

# Survey Evaluating Differences Within the Curriculum of Pediatric Dentistry Programs

### BACKGROUND

- 85% of dental visits are completed by general dentists<sup>1</sup>
- Pediatric dentists see younger children

#### **Space Maintenance (SM)**

- 3 types: Nance, LLHA, and Band and Loop<sup>2</sup>
- Lab fabricated is gold standard
- Chairside are newer and increasing in use **Tooth Isolation**
- Dental dam is standard of care for isolation<sup>3</sup>
- Isolite® and Dry Shield® combine isolation with high-speed evacuation<sup>3</sup>

#### Pulpal therapy for non-vital teeth

- Extraction or pulpectomy (PE) is the standard of care primary teeth irreversible pulpitis or necrosis<sup>4</sup>
- Lesion Sterilization Tissue Repair (LSTR) is an alternative to pulpectomy<sup>4</sup>

#### Impression techniques

- Conventional impressions (CI) with alginate/PVS are the standard of care<sup>5</sup>
- Intraoral scanning is becoming more common in many pediatric dental practices<sup>6</sup>
- <u>There is a lack of knowledge regarding</u> teaching of new technologies in the field of pediatric dentistry.

### **PURPOSE/OBJECTIVE**

To assess the differences in emerging clinical techniques taught within the pediatric curriculum of dental schools and residency programs in the United States.

# MATERIALS/METHODS

#### **Survey Components:**

- A 13-item survey (Qualtrics) distributed to pre-doctoral (DDS) and postgraduate (GR) program directors.
- Questioned teaching time, clinical experience, and change in amount of clinical instruction for 4 new topics with new techniques:

• Impressions.

- Space maintenance
- Isolation

#### **Data Analysis:**

- Cochran-Mantel-Haenszel chi-square tests used for comparisons of methods within a topic area (e.g. Isolite® vs. dental dam)
- Mantel-Haenszel tests for ordinal responses used for comparisons between program types.
- A two-sided, 5% significance level was used for each test.

76-100 51-75

26-50

1-25

Figure 1: Percentage of Learners Having at Least 1 Clinical \*,  $^{,+,-}$  - Indicates statistical significance Experience

REFERENCES



Nadia Pritchard DDS • Brian Sanders DDS, MS • LaQuia Vinson DDS, MPH • Angela Yepes DDS, MS • George Eckert MAS • Allison Scully DDS, MS, FAAPD Indiana University School of Dentistry--Riley Hospital for Children

Pulpal therapy for non-vital teeth



### RESULTS

#### **Clinical experience (Figure 1):**

- Residents had significantly more experience with CI and PE (p<0.001) No difference in experience with isolation or SM experience
- DDS students had significantly more experience with B&L than Nance (p=0.0470)
  - No difference with isolation, impressions, PE, or other forms of SM
- Less than 50% of DDS students had clinical experience involving SM compared to nearly 100% of residents
- Most residents and predoctoral students have NOT completed LSTR **Trends in Clinical Instruction (Figure 2):**
- The use of different SM has remained constant at both levels.
- Changes in clinical teaching time:
  - **Slightly Increasing**
  - Isolation Systems
  - Intraoral Scanning
  - LSTR

### Slightly Decreasing

- Rubber Dam
- Traditional Impressions



Figure 2: Changes in Clinical Instruction: 1=Greatly Decreased, 2=Somewhat Decreased, 3=Neither Increased nor Decreased, 4=Somewhat Increased, 5=Greatly Increased

## CONCLUSION

- Recent residency graduates have broader experiences with new technologies and procedures in pediatrics than dental students.
  - Both groups used diverse isolation techniques
- The clinical teaching of the topics are remaining approximately stable
- Intraoral scanning and LSTR are slightly increasing
  - Still not the most common method.
- Recent graduates, especially residents, may be familiar with new techniques but need more training and experience to fully implement them.

INDIANA UNIVERSITY SCHOOL OF DENTISTRY INDIANAPOLIS