

**Review Form 1.7**

Journal Name:	<b>International Journal of TROPICAL DISEASE &amp; Health</b>
Manuscript Number:	<b>Ms_IJTDH_119421</b>
Title of the Manuscript:	<b>Assessing Drug Susceptibility Patterns of some bacteria isolated from the palms of Pharmacy Technicians</b>
Type of the Article	<b>Cross-sectional study</b>

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**PART 1: Review Comments**

	Reviewer's comment	Author's comment (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><b>Compulsory</b> REVISION comments</p> <ol style="list-style-type: none"> <li><b>Is the manuscript important for scientific community?</b> (Please write few sentences on this manuscript)</li> <li><b>Is the title of the article suitable?</b> (If not please suggest an alternative title)</li> <li><b>Is the abstract of the article comprehensive?</b></li> <li><b>Are subsections and structure of the manuscript appropriate?</b></li> <li><b>Do you think the manuscript is scientifically correct?</b></li> <li><b>Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form.</b></li> </ol> <p><u>(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)</u></p>	<p><b>1. Yes, your manuscript is important for the scientific community for several reasons:</b></p> <ol style="list-style-type: none"> <li><b>Infection Control and Public Health:</b> The study provides crucial data on bacterial contamination and antimicrobial resistance among pharmacy technicians, highlighting an often-overlooked aspect of infection control in healthcare settings.</li> <li><b>Antimicrobial Resistance:</b> It addresses the pressing issue of antimicrobial resistance, particularly in healthcare environments, contributing valuable information on resistance patterns that can inform treatment guidelines and infection control practices.</li> <li><b>Healthcare Worker Hygiene:</b> By focusing on pharmacy technicians, the study underscores the importance of hand hygiene among all healthcare workers, not just those in direct patient care roles.</li> <li><b>Geographic Relevance:</b> The research adds to the body of knowledge with data from Ghana, which can be useful for regional and global comparisons, enhancing understanding of how antimicrobial resistance patterns may vary geographically.</li> </ol> <p><b>2. The current title "Assessing Drug Susceptibility Patterns of Some Bacteria Isolated from the Palms of Pharmacy Technicians" is clear and informative, but it can be made more specific and engaging. "Antimicrobial Resistance Patterns of Bacteria Isolated from Pharmacy Technicians' Hands in Ghana"</b></p> <p><b>3. Points of Improvement:</b></p> <ol style="list-style-type: none"> <li><b>Clarity:</b> Simplified some sentences for better understanding.</li> <li><b>Consistency:</b> Used consistent terminology and phrasing.</li> <li><b>Conciseness:</b> Removed redundant phrases to make the abstract more succinct.</li> <li><b>Focus:</b> Ensured that the most important findings and implications are clearly stated.</li> </ol> <p><b>4. 1.0 INTRODUCTION</b></p> <p>Your introduction is detailed and sets the context well. To improve clarity and focus, consider the following:</p> <ul style="list-style-type: none"> <li><b>Streamline the historical context:</b> Shorten the history of pharmacy technicians to keep the focus on the study's relevance.</li> <li><b>Highlight the significance:</b> Emphasize why studying bacterial contamination and drug resistance in pharmacy technicians is crucial.</li> <li><b>State the research gap and objective clearly:</b> Explicitly mention the gap in current knowledge and how your study addresses it.</li> </ul> <p><b>2.0 METHODOLOGY</b></p> <p>This section is well-structured. Here are some minor suggestions:</p> <ul style="list-style-type: none"> <li><b>Subsection clarity:</b> Ensure each subsection flows logically and concisely.</li> <li><b>Detail specifics:</b> Be precise about the methods used for bacterial identification and antibiotic susceptibility testing.</li> </ul>	

