

REVIEWER'S REPORT

Manuscript No.: IJAR-53319

Date: 14.08.2025

Title: Assessment of Multi Drug Resistance Tuberculosis: Clinical Patterns, Resistance and Outcomes in a Southern Coastal Region Teaching Hospital

Recommendation:

Accept as it is

Accept after minor revision...YES.....

Accept after major revision

Do not accept (*Reasons below*)

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Rating	Excel.	Good	Fair	Poor
Originality			√	
Techn. Quality		√		
Clarity			√	
Significance		√		

Reviewer Name: PROF DR DILLIP KUMAR MOHAPATRA

Date:14.08.2025

Reviewer's Comment for Publication.

(To be published with the manuscript in the journal)

The reviewer is requested to provide a brief comment (3-4 lines) highlighting the significance, strengths, or key insights of the manuscript. This comment will be Displayed in the journal publication alongside with the reviewers name.

Detailed Reviewer's Report

Significance

- 1. Understanding MDR-TB Challenges:** The study highlights the challenges in managing MDR-TB, particularly in regions with high burdens of previously treated TB cases and significant drug resistance.
- 2. Importance of Patient History:** Findings indicate a strong link between previous TB treatment and the development of MDR-TB, emphasizing the need for thorough treatment histories and effective drug-resistance surveillance.
- 3. Need for Enhanced TB Control Strategies:** The study underscores the need for strengthened TB control programs focusing on patient adherence support, early drug susceptibility testing, and access to newer MDR-TB regimens.
- 4. Implications for Public Health and Policy:** Results suggest that targeted interventions are essential to improve treatment outcomes, reduce mortality, and curb the emergence and transmission of drug-resistant TB strains.

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Strengths:

1. Relevance of MDR-TB study: The study addresses critical challenges in managing MDR-TB in a southern coastal region of India.
2. Detailed analysis of drug resistance and treatment outcomes: Highlights the need for improved diagnosis, adherence, and monitoring strategies.

The study has strong public health relevance and structured findings but requires methodological clarification, statistical enhancement, and careful editing before it can be considered for publication in a peer-reviewed journal.

The manuscript addresses an important public health challenge—MDR-TB—in a high-burden country. It combines demographic, clinical, and drug-resistance data with treatment outcomes, offering relevant insights for TB control in India.

The topic is timely, the dataset is well-organized, and the conclusions are generally consistent with the presented results.

However, certain sections require tightening, clarification, and deeper statistical analysis to strengthen the scientific rigor and international relevance.

Recommendations for Improvement

1. Correct and clarify the study period and patient selection criteria.
2. Include basic statistical testing for associations and present p-values or confidence intervals.
3. Ensure consistency of numerical results between Abstract, Results, and Discussion.
4. Expand on how these findings compare to state-level and national MDR-TB statistics.
5. Revise language for clarity and grammar.
6. Reformat tables for clarity and accuracy.
7. The methodology states "**retrospective record-based study**" over **December 2024 – May 2025**, yet this appears to be a future time frame relative to typical study timelines. This needs correction or clarification.
8. The inclusion/exclusion criteria require refinement. For example, "**patients who are suspect to MDR TB**" is **vague**—were these suspects confirmed by DST before inclusion?
9. Currently, the study reports frequencies and percentages without statistical comparisons. Even basic tests (Chi-square, Fisher's exact) for associations between age, gender, treatment history, and outcomes would strengthen the conclusions.
10. Some discrepancies exist: Abstract mentions cure rate **44%**, Discussion mentions **49%** consistency is required.
11. The term "**presumptive TB**" is used in the development category, but MDR-TB is by definition confirmed by resistance testing—please clarify if these were presumptive MDR cases or presumptive TB prior to confirmation.