

Review Form 3

Journal Name:	South Asian Journal of Research in Microbiology
Manuscript Number:	Ms_SAJRM_125998
Title of the Manuscript:	Molecular detection of Integrons I and II in some clinical isolates from Niger Delta University Teaching Hospital, Okolobiri, Nigeria
Type of the Article	Original Research Article

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PART 1: Review Comments

Compulsory REVISION comments	Reviewer's comment	Author's Feedback <i>(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
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.		
Is the title of the article suitable? (If not please suggest an alternative title)		
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.		
Are subsections and structure of the manuscript appropriate?		
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.		
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form. -		

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<p>Minor REVISION comments</p> <p>Is the language/English quality of the article suitable for scholarly communications?</p>		
<p>Optional/General comments</p>	<p>Here are some comments to ensure clarity and precision</p> <p>Introduction:</p> <ul style="list-style-type: none"> - The introduction all over should be supported by references. - The second paragraph must be supported by references. - <p>Precision in Units and Terminology: Ensure that units and scientific terms are correctly stated.</p> <p>Minor adjustments in terminology can clarify experimental specifics (e.g., consistently using "µL" instead of "microlitres").</p> <p>2.2 Experimental Design</p> <ul style="list-style-type: none"> <input type="checkbox"/> It would be helpful to specify why a cross-sectional and descriptive design was chosen for this study, briefly mentioning its suitability for analyzing clinical isolates. <p>2.6 Sample Size Determination</p> <ul style="list-style-type: none"> <input type="checkbox"/> The sample size calculation formula could benefit from clearer formatting for readability. Also, confirm that the final sample size calculation (n = 100) was based on the formula, as there seems to be a slight discrepancy in the calculation (162 is stated instead of 134). <p>2.8 Sample Collection</p> <ul style="list-style-type: none"> <input type="checkbox"/> Consider adding details on how the isolates were handled and stored between collection and analysis, such as temperature conditions or transport media. <p>2.9 Molecular Analysis</p> <ul style="list-style-type: none"> <input type="checkbox"/> DNA Extraction (2.9.1): Include a reference or brief rationale for the boiling method used here. If this is a standard protocol, a citation would strengthen the section. <input type="checkbox"/> DNA Quantification (2.9.2): Provide more detail on the specific Nanodrop software settings used for DNA purity measurement if they are relevant. <input type="checkbox"/> Integron Gene Amplification (2.9.3): While comprehensive, this section could benefit from added clarity on the final PCR conditions, including reaction volume and the specifics of the touch-down protocol if deviations occurred. <p>2.9.5 Agarose Gel Electrophoresis</p> <ul style="list-style-type: none"> <input type="checkbox"/> Minor details on the buffer preparation and microwave heating time could add value. For instance, specifying the time to achieve full dissolution can provide better reproducibility. <p>Additional Recommendations</p> <ol style="list-style-type: none"> 1. References: Where possible, add references for established methods and reagents to aid reproducibility. 2. Language and Flow: Some minor language adjustments (e.g., "was drown" should be "was drawn") will improve clarity. 3. Ethical Clearance: Expand this section to confirm ethical considerations beyond committee approval, such as informed consent or data handling protocols if applicable. <p>Results and Discussion</p> <ul style="list-style-type: none"> <input type="checkbox"/> Clarity of Key Findings: Your results effectively outline the prevalence of integron₁ bearing organisms and their association with multidrug resistance. However, expanding on the clinical impact of these findings, such as potential implications for treatment efficacy in hospital settings, would strengthen the discussion. • Comparative Analysis with Literature: The references to previous studies are well₁ placed, especially with respect to resistance patterns reported by Odetoyin et al. and Hosein et al. To enhance these comparisons, consider specifying any unique resistance genes or resistance profiles identified in your isolates that differ from other regions. 	

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	<p><input type="checkbox"/> Mechanisms of Resistance: The explanation of gene cassettes conferring resistance is detailed, but further clarification on how integrons facilitate horizontal gene transfer could provide a more comprehensive understanding of how multidrug resistance spreads among clinical isolates.</p> <p>2. Methodology and Interpretation</p> <p><input type="checkbox"/> Strength of Sample Size and Sampling: While the sample size is appropriate and adequately explained, it would be beneficial to discuss any limitations or potential biases due to the relatively small sample pool or hospital-centric sample collection. This could clarify the generalizability of your findings to broader populations.</p> <p><input type="checkbox"/> Gene Cassette Functions: In the section discussing gene cassettes (e.g., beta₁ lactamase, sulphonamides, aminoglycosides), providing a table summarizing the specific genes identified and their associated resistance profiles may enhance clarity and make it easier for readers to follow.</p> <p>3. Conclusion</p> <ul style="list-style-type: none"> • Implications for Antibiotic Stewardship: The call for antibiotic stewardship is well-founded given the high prevalence of integron-related resistance. Expanding on specific recommendations or strategies that could mitigate resistance (e.g., rotation of antibiotic classes, monitoring integron presence) would add practical value to the conclusion. • Broader Health Impact: Given the alarming rates of multidrug resistance, adding a sentence or two on the potential public health implications—especially in healthcare environments—could emphasize the urgency of implementing resistance-control measures. <p>4. Ethical and Consent Statements</p> <ul style="list-style-type: none"> • Consent Section: Clarify that patient consent was obtained for research purposes if relevant, or that all samples were anonymized and part of routine diagnostics. For case reports, this section is usually for clinical case studies with patient-specific data, which doesn't appear to apply to this study. <p>5. Minor Edits and Consistency</p> <ul style="list-style-type: none"> • Grammar and Language: Minor grammatical errors (e.g., "drown" should be "drawn") and typos (e.g., "accordance" should be "accordance") should be corrected for smooth readability. • Scientific Terminology and Abbreviations: Consistent use of abbreviations (e.g., "µL" instead of "microlitres") and italicization of organism names (e.g., <i>Escherichia coli</i>) would standardize formatting 	
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PART 2:

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

Reviewer Details:

Name:	Rania Hamed Elbawab
Department, University & Country	Menoufia University, Egypt