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Dr. Kovy Arteaga-Livias
Editor-in-Chief
Microbe, Infection and Chemotherapy Journal.

Subject: Response to Reviewers.

Dear Dr. Arteaga-Livias,

We sincerely appreciate the time and effort the reviewers have taken to assess our manuscript. Their constructive feedback has been invaluable in improving our work. Below, we provide a detailed response to each comment, indicating the changes made in the revised manuscript.

Reviewer A

1. Summary

- Comment: The abstract mentions 300 samples but then states 185 bacterial isolates. This discrepancy needs clarification.
- Response: We have clarified that out of 300 samples, 185 yielded bacterial growth. This distinction has been made explicit in the revised abstract.

- Comment: The abstract states "Molecular analysis revealed the blaTEM gene in all ESBL-producing isolates, with blaSHV detected in some." It should specify the exact number or percentage of isolates with blaSHV.
- Response: The revised abstract now specifies the exact number and percentage of isolates harboring blaSHV.

2. Introduction

- Comment: A more focused literature review on *K. pneumoniae* prevalence and resistance mechanisms in Nigeria or West Africa is needed.
- Response: We have expanded the introduction to include a focused review of *K. pneumoniae* prevalence and resistance in Nigeria and the West African region.

- Comment: The last paragraph of the introduction is repetitive.
- Response: We have streamlined the paragraph to remove redundancy while maintaining clarity.

3. Methodology

- Comment: The criteria for patient inclusion should be clearly defined.
- Response: We have revised section 2.3 to clearly outline the inclusion criteria used for patient selection.

- Comment: The microbiological and biochemical tests used for bacterial identification should be explicitly listed.
- Response: We now explicitly list the microbiological and biochemical tests (Gram staining, oxidase test, catalase test, citrate utilization, urease test, and indole test).

- Comment: The CLSI edition used for antibiotic susceptibility testing should be specified.
- Response: We have stated that the CLSI M100 30th edition was used.

- Comment: The concentration of Trimethoprim-Sulfamethoxazole should be corrected.
- Response: The concentration has been corrected, specifying both Trimethoprim and Sulfamethoxazole concentrations.

- Comment: The distance between discs in the phenotypic ESBL detection should be measured edge to edge.
- Response: We have revised the description to clarify that the distance was measured edge to edge.

- Comment: The DNA extraction method should have a proper citation.
- Response: A citation for the alkaline lysis method has been added.

- Comment: The primer table is missing the product size for blaCTX-M, and the annealing temperature should be explicitly mentioned.
- Response: The product size for blaCTX-M has been added, and the annealing temperature is now explicitly mentioned.

- Comment: More details on the PCR mix should be provided.
- Response: We have included the concentrations of MgCl₂ and dNTPs in the revised methodology.

- Comment: Mention if statistical power analysis was conducted.
- Response: We have stated that a statistical power analysis was conducted.

4. Results

- Comment: Figures and tables are redundant; related data should be combined.
- Response: We have revised and combined overlapping tables/figures to enhance clarity.

- Comment: Table 2 contains a column labeled "NG," which is not explained.
- Response: We have clarified that "NG" refers to "No Growth" in the table caption.

- Comment: Figure 1 is irrelevant and should be removed.
- Response: Figure 1 has been removed.

- Comment: Table 3's caption mentions a T-test, but the results are incomplete.
- Response: We have revised the table caption to include degrees of freedom, t-statistic, and p-value.

- Comment: Table 4 should clarify that percentages in the ESBL K. pneumoniae column are based on isolates, not total samples.
- Response: We have added a clarification in the table caption.

- Comment: Figure 3 lacks band labels.
- Response: We have labeled the bands clearly and improved the figure legend.

5. Discussion

- Comment: Some statements lack supporting evidence from the study's results.
- Response: We have revised the discussion to ensure that all claims are supported by data.

- Comment: The discussion mentions blaOXA was not detected, but screening for it was not mentioned in the methods.
- Response: Since blaOXA was not screened, we have removed this statement.

- Comment: The discussion reiterates results rather than critically interpreting them.
- Response: We have added a critical interpretation comparing our findings to global trends.

- Comment: Study limitations should be discussed.
- Response: We have added a section discussing limitations such as reliance on phenotypic methods and sample representativeness.

6. Conclusion

- Comment: The conclusion is repetitive and should be more concise.
- Response: We have revised the conclusion to be more concise and impactful.

7. References

- Comment: References should conform to the Vancouver style.
- Response: We have reformatted all references according to the Vancouver style.

8. Ethical Aspects

- Comment: The manuscript should provide more detail on confidentiality measures and consent.
- Response: We have expanded the ethical statement to include confidentiality measures and the consent process.

Reviewer B

1. Title

- Comment: The manuscript lacks a title.
- Response: We have included a title that accurately reflects the content of the study.

2. Summary

- Comment: Keywords should be included immediately after the summary.
- Response: Keywords have been added.

3. Methodology

- Comment: Include references for some of the methods used.
- Response: Additional references for the methodology have been provided.

4. Results

- Comment: Minor correction: Some methods should be briefly mentioned in the results section.
- Response: We have briefly referenced the relevant methods within the results section.

5. Conclusion

- Comment: Consider suggested words to enhance impact.
- Response: The conclusion has been refined for better impact.

6. References

- Comment: References should conform to Vancouver format.
- Response: All references have been reformatted accordingly.

7. Redaction

- Comment: Some language corrections are needed.
- Response: We have carefully revised the manuscript for grammar and clarity.

We appreciate the reviewers' valuable feedback and have incorporated their suggestions accordingly. We believe these revisions have significantly improved the manuscript and look forward to your consideration.

Sincerely,

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