

Management of Pediatric Dental Emergency Based on Location, Provider Background and Training

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Introduction

Most common pediatric dental emergencies

- Trauma
- Toothaches from untreated dental caries

Study aims to see if there are differences management of provider

- At hospital
- At clinic

Materials and Methods

Inclusion criteria for charts

- Chief complaints of dental pain
- Between July 2021 and June 2023
- <15 years old

At the Emergency Department (ED)

- Encounter type, provider type, procedure, behavior management aid, prescriptions, dental consult, recommendations, and hospital stay.

At Family Health Center Dental Clinic (FHC)

- Encounter type, dental resident type, attending type, procedures, and behavior management aids.

Results

At the ED

- Swelling associated with dental caries, dental department was consulted vs dental pain without swelling and trauma, with a p-value of <1.247.
- Difference in management depending on which dental residents were involved in care, with the p-value of <1.118
- Surgery and medicine or surgery alone mainly was done under a dental consult
- Surgery or surgery with medication was done mainly by oral surgery residents, followed by pediatric residents, followed by GPR residents vs the patient was only seen by medical with the p-value of < 3.374
- Medication and no treatment were seldom done by all dental residents

In the dental clinic

- There was no difference between the treatment and provider
- Difference in behavior management, Pediatric residents and pediatrics attending when paired together tend to use more behavior management aids, and GPR residents and GPR attending when paired together tend not to do any behavior management with the p-value shown to be 0.003732.

