

Integrating Pediatric Oral Health into Comprehensive Healthcare: Best Practices and Preventive Strategies

Strategies for Prevention and Early Intervention

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STERLINGSMILES
PEDIATRIC DENTISTRY

DISCLOSURE

I have no actual or potential conflict of interest in relation to this program/presentation.



- 1. **Review** the latest American Academy of Pediatric Dentistry (AAPD) guidelines
- 2. **Discuss** evidence-based practices for early childhood oral health
- 3. **Analyze** the impact of oral health on systemic health
- 4. **Examine** preventive strategies including in-office fluoride varnish applications by pediatricians
- 5. **Discuss** incorporating oral health education into medical training programs
- 6. **Provide** Resources and support available to you and your patients here in Louisiana


Objectives



At what age should you be referring your patients to the pediatric dentist?



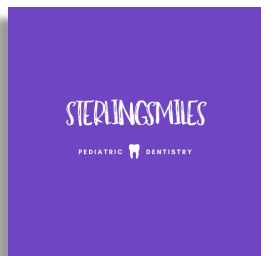
Why is it essential for pediatricians to understand and promote early childhood oral health?

- A) To reduce systemic health issues
 - B) To enhance children's overall well-being
 - C) To improve academic performance
 - D) All of the above
- 

- State vs. National Statistics:
 - Louisiana: 65.7% of children have experienced dental decay. -
 - National average: Approximately 52% of children have experienced dental decay.
- Socio-Economic Factors:
 - Higher prevalence in low-income families due to limited access to dental care.
 - Lack of awareness and education about preventive dental practices.
 - Poor dietary habits, including high sugar consumption. -
Insufficient fluoride in drinking water in some areas.

Addressing these socio-economic factors through targeted interventions and education can help reduce the prevalence of ECC and improve overall oral health outcomes in Louisiana.

Epidemiological Data on ECC Prevalence in Louisiana



Analyzing the Impact of Oral Health on Systemic Health

- Oral health is intrinsically linked to overall health.
- Poor oral health can lead to:
 - Nutritional deficiencies due to pain and difficulty in eating.-
 - Systemic infections, including bacteremia and endocarditis.-
 - Increased risk for chronic diseases like diabetes and cardiovascular diseases.-
 - Complications during pregnancy such as preterm birth and low birth weight.-
 - Psychological and social issues, including low self-esteem and difficulties in school and social interactions.
- *Numerous studies have demonstrated that maintaining good oral health can contribute to better overall health outcomes, prevent systemic diseases, and enhance quality of life.*

1. Healthcare Costs:

- a. Untreated dental issues can lead to costly emergency room visits and complex treatments.
- b. Preventive care and early intervention can reduce these costs significantly.

2. Lost Productivity:

- a. Dental pain and infections can result in missed school days for children and missed workdays for parents.
- b. This loss of productivity can have long-term economic implications for families and society.



The Economic Impact of Untreated Dental Issues

3. Long-Term Health Costs:

- a. Poor oral health is linked to systemic conditions such as diabetes and cardiovascular disease, which can increase healthcare costs over a lifetime.

4. Impact on Quality of Life:

- a. Dental issues can affect a child's ability to eat, speak, and learn, impacting their overall well-being and future potential.

Investing in preventive oral health care can save significant healthcare costs and improve the quality of life for individuals and society.



The Economic Impact of Untreated Dental Issues Cont.

Examining Preventive Strategies

Preventive strategies for pediatric oral health include:

1. In-Office Fluoride Varnish Applications:

- Pediatricians can apply fluoride varnish during routine check-ups.
- Helps strengthen tooth enamel and prevent decay.
- Recommended every 3 to 6 months starting from the appearance of the first tooth.

2. Patient Education:

- Educate parents about the importance of oral hygiene.
- Demonstrate proper brushing and flossing techniques.
- Discuss the impact of diet on oral health

Examining Preventive Strategies

Preventive strategies for pediatric oral health include:

3. Early Dental Visits:

- Encourage the establishment of a dental home by the child's first birthday.
- Regular dental check-ups to monitor and maintain oral health.

