



REVIEWER'S REPORT

Manuscript No.: IJAR-50768

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Title: The prevalence of tuberculosis among patients with silicosis in the southeastern part of Rajasthan, India.

Recommendation:

- Accept as it is.....**YES**.....
- Accept after minor revision.....
- Accept after major revision
- Do not accept (*Reasons below*)

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

Reviewer's Name: Dr Aamina

Reviewer's Decision about Paper: **Recommended for Publication.**

Comments (*Use additional pages, if required*)

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Reviewer's Comment / Report

Abstract Review: The abstract effectively introduces the study's significance, highlighting the increased risk of tuberculosis (TB) among silicosis patients. The background provides clarity on silicosis as an occupational hazard and the link between silicosis and TB. The methodology is well-documented, specifying the sample size and diagnostic approaches used, such as sputum tests for acid-fast bacilli (AFB), GeneXpert, and culture examination. The results section presents the key findings concisely, indicating the high prevalence of TB among silicosis patients (74%). The conclusion emphasizes the importance of preventive measures, including health monitoring and PPE usage in silica-exposed industries. The abstract is structured effectively and provides a clear summary of the study.

Introduction Review: The introduction thoroughly explains silicosis as a significant occupational disease, detailing its causes, pathophysiology, and clinical presentations. The classification of silicosis into chronic, accelerated, and acute forms is well-detailed, supported by relevant literature. The description of diagnostic methods, particularly imaging techniques such as chest X-rays and CT scans, is comprehensive. The inclusion of differential diagnoses strengthens the discussion by addressing potential misdiagnoses. The introduction successfully sets the stage for the study by providing the necessary background and rationale for investigating TB prevalence in silicosis patients.

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Methodology Review: The methodology section clearly describes the study design, sample size, and diagnostic criteria. The inclusion of 120 patients with silicosis and previously treated silicotuberculosis ensures a robust sample. The use of multiple diagnostic techniques, including microbiological examination, adds validity to the findings. The study period and location are specified, enhancing reproducibility. The systematic follow-up approach allows for accurate prevalence assessment. The methodology is well-structured, ensuring clarity and comprehensibility.

Results Review: The results are presented clearly, highlighting key statistics, including the mean exposure duration (10 years) and the breakdown of TB diagnoses. The differentiation between microbiologically confirmed cases (46), previously treated negative cases (31), and clinically diagnosed silicotuberculosis cases (12) provides a comprehensive overview. The overall TB prevalence rate (74%) among silicosis patients is well-articulated. The results are well-organized and align with the study objectives.

Discussion Review: The discussion effectively contextualizes the study findings within the broader epidemiological and occupational health framework. The high TB prevalence aligns with existing literature on silicotuberculosis risk. The study underscores the importance of workplace health measures, including PPE use and routine medical screenings. The comparison with global and national prevalence data strengthens the argument for improved health interventions. The discussion is well-supported with relevant references and aligns with the study's objectives.

Conclusion Review: The conclusion succinctly summarizes the key findings, reinforcing the need for proactive health measures in silica-exposed workplaces. The emphasis on early diagnosis, regular health monitoring, and protective equipment is appropriate. The conclusion effectively ties the study findings to practical public health recommendations.

Overall Assessment: The study is well-structured, comprehensive, and provides valuable insights into the high TB prevalence among silicosis patients. The methodology is robust, and the discussion effectively contextualizes the findings. The inclusion of occupational health recommendations strengthens the study's relevance. The report is clear, well-organized, and contributes significantly to the field of occupational and respiratory medicine.