	<p><b>3.0 RESULTS AND DISCUSSION</b></p> <p>Combining results and discussion can work, but make sure to clearly separate the presentation of findings from their interpretation.</p> <ul style="list-style-type: none"><li>• <b>Results clarity:</b> Use clear, concise language to present your findings. Visual aids like tables and graphs can enhance understanding.</li><li>• <b>Discussion depth:</b> Provide a thorough analysis of your results, comparing them with existing literature and discussing their implications.</li></ul> <p><b>4.0 CONCLUSION AND RECOMMENDATIONS</b></p> <p>This section effectively summarizes your findings and suggests practical applications.</p> <ul style="list-style-type: none"><li>• <b>Actionable recommendations:</b> Be specific about the steps that should be taken based on your findings.</li><li>• <b>Future research:</b> Mention areas where further research is needed to build on your findings.</li></ul> <p><b>Example of Structured Manuscript</b></p> <p><b>1.0 INTRODUCTION</b></p> <ul style="list-style-type: none"><li>• Brief history of pharmacy technicians in Ghana.</li><li>• Importance of their role in healthcare.</li><li>• Risks of bacterial transmission and infection.</li><li>• Objectives of the study.</li></ul> <p><b>2.0 METHODOLOGY</b></p> <ul style="list-style-type: none"><li>• <b>2.1 Study Setting:</b> Describe the Upper West region and its healthcare facilities.</li><li>• <b>2.2 Study Design:</b> Explain the cross-sectional design and study period.</li><li>• <b>2.3 Inclusion and Exclusion Criteria:</b> Detail criteria for participant selection.</li><li>• <b>2.4 Sample Collection and Inoculation:</b> Describe sample collection methods.</li><li>• <b>2.5 Bacteria Identification and Isolation:</b> Explain identification procedures.</li><li>• <b>2.6 Antibiotic Susceptibility Testing:</b> Detail the testing method and guidelines used.</li></ul> <p><b>3.0 RESULTS</b></p> <ul style="list-style-type: none"><li>• <b>3.1 Findings:</b> Present data on bacterial species identified and their prevalence.</li><li>• <b>3.2 Antimicrobial Susceptibility:</b> Show susceptibility patterns of the isolates.</li></ul> <p><b>4.0 DISCUSSION</b></p> <ul style="list-style-type: none"><li>• Interpretation of results.</li><li>• Comparison with previous studies.</li><li>• Implications for public health and pharmacy practice.</li></ul> <p><b>5.0 CONCLUSION AND RECOMMENDATIONS</b></p> <ul style="list-style-type: none"><li>• Summary of key findings.</li><li>• Importance of proper hand hygiene.</li><li>• Need for regular surveillance and improved hygiene protocols.</li></ul>	
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	<ul style="list-style-type: none"><li>• Suggestions for future research.</li></ul> <p><b>Refinements</b></p> <ol style="list-style-type: none"><li>1. <b>Introduction:</b> Shorten historical context to focus more on the importance and relevance of the study.</li><li>2. <b>Methodology:</b> Ensure detailed and precise descriptions of all procedures.</li><li>3. <b>Results:</b> Use tables/graphs to present data clearly.</li><li>4. <b>Discussion:</b> Separate the presentation of findings from their interpretation.</li><li>5. <b>Conclusion:</b> Provide clear, actionable recommendations and mention future research directions.</li></ol> <p><b>5. Suggestions for Improvement:</b></p> <ol style="list-style-type: none"><li>1. <b>Sample Size and Representation:</b><ul style="list-style-type: none"><li>○ The unequal distribution of samples among different pharmacy settings is a limitation. While the manuscript acknowledges this, a more balanced sampling or a larger sample size could strengthen the findings.</li></ul></li><li>2. <b>Control Measures:</b><ul style="list-style-type: none"><li>○ Including details about control measures during sample collection and processing can further validate the study's reliability.</li></ul></li><li>3. <b>Statistical Analysis:</b><ul style="list-style-type: none"><li>○ Although not explicitly mentioned, statistical analysis of the data could enhance the robustness of the findings. Including statistical tests to compare the prevalence of bacterial contamination and resistance patterns across different settings would add depth to the results.</li></ul></li><li>4. <b>Literature Comparison:</b><ul style="list-style-type: none"><li>○ Expanding the discussion to compare findings with a broader range of studies from different regions could provide a more comprehensive context for the results.</li></ul></li><li>5. <b>Ethical Considerations:</b><ul style="list-style-type: none"><li>○ While informed consent is mentioned, adding a brief statement about ethical approval from a relevant institutional review board would be beneficial.</li></ul></li></ol> <p><b>6. some references are a bit dated, and it would be beneficial to include more recent studies to ensure the literature review is up-to-date.</b></p>	
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<p><b>Minor</b> REVISION comments</p> <p>1. <b>Is language/English quality of the article suitable for scholarly communications?</b></p>	<p><b>Minor Revision Comments</b></p> <p>1. <b>Is the language/English quality of the article suitable for scholarly communications?</b></p> <p>The language and English quality of the article are generally suitable for scholarly communications. However, there are a few areas where minor revisions can improve clarity and readability. Here are some suggestions for enhancing the language quality:</p> <ul style="list-style-type: none"> <li>○ <b>Abstract:</b> Ensure the abstract is concise and clearly summarizes the key findings and significance of the study. Avoid overly complex sentences.</li> <li>○ <b>Introduction:</b> Simplify sentences where possible to enhance readability. Ensure that the rationale for the study is clearly articulated.</li> <li>○ <b>Materials and Methods:</b> Use clear and precise language to describe the methods. Avoid jargon that may not be familiar to all readers.</li> <li>○ <b>Results:</b> Present findings in a straightforward manner. Use active voice where appropriate to make the text more engaging.</li> <li>○ <b>Discussion:</b> Ensure that the discussion flows logically from the results. Clarify the implications of the findings and how they contribute to the field.</li> </ul> <p>Here are some specific examples of language improvements that can be made:</p> <ol style="list-style-type: none"> <li>1. <b>Original:</b> "The study reveals significant variations in antimicrobial resistance patterns among the bacterial isolates." <b>Revised:</b> "This study reveals significant variations in antimicrobial resistance patterns among bacterial isolates."</li> <li>2. <b>Original:</b> "In conclusion, the data obtained from this study can be utilized to develop targeted antimicrobial strategies." <b>Revised:</b> "In conclusion, the data from this study can be used to develop targeted antimicrobial strategies."</li> <li>3. <b>Original:</b> "The methodology employed in this research is robust and comprehensive, ensuring reliable results." <b>Revised:</b> "The methodology used in this research is robust and comprehensive, ensuring reliable results."</li> <li>4. <b>Original:</b> "Our findings indicate that there is a need for continuous monitoring of antimicrobial resistance trends." <b>Revised:</b> "Our findings indicate a need for continuous monitoring of antimicrobial resistance trends."</li> </ol> <p>By making these minor revisions, the manuscript's language will be more polished and suitable for scholarly communication.</p>	
<p><b>Optional/General</b> comments</p>	<p>To include the list of antimicrobial agents used in your end of manuscript, it would be appropriate to add this information in the <b>Materials and Methods</b> section. This section typically details the experimental procedures, including the types of antimicrobial agents used and their concentrations, which is crucial for reproducibility and understanding the study's methodology.</p> <p>Here's a suggested placement and formatting for the antimicrobial agents list:</p> <p><b>Materials and Methods</b></p>	

