stochastic SIR model" - This would flow better if stated in a passive voice like the earlier part: "Next, some of the coefficients will be altered to create..."</li> <li>2. "Using the Lyapunov function" - You could add clarification, especially for non-experts, such as "Using the Lyapunov function, a mathematical tool used to assess stability..."</li> <li>3. "Necessary and sufficient conditions for the regularity" - This phrasing is somewhat vague. It would be clearer as: "necessary and sufficient conditions for the stability, existence, and uniqueness..."</li> </ol>	
Are subsections and structure of the manuscript appropriate?	Yes	
Please write a few sentences regarding the scientific correctness of this manuscript. Why do you think that this manuscript is scientifically robust and technically sound? A minimum of 3-4 sentences may be required for this part.	<ol style="list-style-type: none"> <li>1. Under the section 2.2 there should be subsections 2.2.1 Existence and uniqueness of solutions , 2.2.2 Positivity of the vector <math>X(t)</math>, 2.2.3 Disease-free equilibrium DFE : <math>E_0</math> , 2.2.4 Basic reproduction number <math>R_0</math>.</li> </ol> <p>This manuscript is scientifically robust for its novelty, because it has the SIR delay model taking into account the dynamics of cercariae and miracidia and vaccination strategies that accounts for the dynamics of parasites in both molluscs and humans.</p>	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form. =	<p>Some references may be add:</p> <ol style="list-style-type: none"> <li>1. Soni, M., Sharma, R. K., &amp; Sharma, S. (2024). PREVENTION STRATEGIES TO CONTROL AN EPIDEMIC USING A SEIQHRV MODEL. <i>The Pure and Applied Mathematics</i>, 31(2), 131-158.</li> <li>2. Soni, M., Sharma, R. K., &amp; Sharma, S. (2021). The basic reproduction number and herd immunity for COVID-19 in India. <i>Indian Journal of Science and Technology</i>, 14(35), 2773-2777.</li> </ol>	
<u>Minor</u> REVISION comments  Is the language/English quality of the article suitable for scholarly communications?	Yes	
<u>Optional/General</u> comments	No comment	

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**PART 2:**

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

**Reviewer Details:**

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