



REVIEWER'S REPORT

Manuscript No.: IJAR-56377

Title: Evaluation of Clinical Outcomes of Two Types of Fissure Sealant Materials Placed on the First and Second Molars of Children and Adolescents Attending a Restorative Dentistry Unit

Recommendation:

Accept after minor revision.....

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

Reviewer's ID: JPR-198

Detailed Reviewer's Report

This manuscript presents a clinically relevant, well-documented evaluation of pit and fissure sealant outcomes in a Sri Lankan paediatric hospital setting. It addresses a clear gap in local evidence and reports practice-based outcomes with transparent methods and appropriate statistical analyses for a descriptive cross-sectional study. The key finding—that frequent sugary snack consumption, rather than sealant material or operator, predicts new caries—is clinically meaningful and directly applicable to preventive programs.

Major Points Requiring Attention

1. Sample Size and Statistical Power

- The study includes only 48 participants, with a small and imbalanced resin-based sealant group.
- Non-significant differences between materials may reflect limited power rather than true equivalence.
- Logistic regression models include multiple predictors relative to few outcome events.

Required revision: Explicitly acknowledge limited statistical power and potential overfitting; frame material comparisons as descriptive and exploratory.

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2. Study Design Terminology

- Although described as cross-sectional, outcomes are assessed at follow-up after sealant placement over varying durations.

Required revision: Clarify that this is a cross-sectional assessment of outcomes at follow-up, not a longitudinal effectiveness study.

3. Generalizability

- Convenience sampling of high-caries-risk patients limits applicability to the general paediatric population.

Required revision: Strengthen the limitations section to clarify that findings may not generalize beyond high-risk, hospital-based cohorts.

4. Caries Detection Method

- Caries assessment relied on visual and tactile examination without radiographs.

Required revision: Explicitly state that subclinical or interproximal caries may have been underestimated.

Minor Issues

- The Introduction and Discussion are longer than necessary for a single-centre descriptive study and should be modestly condensed.
- Clarify the direction of the odds ratio for sugary snack consumption (statistical coding vs clinical interpretation).
- Minor language polishing and reference formatting consistency are recommended.
- Redundant table rows (e.g., baseline 100% retention/caries-free status) can be removed.

Conclusion

This is a solid, practice-relevant study with clear methodology and clinically useful findings. The required revisions are mainly clarificatory rather than fundamental. With modest tightening of interpretation, clearer acknowledgment of limitations, and minor editorial refinement, the manuscript would be suitable for publication in the journal.