

PURPOSE/OBJECTIVE

The investigators utilized the gradual release of responsibility educational pedagogy (I do, We do, You do) to develop asynchronous modules for clinical instruction in vital pulp therapy, behavior guidance and sealant application technique.

METHODS

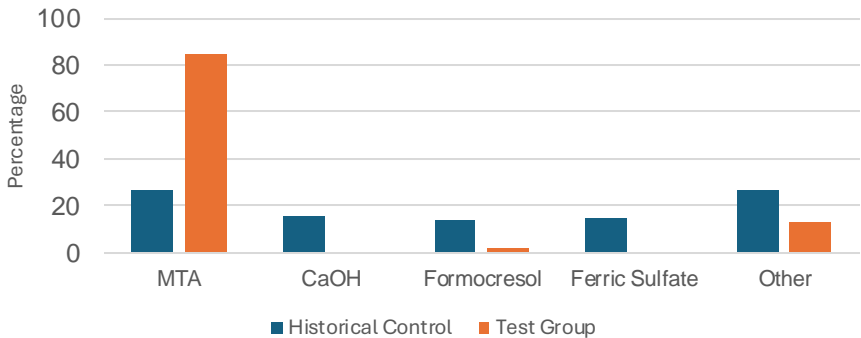
- Mixed methods (Before and After/Cross-Sectional)
- 121 current D4 students completed the modules; 454 historical controls
- Cross-Sectional outcome: Knowledge (exam performance)
- Before and After outcome: Change in self-efficacy
- Statistical tests: Chi-Square Analysis, Wilcoxon Sign Rank

RESULTS

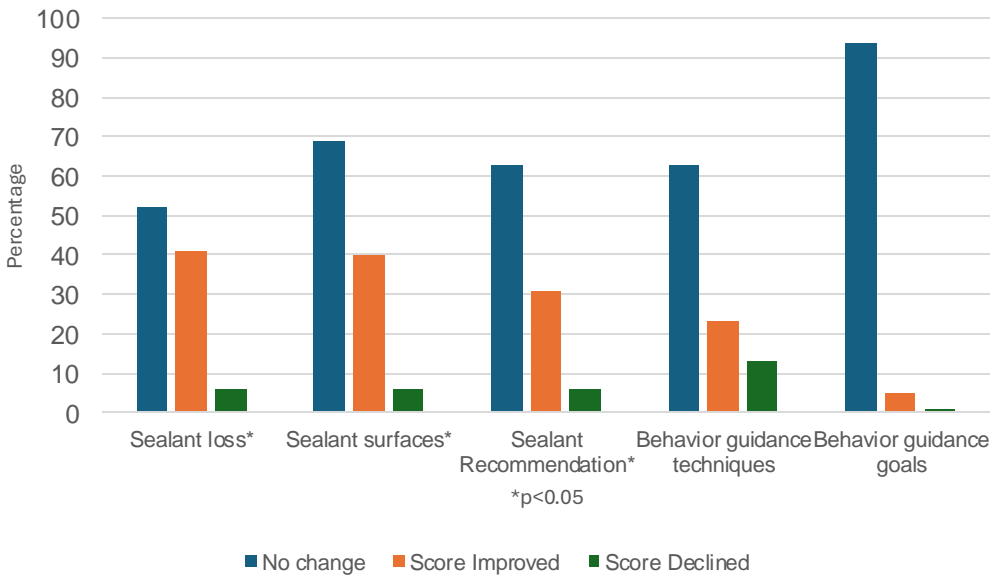
- 121 current D4 students; 454 historical controls
 - 37 students completed both pre- and post-module self-efficacy statements
- Students in the test group answered the hemostasis question correctly twice as often (86% versus 41%, $p<0.001$).
- The test group selected MTA as the pulpotomy medicament choice more than 3 times as often (85% versus 27%, $p<0.001$).
- The test group showed significant improvement in scores relating to sealant application technique.
- Self-efficacy improved most often for confidence in: listing the steps of a pulpotomy ($n=34$), achieving hemostasis during pulpotomy ($n=26$), and using basic behavior guidance techniques ($n=25$).

Assessment of Hemostasis	Historical Control	Test Group	Total
No	59%	14%	25%
Yes $P<0.001$	41%	86%	75%

Vital Pulp Therapy Medicament Choice



Module Knowledge Outcomes



CONCLUSIONS

- Active learning strategies improved:
- Exam performance on questions for dental sealant and vital pulp therapy concepts.
 - Self-efficacy related to clinical pediatric dentistry.

Active learning strategies may help increase dental student and general dentist comfort with specialty concepts.

References:



Funding: No Funding Sources
 Acknowledgements: Thank you to The Ohio State University and Nationwide Children's Hospital faculty and staff, especially Drs. Erin Gross and Beau Meyer for their mentorship with this study.