College of Dentistry

UF UNIVERSITY of FLORIDA

BARRIERS AND FACILITATORS IN MANAGING NON-TRAUMATIC AND TRAUMATIC DENTAL CONDITIONS IN THE ED

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INTRODUCTION

- Emergency department (ED) providers frequently encounter patients with non-traumatic dental conditions (NTDC) and traumatic dental conditions but face challenges due to limited training and resources.
- This study identifies ED providers' perceived barriers and facilitators to NTDC management to inform provider-centered interventions

METHODS

- Semi-structured, 30-minute virtual interviews were conducted with 33 ED providers recruited through a national ED research network.
- Providers were asked about their approach to NTDC management, including whether they placed any material on teeth.
- Interviews were transcribed and coded using the Capability, Opportunity, and Motivation Model of Behavior Change (COM-B).

RESULTS

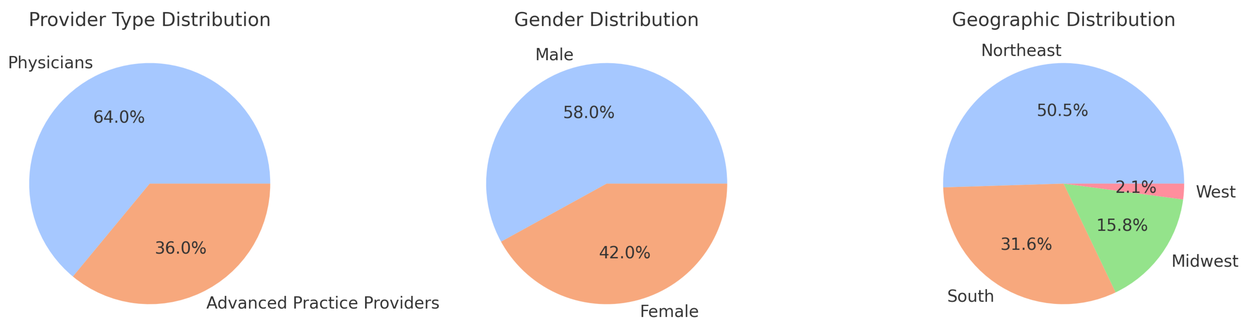

Figure 1: Participant Demographic Distributions

- **Key Findings:**
  - Only two providers reported placing materials on teeth (viscous lidocaine, "amalgam-like coating")
    - *"Sometimes we use viscous lidocaine for very large cavities where the pulp is exposed."* (Male, Physician, NE, 24 years in practice)
  - 13 providers did not place materials on the teeth due to lack of training and resources
    - *"I don't think we get the training to do that. I wouldn't know how to place a cap or filling."* (Female, Physician, NE, 3 years in practice)
  - 12 providers placed materials only in cases of dental trauma, using dental wax, Dermabond, calcium-hydroxide, "cement," and resins
    - *"I mean, if there's exposed pulp, then we'll, you know, I'll try to cover that. Finding that material is sometimes difficult, like we, we have a dental box that doesn't always have this stuff in it that we need. You know, we get creative sometimes, like if we can't find it. While its not- you're gonna cringe at this. We have put, like Derma Bond to cover the tooth because I know we don't want to have that pulp exposed."* (Female, Physician, NE, 9 years in practice)
  - Several providers noted inconsistent access to a well-stocked dental box.
    - *"Sometimes, like our dental box, I have to say in all four sites is not very robust. We, a lot of our materials are older. Like to even try to make a compound to like seal the tooth or anything of that nature is always very challenging cause our ingredients are dried out."* (Female, NP, NE, 10 years in practice)

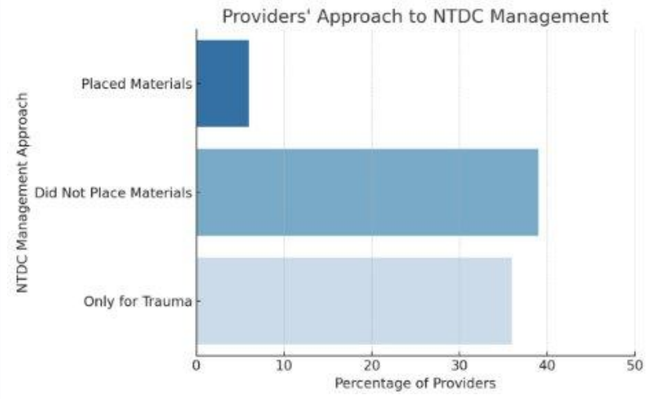

Figure 2: Providers' Approach to NTDC Management

CONCLUSION & NEXT STEPS

- There is a significant gap in training and available materials for NTDC management in the ED
- Providers emphasized the need for enhanced training and better access to dental materials
- Integration of dental care resources into EDs could support evidence-based practice and improve patient outcomes
- Future work should explore the development of training programs and improved resource allocation to assist ED providers in managing NTDC effectively

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