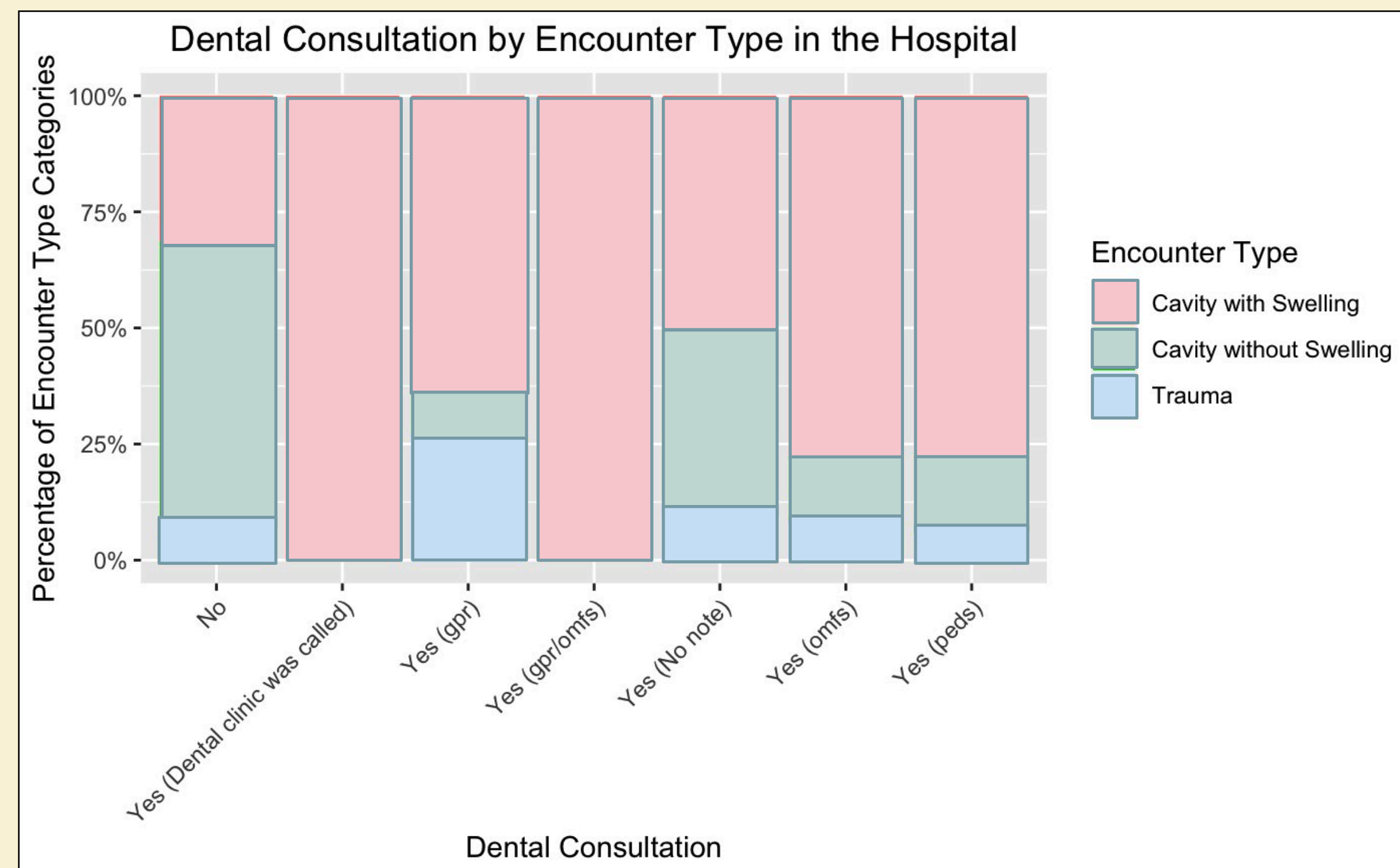


Figure 1: Displays the relationship between the dental department's consultation and the percentage of different types of encounters in the hospital. When pediatric patients presented with oral pain without facial swelling, the dental resident was often not consulted; residents were always contacted when there was facial swelling.