### Antimicrobial Susceptibility Testing

Antimicrobial susceptibility testing was performed using the following antimicrobial agents. The agents were selected based on their relevance to both Gram-positive and Gram-negative bacterial isolates encountered in the study.

#### Gram-Positive Agents:

1. **P/10** = Penicillin-G, 10 micrograms
2. **AMX/10** = Amoxicillin, 10 micrograms
3. **AMC/30** = Amoxicillin + Clavulanic Acid, 30 micrograms
4. **SXT/25** = Cotrimoxazole, 25 micrograms
5. **CFM/30** = Cephalexin, 30 micrograms
6. **CFZ/30** = Cefazolin, 30 micrograms
7. **XM/30** = Cefuroxime, 30 micrograms
8. **C/30** = Chloramphenicol, 30 micrograms
9. **CL/5** = Ciprofloxacin, 5 micrograms
10. **TE/30** = Tetracycline, 30 micrograms
11. **OF/5** = Ofloxacin, 5 micrograms
12. **PT/100** = Piperacillin, 100 micrograms
13. **AZ/15** = Azithromycin, 15 micrograms
14. **EM/30** = Erythromycin, 30 micrograms

#### Gram-Negative Agents:

1. **CPR/30** = Ciprofloxacin, 30 micrograms
2. **CAZ/30** = Ceftazidime, 30 micrograms
3. **AMK/30** = Amikacin, 30 micrograms
4. **IMP/30** = Imipenem, 30 micrograms
5. **CTR/30** = Ceftriaxone, 30 micrograms
6. **CTX/30** = Cefotaxime, 30 micrograms
7. **NOR/30** = Norfloxacin, 30 micrograms
8. **PIP/100** = Piperacillin, 100 micrograms

In the **Results** section, you can refer back to this list when discussing the effectiveness of these agents against the isolates tested. This helps maintain clarity and ensures that readers can easily cross-reference the agents used with the results obtained.

#### Example in Results Section:

"In our study, the antimicrobial susceptibility testing revealed that Penicillin-G (P/10) and Amoxicillin (AMX/10) were less effective against the Gram-positive isolates, while Imipenem (IMP/30) and Amikacin (AMK/30) showed high efficacy against the Gram-negative isolates (see Materials and Methods for detailed list of agents used)."

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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:**

Name:	<b>Abhishek Shivanand Lachyan</b>
Department, University & Country	<b>AIIMS, India</b>