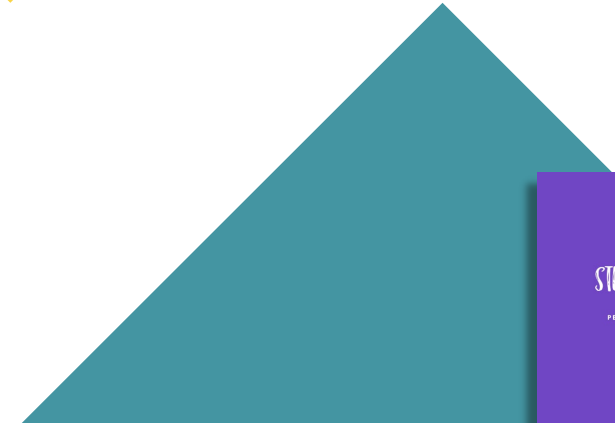
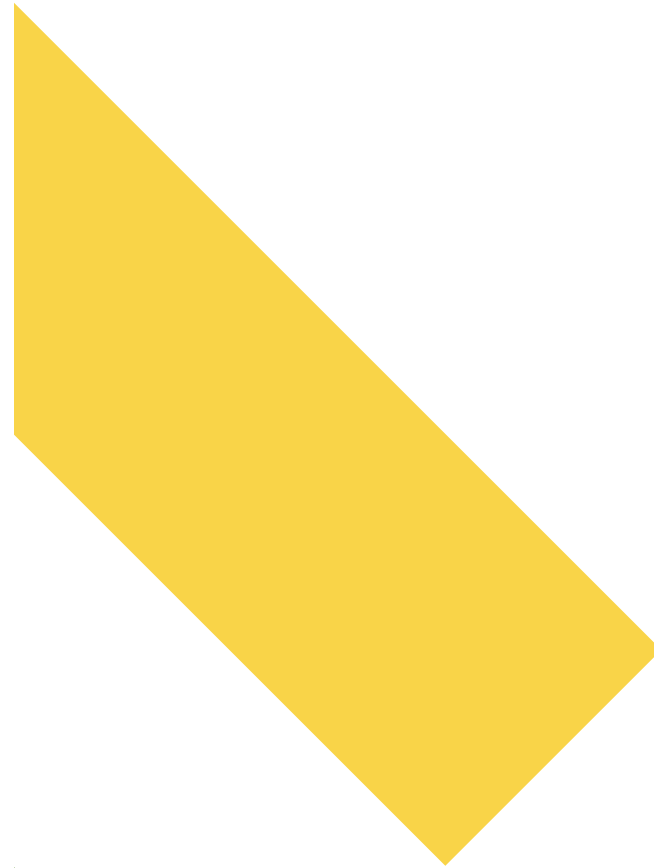
4. Dietary Counseling:

- Advise on limiting sugary snacks and drinks.
- Promote healthy eating habits to prevent dental caries.

Implementing these preventive strategies can significantly reduce the risk of early childhood caries and promote long-term oral health.