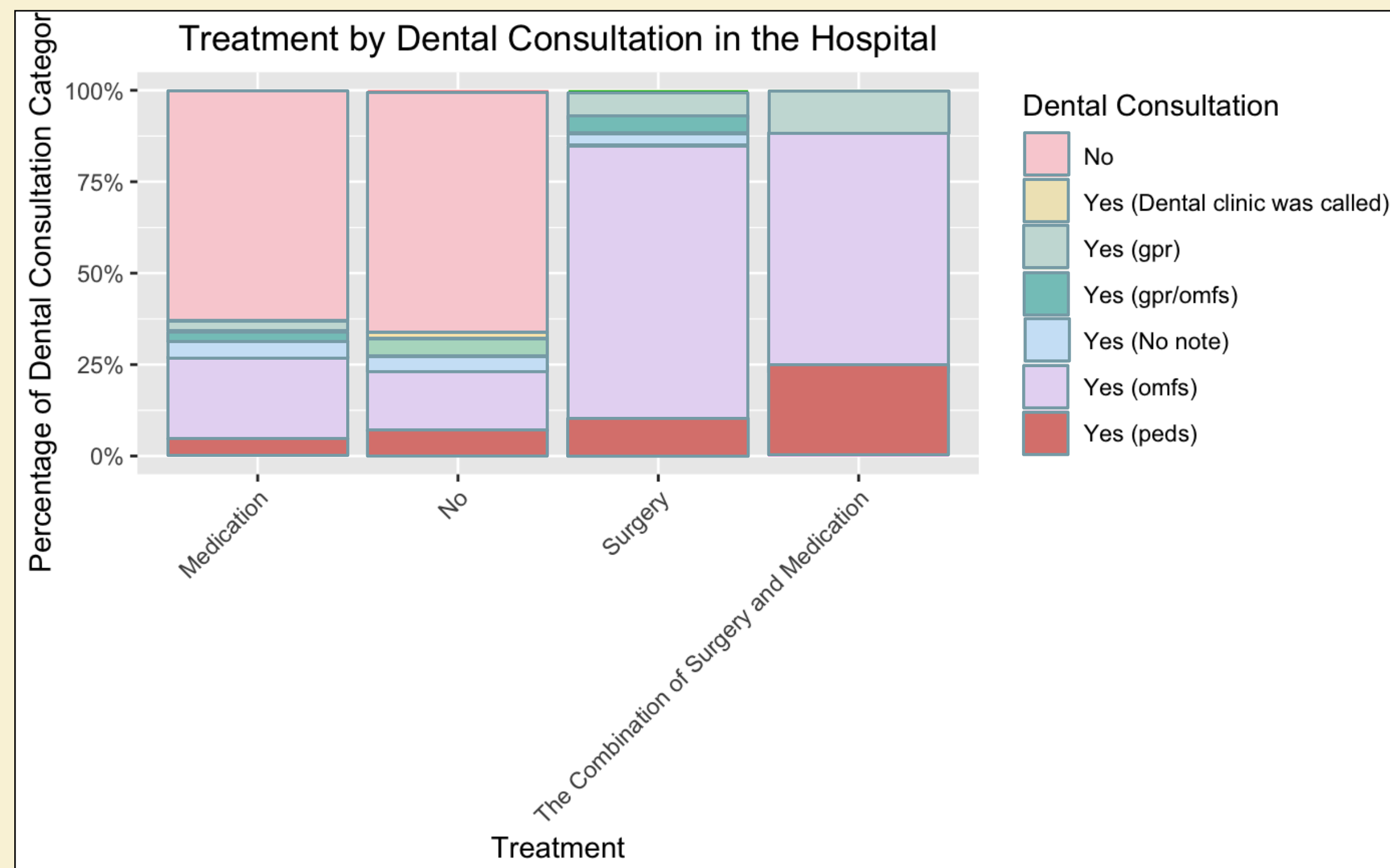
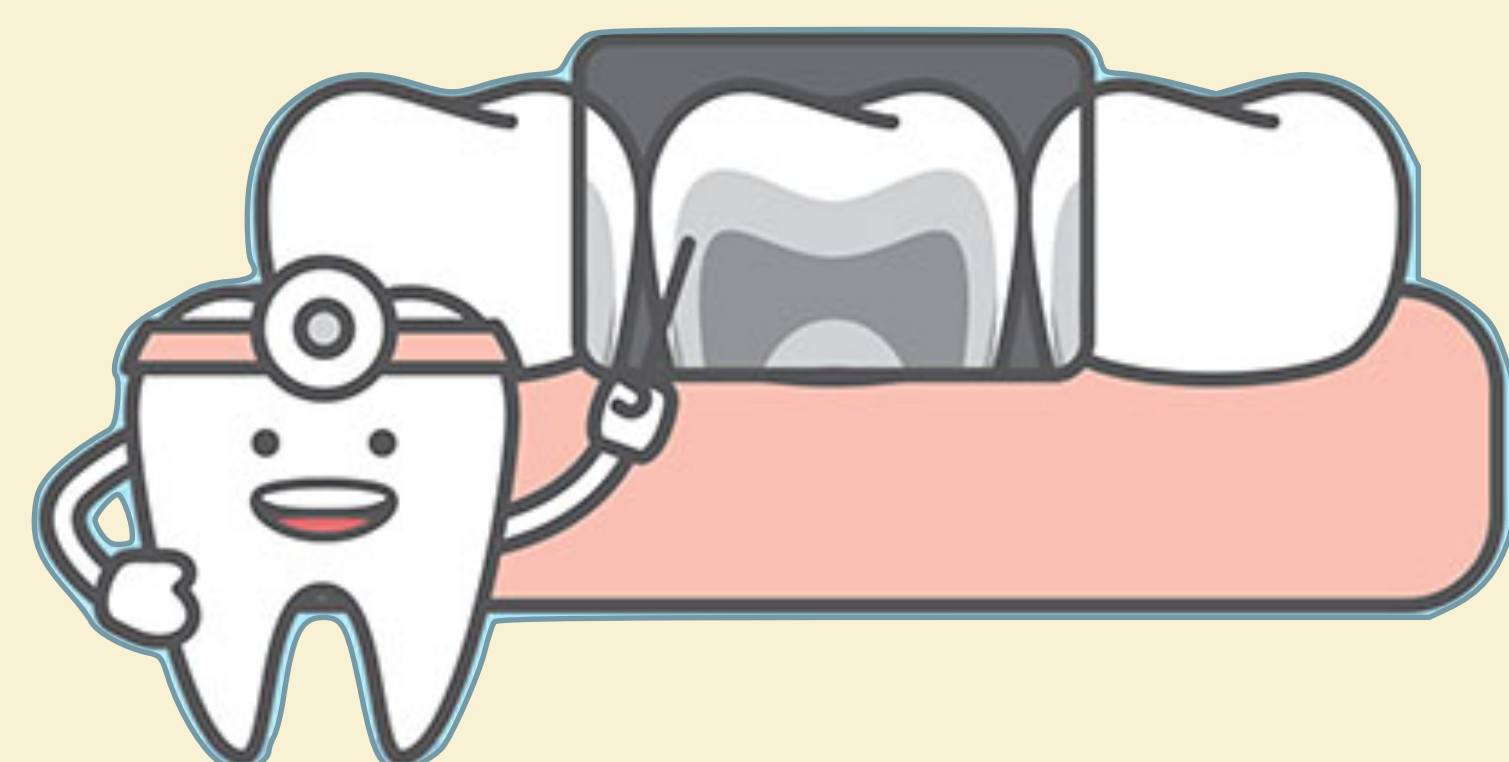


Figure 3: Illustrates a contrast in treatment management relative to the percentage of consultations based on the type of dental resident at the hospital. In the dental department, surgery with and without medication was performed mainly by oral surgery residents. Pediatric residents sometimes performed procedures, and GPR residents the least often. Dental residents often performed a procedure when consulted rather than sending the patient home with a prescription and recommendation.



