

REVIEWER'S REPORT

Manuscript No.: IJAR-51040

Date: 15-04-2025

Title: "A PROSPECTIVE COHORT STUDY TO STUDY THE EFFECTIVENESS OF SURGICAL BUNDLE IN REDUCING SURGICAL SITE INFECTION IN CAESAREAN DELIVERIES".

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*)

Reviewer's Comment / Report

Abstract Review: The abstract provides a concise and well-structured summary of the research, including the objective, methods, results, and conclusion. It effectively outlines the implementation of the surgical bundle and clearly presents the statistically significant reduction in surgical site infections (SSI) observed. The conclusion is logically drawn based on the data, and the keywords and synopsis align with the core focus of the study.

Introduction Review: The introduction provides comprehensive background information on the increasing prevalence of caesarean deliveries and the associated risk of SSIs. It establishes the rationale for the study by emphasizing both the clinical and economic impact of postoperative infections. The discussion of modifiable versus non-modifiable risk factors sets a clear foundation for exploring interventions aimed at infection control. The inclusion of national data (NFHS-4) supports the study's relevance in the Indian healthcare context.

Methodology Review: The methodology is clearly outlined, with details about the study design, duration, setting, sample size, and intervention. The inclusion of 620 women and the division into two equal groups ensures a robust comparison. The surgical bundle components are precisely described, and the observational period of 30 days post-operation for SSI development is appropriate for capturing

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relevant outcomes. The use of a standardized patient proforma for data collection reflects systematic and structured data handling.

Results Review: The results are presented with clarity, highlighting the difference in infection rates between the two groups. The reported figures (13.2% vs 6.1%) demonstrate a notable reduction in SSI rates with statistical significance ($p < 0.001$). The outcome is directly aligned with the study objective, and the numerical data effectively supports the conclusion.

Discussion and Clinical Significance: The discussion reflects on the importance of surgical site infection prevention in the context of increasing caesarean deliveries and limited resources in developing countries. The manuscript draws attention to the need for scalable, cost-effective solutions. The emphasis on modifiable factors and preventive care underscores the potential for policy-level implications. The connection between reduced infection rates and decreased healthcare costs and maternal morbidity adds practical significance to the findings.

Language and Presentation: The manuscript maintains a formal academic tone and uses precise clinical terminology throughout. The structure is logical and coherent, with a smooth flow from background to results. The writing is clear and free of ambiguity, facilitating easy comprehension of the study design and outcomes.

Overall Assessment: This prospective cohort study addresses a highly relevant clinical issue with practical implications. The findings are well-supported by the data and contribute to the growing evidence on surgical bundles as effective tools in reducing SSIs post-caesarean delivery. The study is particularly valuable for healthcare settings where resource optimization is critical. The manuscript is methodologically sound, well-written, and presents a strong case for integrating evidence-based surgical practices into routine obstetric care.