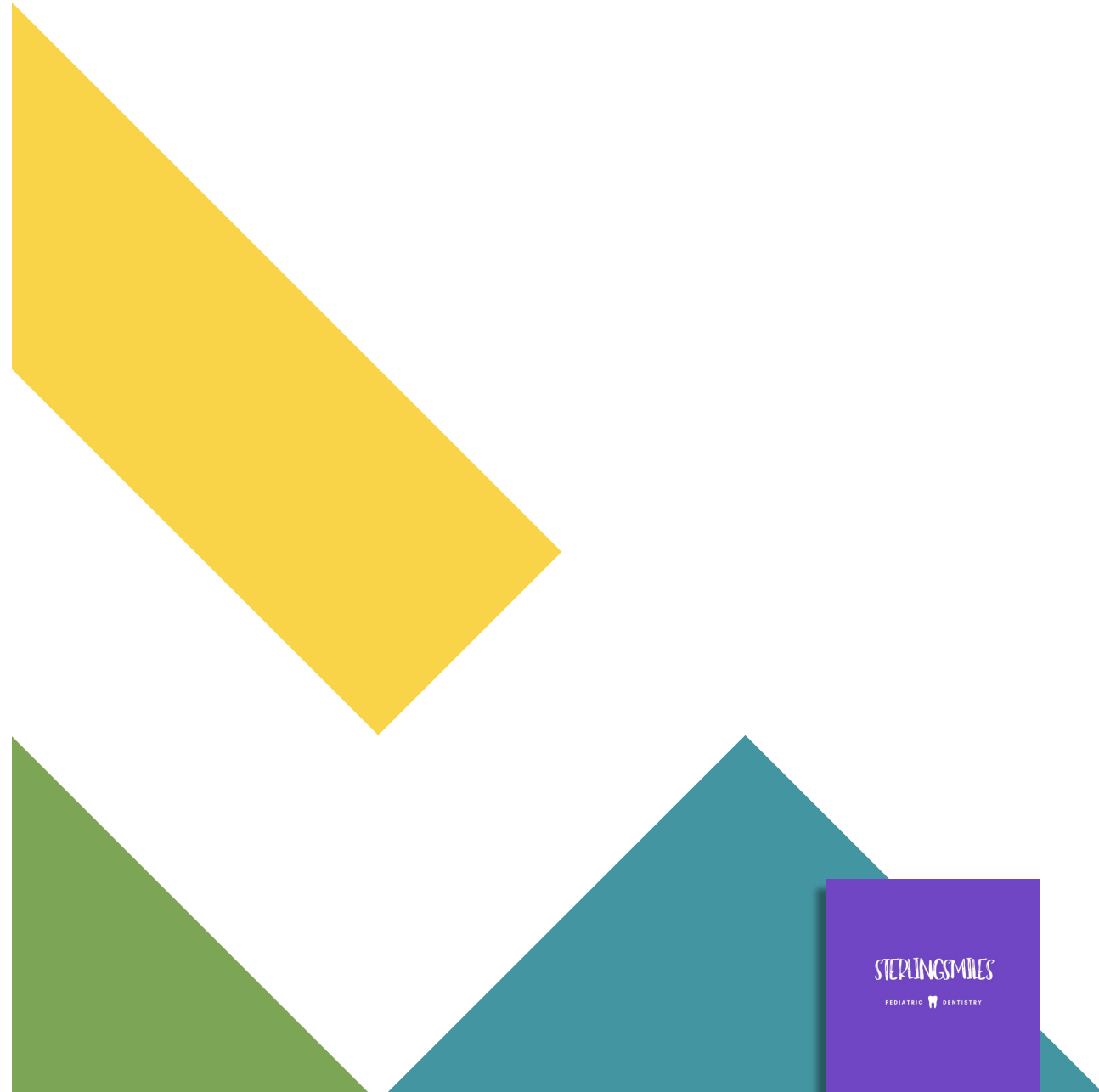
Rationale Behind Early Dental Visits and the Concept of a Dental Home

- 1. Rationale for Early Dental Visits:
 - Establishing a dental visit by the child's first birthday is crucial for early detection and prevention of dental issues.
 - Early visits help educate parents about proper oral hygiene practices and dietary habits.



Rationale Behind Early Dental Visits and the Concept of a Dental Home

- 2. Concept of a Dental Home:
 - A dental home provides continuous, accessible, and comprehensive oral health care.
 - It fosters a positive relationship between the child, family, and dental care providers.



Rationale Behind Early Dental Visits and the Concept of a Dental Home

- 3. AAPD Recommendations:
 - Fluoride Use: Apply fluoride varnish every 3 to 6 months starting with the eruption of the first tooth.
 - Sealant Application: Sealants should be applied to primary molars at risk of decay.
 - **Pediatricians' Role:** Pediatricians should administer fluoride varnish during routine visits to strengthen enamel and prevent caries. Emphasizing early dental visits and establishing a dental home can significantly reduce the risk of dental problems and promote lifelong oral health

Establishing a Dental Home

- 1. Concept of a Dental Home:
 - A dental home provides continuous, comprehensive oral health care starting by the child's first birthday or at the emergence of the first tooth.
 - Integrates preventive, acute, and chronic oral health care in a family-centered way.



Establishing a Dental Home



- 2. Integration with Medical Home Model:
 - Collaboration between dental and medical providers ensures holistic care for the child.
 - Medical home model emphasizes continuous and comprehensive medical care; adding a dental home ensures overall health.

Establishing a Dental Home

- 3. Role of Pediatricians:
 - Pediatricians should refer to a pediatric dentist by the child's first birthday or at the emergence of the first tooth.
 - Regular dental check-ups and early intervention for any oral health issues.
 - Establishing a dental home in tandem with a medical home promotes better health outcomes and ensures coordinated care for children.

1. Baby bottle decay
2. Nursing bottle caries
3. Early childhood caries (ECC)



What Does Dental Decay Look Like?