SCAN ME

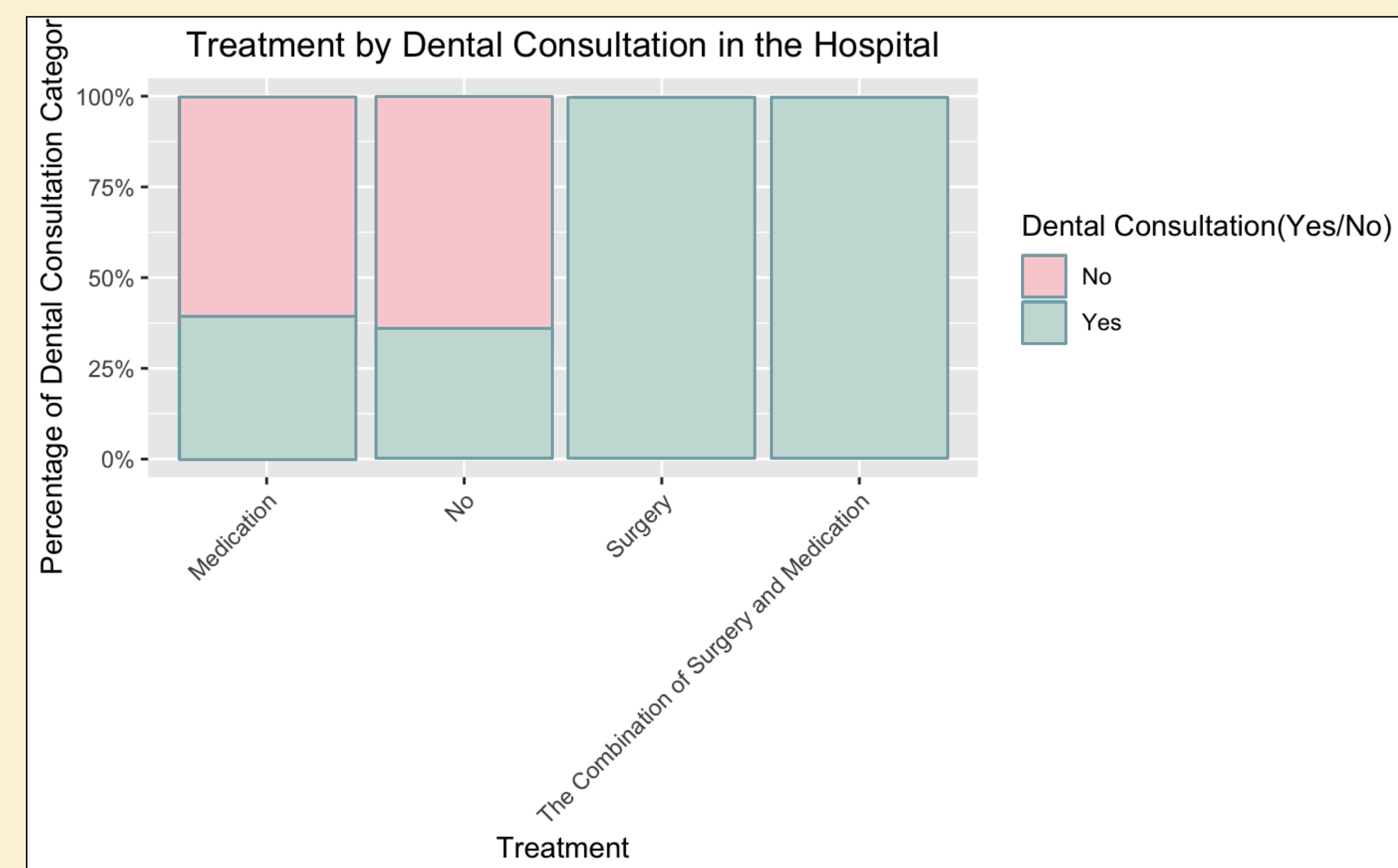


Figure 2: illustrates a contrast in treatment management of dental residents compared to the percentage of consultations made at the hospital. When the dental residents were consulted, these patients most likely required surgical treatment or surgical treatment with pharmacological management.

