

Review Form 3

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| Journal Name: | South Asian Journal of Research in Microbiology |
| Manuscript Number: | Ms_SAJRM_123125 |
| Title of the Manuscript: | Sensitivity of Nitrofurantoin V/S Fluoroquinolones in E. Coli Isolated from Urinary Tract Infection |
| Type of the Article | Original Research Article |

Review Form 3

PART 1: Review Comments

| Compulsory 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) |
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| 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 involves an important issue in microbiology. The antibiotic resistance for UTI is growing widely. As Nitrofurantoin and Fluoroquinolones are empirical antibiotics for treatment of UTI the comparison between these two agents against E. coli isolates provides valuable insights for the empirical treatment strategies. I appreciate the study's focus on a common clinical problem and its potential to inform antibiotic stewardship practices. | |
| Is the title of the article suitable? (If not please suggest an alternative title) | The title is appropriate because it accurately reflects the main focus of the study. However, to be more specific, it can be modified to: "Comparative Sensitivity of Nitrofurantoin versus Fluoroquinolones against E. coli Isolates from Urinary Tract Infections: A Single-Center Study" | |
| 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. | The summary affords a terrific evaluate but will be more comprehensive. Suggestions for development: 1- Including the overall number of E. Coli isolates. 2- Specify the exact sensitivity percentage for every antibiotic tested. 3- Adding a brief statement at the results of the findings. 4- | |
| Are subsections and structure of the manuscript appropriate? | The general structure follows a standard scientific format. But some improvements could be made: 1- The introduction could be more focused on the specific research question. 2- The methods section needs more detail on the study design and statistical analysis. 3- Data on all isolates, not just E. coli, should be included in the results section. | |
| 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. | The manuscript demonstrates a scientific advantage in addressing a clinically relevant question using standard microbiological techniques. The use of CLSI guidelines to interpret the results of antibiotic sensitivity ensures reliability. However, the scientific strength could be improved by providing more details of the methodology, particularly with regard to sample collection and statistical analysis. The study's main strength lies in its practical effects on the treatment of urinary tract inflammation, but the larger sample size and more comprehensive data presentation would enhance its scientific validity. | |
| Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form. = | The references are generally relevant and recent. However, the manuscript would benefit from additional references on: 1- Global trends in antibiotic resistance in UTIs 2- Mechanisms of resistance to Nitrofurantoin and Fluoroquinolones in E. coli 3- Recent guidelines on empirical treatment of UTIs | |

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| <p>Minor REVISION comments</p> <p>Is the language/English quality of the article suitable for scholarly communications?</p> | <p>The language is generally suitable for scholarly communication, but more recommendations to improve clarity and professionalism:</p> <ol style="list-style-type: none">1- The manuscript would benefit from a thorough proofreading to correct minor grammatical errors and improve clarity.2- Ensure consistent formatting of scientific names (e.g., E. coli should always be italicized). | |
| <p>Optional/General comments</p> | <p>Methodology</p> <ol style="list-style-type: none">1- The sample size (181) is relatively small for a 6-month study.2- The authors should justify this sample size.3- The exclusion criteria mention not including patients younger than 19, but the results show data for patients aged 0-17. This inconsistency needs to be addressed.4- More details on the antibiotic sensitivity testing methodology would be beneficial. <p>Discussion</p> <ol style="list-style-type: none">1- Compare the results more extensively with other similar studies from different geographical regions. <p>Conclusion:</p> <ol style="list-style-type: none">1- The conclusion could be strengthened by discussing the limitations of the study and suggesting future research directions. <p>Results</p> <ol style="list-style-type: none">1- The results section should be more comprehensive, including data on all isolates, not just E. coli. <p>Language and formatting</p> <ol style="list-style-type: none">3- The manuscript would benefit from a thorough proofreading to correct minor grammatical errors and improve clarity.4- Ensure consistent formatting of scientific names (e.g., E. coli should always be italicized). <p>Generalizability</p> <ol style="list-style-type: none">1- The study was conducted at a single medical center (GKGH). This limits the generalizability of the findings to other geographic locations or healthcare settings, where antibiotic resistance patterns may differ. <p>Focus on E. coli</p> <ol style="list-style-type: none">1- While E. coli was the most common isolate, the detailed analysis focused primarily on this pathogen. The lack of comprehensive data on other isolated organisms limits the study's overall utility in understanding UTI pathogens and their antibiotic sensitivities. <p>Lack of clinical outcome data</p> <ol style="list-style-type: none">1- No information on treatment outcomes. Without this data, it's difficult to correlate in vitro antibiotic sensitivity with clinical efficacy. <p>Absence of risk factor analysis</p> <p>The study doesn't explore potential risk factors for antibiotic resistance, such as previous antibiotic use, recurrent UTIs, or comorbidities. This information could have provided valuable context for the observed resistance patterns.</p> <p>Potential selection bias</p> <ol style="list-style-type: none">1- The study doesn't clearly describe how patients were selected for inclusion, which could introduce bias if the selection was not systematic or random. <p>Limited statistical analysis</p> <ol style="list-style-type: none">1- The presentation of results lacks confidence intervals, odds ratios, or other statistical measures that would allow for a more nuanced interpretation of the data. <p>Suggested Study Design</p> <ol style="list-style-type: none">1- Prospective Observational Cohort Study <p>Ethical Considerations:</p> <ol style="list-style-type: none">1- Obtain ethical approval and implement informed consent procedures. | |

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PART 2:

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

Reviewer Details:

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