

**Review Form 1.7**

Journal Name:	<b>Journal of Advances in Biology &amp; Biotechnology</b>
Manuscript Number:	<b>Ms_JABB_109412</b>
Title of the Manuscript:	<b>NOTIFICATIONS OF LEPTOSPIROSIS IN THE STATE OF CEARÁ - BRAZIL, FROM 2013 TO 2019: PROFILE OF CASES AND FACTORS ASSOCIATED WITH THE INCIDENCE</b>
Type of the Article	<b>Original Research Article</b>

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**PART 1: Review Comments**

	Reviewer's comment	Author's comment <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>
<p><b><u>Compulsory</u></b> REVISION comments</p> <ol style="list-style-type: none"> <li>1. <b>Is the manuscript important for scientific community?</b> (Please write few sentences on this manuscript)</li> <li>2. <b>Is the title of the article suitable?</b> (If not please suggest an alternative title)</li> <li>3. <b>Is the abstract of the article comprehensive?</b></li> <li>4. <b>Are subsections and structure of the manuscript appropriate?</b></li> <li>5. <b>Do you think the manuscript is scientifically correct?</b></li> <li>6. <b>Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form.</b></li> </ol> <p><b><u>(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)</u></b></p>	<ol style="list-style-type: none"> <li>1. The manuscript provides valuable insights into the epidemiology of leptospirosis in the State of Ceará, highlighting its correlation with socioeconomic factors and rainfall. This is particularly important for the scientific community as it contributes to the understanding of disease patterns in tropical, developing regions and informs public health strategies.</li> <li>2. The title "NOTIFICATIONS OF LEPTOSPIROSIS IN THE STATE OF CEARÁ - BRAZIL, FROM 2013 TO 2019: PROFILE OF CASES AND FACTORS ASSOCIATED WITH THE INCIDENCE" is informative and accurately reflects the core content of the manuscript. It identifies the disease of interest, the geographical scope, and the timeframe, and hints at the analytical focus on case profiles and associated factors. The use of uppercase letters throughout may not be necessary and could be replaced with standard title case for better readability: "Notifications of Leptospirosis in the State of Ceará, Brazil, from 2013 to 2019: Profile of Cases and Factors Associated with Incidence" This alternative provides the same information but may be easier to read and more aligned with the stylistic norms of scientific literature titles.</li> <li>3. The abstract of the article seems to provide a comprehensive overview of the study, addressing its objective, methods, key findings, and conclusion succinctly: <ul style="list-style-type: none"> <li>• Objective: Clearly states the purpose of the study.</li> <li>• Methods: Briefly describes the study design and the data source.</li> <li>• Results: Summarizes the main findings, including incidence, fatality rate, demographic details of the affected population, diagnostic methods, and cure rate.</li> <li>• Conclusion: Offers a high-level conclusion about the trend in leptospirosis reports and its association with rainfall and socioeconomic factors.</li> </ul> <p>Keywords: The selected keywords are relevant to the content and scope of the study.</p> <p>However, for an abstract to be fully comprehensive, it may benefit from a few additional pieces of information:</p> <ul style="list-style-type: none"> <li>• A brief context or background of the disease's impact in the region to set the stage for the study's significance.</li> <li>• Any significant analytical methods or statistical techniques used in the analysis could be mentioned if space permits.</li> <li>• Implications of the findings or recommendations for policy or practice, if any, could be included to highlight the importance of the study.</li> </ul> <li>4. The structure of the manuscript is coherent and aligns with the norms for scientific reporting in epidemiology. Each section/subsection contributes to the overall narrative, building upon the previous section's information.</li> <li>5. <b><u>Scientific correctness of the manuscript:</u></b> <b>Title, Abstract, and Introduction:</b> <ul style="list-style-type: none"> <li>• The title, abstract, and introduction set clear expectations for the manuscript. They provide a good overview of the study's objectives, background, and significance.</li> </ul> </li> </li></ol>	

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	<p><b>Materials and Methods (Methodology):</b></p> <ul style="list-style-type: none"><li>• The methodology is appropriate for a descriptive epidemiological study and is well-articulated. However, it would benefit from a more thorough explanation of the rationale behind the choice of bimonthly intervals and the aggregation of ethnic groups. These decisions could influence data interpretation and should be justified.</li><li>• The use of incidence and lethality rates is apt for the study's aims. Yet, the application of additional statistical methods could enhance the robustness of the analysis. If statistical tests were used to determine the significance of trends or associations, they should be explicitly described.</li><li>• The manuscript should address potential limitations of using secondary data, such as incomplete records or reporting biases, which could impact the study's conclusions.</li><li>• Rainfall data's integration into the analysis requires clarification. The method by which these environmental data points are correlated with leptospirosis cases should be described to understand their impact on disease incidence.</li></ul> <p><b>Results:</b></p> <ul style="list-style-type: none"><li>• The results section is structured and appears to cover the scope of the analysis well.</li></ul> <p><b>Discussion:</b></p> <ul style="list-style-type: none"><li>• The discussion provides an insightful comparison of the findings with previous studies, offering a thoughtful analysis of the factors influencing leptospirosis incidence and mortality rates. It also rightly connects the disease's occurrence with socioeconomic factors and environmental conditions like rainfall and flooding.</li><li>• A detailed examination of the impact of age, occupation, and socioeconomic status on the risk of leptospirosis provides a nuanced understanding of the disease's epidemiology. However, the discussion would benefit from addressing the potential influence of underreporting or misclassification of cases on the findings.</li><li>• The link between educational levels, sanitation conditions, and the incidence of leptospirosis is an important point. The large percentage of cases with missing education data warrants a call for better data collection practices. This aspect could have a significant section dedicated to it, emphasizing the need for improved surveillance and data recording.</li><li>• The mention of racial disparities and their correlation with the incidence of leptospirosis is crucial. The manuscript should explore this further, considering the potential for systemic biases in healthcare access and reporting to influence these findings.</li></ul> <p><b>Conclusion:</b></p> <ul style="list-style-type: none"><li>• The conclusion effectively encapsulates the main findings and their implications for public health interventions and policy. It could be strengthened by including recommendations for future research, particularly in areas where data gaps were identified.</li></ul>	
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	<p><b>Overall Scientific Correctness and Coherence:</b></p> <ul style="list-style-type: none"> <li>The manuscript appears to be scientifically sound, with logical coherence from the introduction to the conclusion. It would benefit from more detail in certain areas to strengthen the scientific rigor, such as statistical analysis and data limitations.</li> </ul> <p><b>Critical Feedback:</b></p> <ul style="list-style-type: none"> <li>To enhance the manuscript, consider including a more explicit description of statistical methods used, justifications for methodological decisions (e.g., bimonthly periods, combining ethnic groups), and a deeper discussion of data limitations.</li> <li>A more in-depth integration of environmental factors, particularly rainfall, with the incidence data would offer a more comprehensive understanding of disease dynamics.</li> <li>Addressing the significant amount of missing data and its potential impact on the study's conclusions will be vital for the scientific community to evaluate the findings fully.</li> </ul> <p>Overall, the manuscript provides valuable insights into the epidemiology of leptospirosis in Ceará, Brazil. With the addition of further methodological details, clarification of data handling, and critical reflection on limitations, the paper can contribute further to the field.</p> <p>6. The references are sufficient and recent.</p>	
<p><b>Minor</b> REVISION comments</p> <p>1. Is language/English quality of the article suitable for scholarly communications?</p>	<p>YES</p>	
<p><b>Optional/General</b> comments</p>		

**PART 2:**

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

**Reviewer Details:**

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