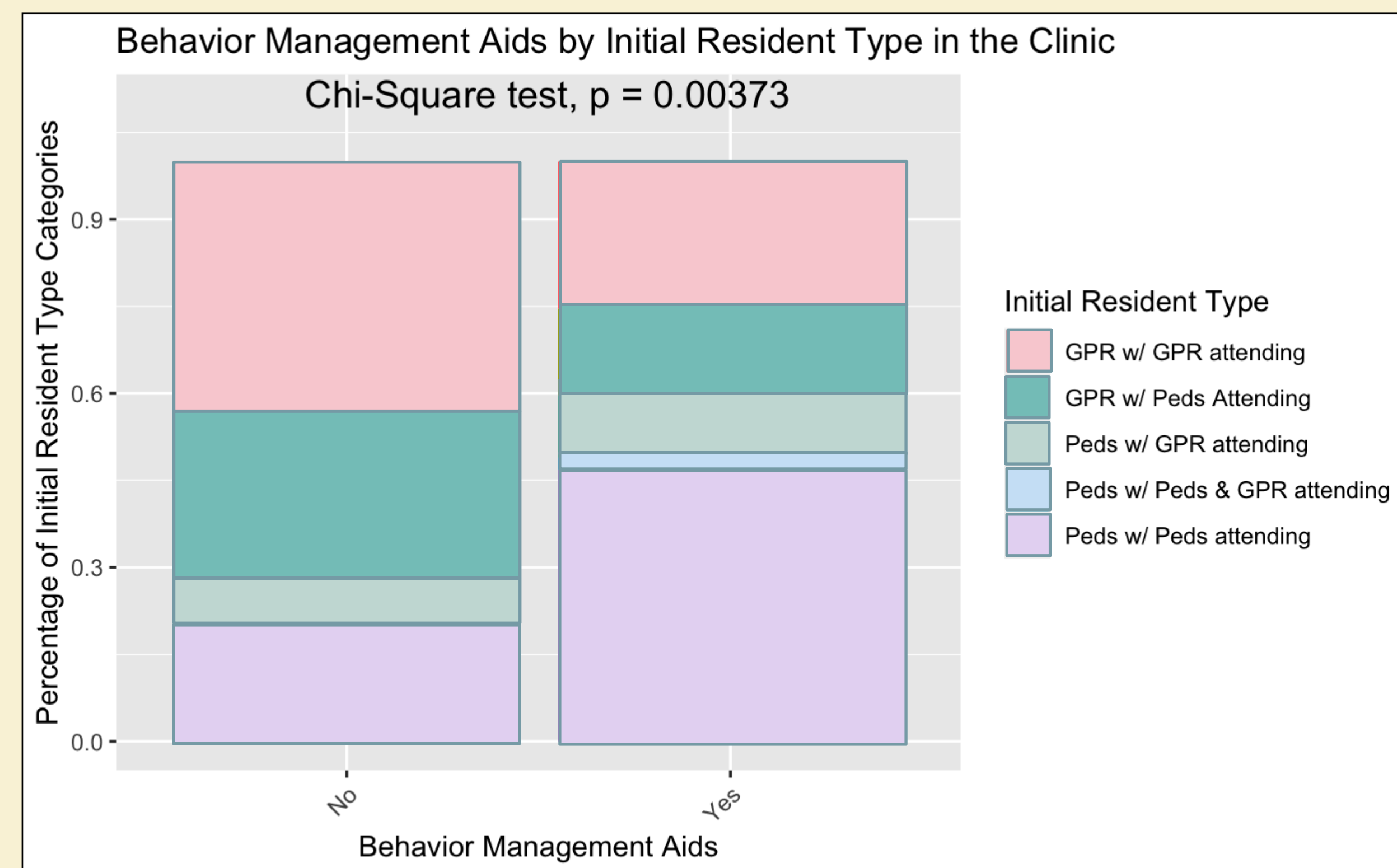


Figure 4: Displays the utilization of behavior management aids in relation to the percentage of emergency treatment provided by different resident types in the clinic. When a pediatric resident addressed emergencies under the supervision of a pediatric attending, nitrous oxide and papoose were used.

Conclusion

The differences in treatment depending on the encounter setting can be attributed to:

- Scope of practice of the doctors within the ED vs the dental clinic and the equipment available

Difference in presentation:

- Emergencies that presented to the ED were more likely to have facial swelling.
- Emergencies seen at the clinic were more likely to be trauma or dental pain without noticeable facial swelling.

AAPD recommendations were followed when dental emergencies are seen at the pediatric ED, and many patients were lost to follow-up maybe

- Instructions were not provided when patients are discharged.
 - Oversight in the documentation rather than a lack of knowledge
 - Patient went to another dental clinic that was not located at the hospital
- Pediatric residents were more likely to preform behavior management for dental emergency at the clinic

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