

Oral Health Knowledge Gaps Among Hennepin Healthcare Pediatric Medicine Providers

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Introduction

Hennepin Healthcare is a county safety net hospital in Minneapolis, Minnesota that provides pediatric medical and dental care. Pediatric medicine providers frequently observe the morbidity associated with dental caries in their patient populations. Therefore, they must be knowledgeable and comfortable educating families about basic preventive oral measures, diagnosing caries, triaging referrals, and managing odontogenic infections. 1, 2, 3 In 2023, the AAP updated its Oral Health Clinical Report 'Maintaining and Improving the Oral Health of Young Children'. It includes revised guidelines stating that pediatricians should be able to provide preventive care including anticipatory guidance, diet counseling, oral hygiene instructions, fluoride education, and timely referral to a dentist.3 However, pediatricians often have limited or unsatisfactory knowledge on key pediatric oral health topics.¹

Purpose

Our purpose was to investigate knowledge gaps related to oral health care topics among Hennepin Healthcare pediatric medicine providers, as well as assess their comfort in preventing and diagnosing oral diseases including dental caries as outlined in the 2023 AAP Guidelines.

Methods

Focus groups were conducted via Microsoft Teams and Zoom with providers from three Hennepin Healthcare clinics. Standardized, open-ended questions were asked by a resident facilitator to access participants' comfort diagnosing and preventing oral diseases and to identify knowledge gaps related to oral health care topics. Participants completed a survey selecting specific oral health topics they wanted additional training on. Each focus group session was recorded and transcribed. Initial and focused coding using content analysis based on themes was completed.4

Results

Most were at least somewhat comfortable practicing to the **AAP Oral Health Guidelines and** assessing caries risk factors

"I talk a lot about fluoridated water, because a lot of people just use the packs of water."

"I'm not clear on the specifics in the guidelines, but I feel reasonably comfortable identifying and counseling on some of the issues around dental hygiene, prolonged bottle feeding, and sugary beverage consumption."

Fluoride was the most common caries prevention measure discussed

"I think we're pretty good at giving fluoride varnish at visits. That system seems to work pretty well in our clinic, and families are not resistant."

Everyone felt somewhat uncomfortable or uncomfortable diagnosing caries and infections

"If it's obvious, but that's like really obvious. I think it has to be like anybody could tell, like a person on the street would be able to tell."

"We probably need some refresher on how to diagnose dental cavities, especially if they're not black, brown, or obvious."

Figure 1. Common themes from focus group discussions regarding provider ability to prevent and diagnose oral diseases

Results

Approximately 30 providers participated including pediatricians, nurse practitioners, and a pediatric pulmonologist. Common themes from the focus groups regarding provider knowledge and comfort preventing and diagnosing oral diseases are shown in Figure 1.

Providers reported a desire for additional training on the following oral health topics:

- 1. How to perform an oral exam
- 2. How to diagnose caries
- Indications for antibiotics in dentistry
- Diagnosis and management of odontogenic infections
- 5. Diagnosing common oral pathology

Conclusions

- 1. Pediatric medicine providers at Hennepin Healthcare were somewhat familiar with the recommendations in the AAP 2023 Clinical Report 'Maintaining and Improving the Oral Health of Young Children'.
- 2. Providers were comfortable and experienced providing oral health preventive measures particularly related to fluoride.
- 3. Providers were uncomfortable diagnosing and managing common oral health problems such as dental caries.
- 4. Providers identified knowledge gaps and a desire for additional training on multiple oral health care topics.

References

- n the last decade: a systematic scoping review and critical reflection." Journal of Clinical Pediatric Dentistry 46.4 (20. Herndon, Jill Boylston, et al. "Preventive oral health care in early childhood: knowledge, confidence, and practices of
- diatricians and family physicians in Florida." The Journal of pediatrics 157.6 (2010): 1018-1024.
- rol, David M., Kaitlin Whelan, and Section on Oral Health. "Maintaining and improving the oral he
- eolotrics 15.1. (2023): e2022060417. Inwuegbuzie, A. J., Dickinson, W. B., Leech, N. L., & Zoran, A. G. (2009). A Qualitative Fra lata in Focus Group Respects international lowered of Qualitative Methods, 8(3), 1-21