Overcoming Challenges

Oral Health Recommendations (0-3 Years):



Begin oral care before the first tooth emerges, by gently cleaning the baby's gums with a soft cloth.



With the appearance of the first tooth,

start brushing twice daily using a fluoride toothpaste in an amount no more than a smear or rice-sized.



Transition to a cup by the first birthday.

How Much is too much?

Recommended toothpaste amounts by age:



0-3 YEARS:
Grain of rice-sized amount



3+ YEARS:
Pea-sized amount

When should pediatricians ideally refer a child to a pediatric dentist?

- A) By the child's first birthday
- B) When the child starts school
- C) Only if there are visible dental issues
- D) When the child loses the first tooth



Common Oral Health Issues in Young Children



Discomfort in the area of the erupting baby teeth

Irritability

Excessive salivation

Low-level fever

Teething



Rubbing infants' gums

Chilled Rings

Teething Snacks

Teething- Treatment

Don't Be too Alarmed if you see:



Eruption Cysts



Establishing a Dental Home



A dental home is where your child will have regular dental visits



Should be established by 1 year of age



Here is where you ask questions

Overcoming Challenges

- Parents often struggle with getting teeth clean
 - Try brushing in the highchair, car seat, pillow
- Finances
 - Check your insurance.
 - Most insurances cover dental care for children
 - Medicaid has AMAZING dental coverage for children
- Weaning
 - We know its hard and takes work



Pacifier's



Thumbs and Fingers

Habits to work on



Open Bite

Safety

- Pacifiers
- Extension Cords
- Highchairs
- Electrical Sockets



1. Promote breastfeeding:

- Breastfeeding is optimal, but prolonged and frequent breastfeeding beyond the first year can increase caries risk.



2. Avoid nighttime bottles with milk or juice:

- Use only water if necessary for nighttime bottles.

Diet

3. Juices

- no more than 4-6 ounces of fruit juice per day
- Dilute with 50% water or more



4. Snacks

- Promote healthy snacks: Encourage fruits, vegetables, cheese, and yogurt instead of sugary or starchy snacks.

Diet

5. Limit sugar intake:

- Reduce the consumption of sugary snacks and drinks.
- Offer water instead of sugary drinks

6. Encourage water intake:

- Promote drinking water, especially between meals.

7. Healthy meal patterns:

- Establish regular meal and snack times and avoid constant grazing.

Diet

Which dietary practice is NOT recommended for preventing early childhood caries?

- A) Limiting juice intake to 4-6 ounces per day
- B) Allowing frequent sippy cup use throughout the day
- C) Nighttime bottle feeding with water
- D) Breastfeeding beyond 12 months

- Use a toothette or toothbrush (once teeth have come in) to removed milk, juice, food
- Especially after nighttime feedings



Clean teeth at night



Integrating Oral Health in Medical Education



Integrating Oral Health in Medical Education - Part 1



- **1. Importance of Including Oral Health Education:**
 - Oral health is crucial for overall health; educating medical professionals ensures comprehensive care.
 - Including oral health in medical education helps in early diagnosis and prevention of oral diseases.
- **2. Curriculum Modules Examples:**
 - Oral-Systemic Health Connections: Understanding how oral health impacts systemic conditions like diabetes and cardiovascular diseases.
 - Early Diagnosis of Oral Diseases: Training on identifying signs of oral diseases during routine check-ups.
 - Interdisciplinary Collaboration: Encouraging teamwork between medical and dental professionals to provide holistic care.

Integrating Oral Health in Medical Education - Part 2



- **3. Successful Case Studies & Programs:**

- Harvard School of Dental Medicine's initiative that integrates dental and medical education.
- Case study: University of Washington's inter-professional education program that includes oral health in primary care training.
 - - Benefits observed: Improved patient outcomes, enhanced professional satisfaction, and better healthcare cost management.
 - *Improved patient outcomes, enhanced professional satisfaction, and better healthcare cost management have been observed in integrated programs. Source: Various studies on the systemic implications of integrating oral health into medical education. Integrating oral health into medical education ensures that future healthcare providers are equipped to deliver comprehensive, interdisciplinary care that addresses both oral and systemic health needs.*

Integrating Oral Health in Medical Education - Part 3



- **4. Role of Healthcare Providers in Early Intervention:**
 - Pediatricians and primary care providers play a key role in early detection and referral to dental specialists.
 - Preventive care, such as fluoride varnish applications and dietary counseling, should be part of routine medical visits.
- **5. Collaboration Between Dental and Medical Schools:**
 - Developing comprehensive training programs that integrate oral health into medical curricula.
 - Joint workshops, seminars, and clinical rotations to enhance interdisciplinary understanding and cooperation.

