



REVIEWER'S REPORT

Manuscript No.: IJAR- 50776

Date: 24/03/2025

Title: "Comparing the Effectiveness of Transrectal Misoprostol with Intravenous Oxytocin in Preventing Postpartum Hemorrhage"

Recommendation:

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

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

Reviewer Name: Dr. S. K. Nath

Date: 25/03/2025

Reviewer's Comment for Publication:

This study provides strong evidence that transrectal misoprostol is as effective as intravenous oxytocin in preventing postpartum hemorrhage. The lack of significant differences in blood loss and PPH incidence between the two drugs supports misoprostol as a potential alternative in rural and resource-constrained settings.

Reviewer's Comment / Report

Strengths of the Study

- **Addresses a Critical Maternal Health Issue:** PPH is a leading cause of maternal mortality, particularly in low-resource settings. The study provides an alternative solution for areas with limited access to oxytocin.
- **Well-Defined Study Design & Methodology:** Randomized selection improves reliability. Clear inclusion and exclusion criteria ensure homogeneity in study participants. Use of BRASS-V drape for objective blood loss measurement reduces estimation errors.
- **Practical Implications for Rural Healthcare:** Since oxytocin requires cold storage and skilled administration, misoprostol provides a cost-effective, easy-to-administer alternative. Misoprostol's heat stability and rectal route of administration make it suitable for home births and rural health centers.
- **Comparison with Previous Studies:** The study validates its findings by comparing them with other clinical trials, enhancing credibility.

Weaknesses of the Study

- **Single-Center Study:** Conducted at one hospital, which limits generalizability to diverse populations.
- **Short-Term Follow-Up:** The study only evaluates outcomes within 24 hours postpartum. Long-term complications (e.g., delayed PPH, maternal recovery) are not assessed.

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- **Sample Size Could Be Larger:** 200 participants provide valuable data, but a larger, multi-center trial could improve the strength of the conclusions.
- **Side Effects Analysis Needs More Depth:** While shivering and fever were significantly higher in the misoprostol group, the study does not explore mitigation strategies.
- **No Cost-Effectiveness Analysis:** Since misoprostol is considered a more affordable option for low-resource settings, a cost-benefit comparison with oxytocin could have strengthened the study's findings.