Resources



- [AAPD | Parent](https://www.aapd.org/resources/parent) -
<https://www.aapd.org/resources/parent>
- <https://www.mychildrensteeth.org/>
- [Oral Health Coalition | Oral Health | Well-Ahead Louisiana \(wellaheadla.com\)](https://www.wellaheadla.com)
- [Members, Parents, and Guardians | MCNA Dental: Louisiana Medicaid and CHIP \(mcnala.net\)](https://www.mcnala.net)

Find a Pediatric Dentist Near You

To find a pediatric dentist in your area, simply put in your ZIP code and search radius

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Mile Radius
Select Mile Radius

Search

Advanced >

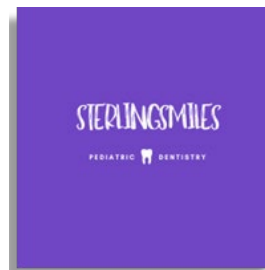
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Healthy Smiles for Louisiana

IMPROVING ORAL HEALTH THROUGHOUT LOUISIANA

Program Overview

MCNA Dental is a dental plan for Louisiana Medicaid and CHIP throughout the entire state. If you live in Louisiana, you or your children may be assigned to MCNA. We will manage your dental care.



References

American Academy of Pediatric Dentistry. (2016). Policy on Breastfeeding. *Pediatric Dentistry*, 38(6), 53-54.

American Academy of Pediatric Dentistry. (2016). Policy on Dietary Recommendations for Infants, Children, and Adolescents. *Pediatric Dentistry*, 38(6), 52-54.

American Academy of Pediatrics. (2017). Fruit Juice in Infants, Children, and Adolescents: Current Recommendations. *Pediatrics*, 139(6), e20170967. doi:10.1542/peds.2017-0967

Balaji, S. M. (2014). Interdisciplinary Approach in Pediatric Oral Health Education. *Journal of Interdisciplinary Dentistry*, 4(3), 124-128. doi:10.4103/2231-0754.143497

Centers for Disease Control and Prevention. (2020). Oral Health Tips. Retrieved from <https://www.cdc.gov/oralhealth/basics/childrens-oral-health/tips.html>

Centers for Disease Control and Prevention. (n.d.). Oral Health Data. Retrieved from <https://www.cdc.gov/oralhealth>

Colgate Oral Care Center. (n.d.). Eruption Cysts: Causes, Symptoms, and Treatments. Retrieved from <https://www.colgate.com/en-us/oral-health/mouth-sores-and-infections/eruption-cyst-causes-symptoms-and-treatments>

Food and Drug Administration. (n.d.). Benzocaine and Babies: Not a Good Mix. Retrieved from <https://www.fda.gov>

Harvard School of Dental Medicine. (n.d.). Initiative to Integrate Oral Health and Primary Care Education. Retrieved from <https://hsdm.harvard.edu>

Louisiana Oral Health Coalition. (2021). Oral Health Report Card. Retrieved from <https://lumcfs.org/advocacy/louisianas-children-numbers/>

Sheiham, A., & James, W. P. T. (2014). Diet and dental caries: The pivotal role of free sugars reemphasized. *Journal of Dental Research*, 93(10), 951-952. doi:10.1177/0022034514551717

Smile California. (n.d.). Oral Health Services for Children. Retrieved from <https://smilecalifornia.org>

Tinanoff, N., & Palmer, C. A. (2000). Dietary Determinants of Dental Caries and Dietary Recommendations for Preschool Children. *Journal of Public Health Dentistry*, 60(3), 197-206. doi:10.1111/j.1752-7325.2000.tb03328.x

Touger-Decker, R., & van Loveren, C. (2003). Sugars and dental caries. *American Journal of Clinical Nutrition*, 78(4), 881S-892S. doi:10.1093/ajcn/78.4.881S

University of Washington. (n.d.). Interprofessional Education Program Including Oral Health in Primary Care Training. Retrieved from <https://www.washington.edu>

Questions?



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