

Children's Hospital LOS ANGELES
CALIFORNIA LEADERSHIP EDUCATION IN NEURODEVELOPMENTAL DISABILITIES
USC University of Southern California

Promoting Oral Health: A Cross-Disciplinary Perspective



Developed by
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A Leadership Project of CA-LEND 2017-2018

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“I’m not a dentist;
I don’t *do* oral health.”

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Objectives

- Participants will review best practices of preventative oral health for all healthy children and families
- Participants will be able to identify at least three institutional barriers to good oral health for children with special healthcare needs
- Participants will identify appropriate oral health interventions in two case study examples
- Participants will be able to identify at least three best practices for improving the oral health of their patients and families

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Oral Health - what is “ideal”?

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Expectations versus Reality



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What is Good Oral Health for Children?



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graph LR; A[Prenatal Care & Vitamins] --> B[Oral Health Screening by Pediatrician & Appropriate Referral]; B --> C[Connection with a Medical/Dental Home for Coordinated Care]
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What is Good Oral Health for Children?

Prenatal

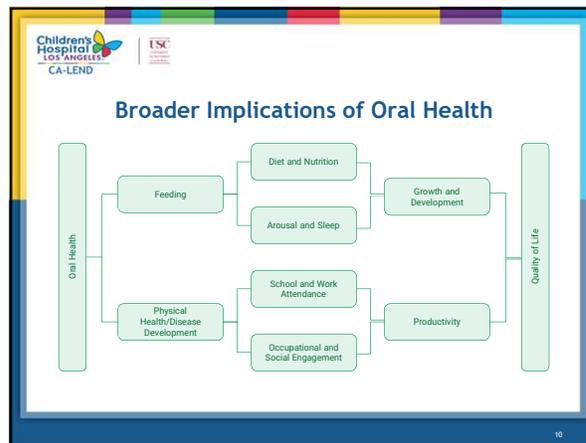
- Maternal oral health has an impact
- Prenatal folate intake lowers risk of cleft lip/palate

Medical home

- Breastfeeding can have positive effects
- Pediatric screening and education
- **First dental visit at age 1**
 - Pediatric DDS highly recommended for kids with special healthcare or developmental delay



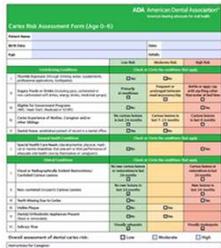
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What is Good Oral Health for Children?

- Screening: Caries risk assessment
- Oral Hygiene
 - Soft cloth before tooth eruption
 - Soft brush and fluoride toothpaste with first tooth
 - Diet - frequency of feeding and carbohydrate exposure
 - Caries are an infectious disease



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Oral Health Challenges

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Why is Good Oral Health Important?

- Children need strong, healthy teeth to:
 - Chew
 - Speak and smile
 - Engage with their environment & others
- Poor oral health negatively impacts:
 - Food intake and growth
 - Sleep
 - Speech and language

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Pediatric Oral Health Issues



Dental caries Gingivitis (Gum Disease) Periodontitis

GUM DISEASE: HEALTHY GUM, GINGIVITIS, PERIODONTITIS

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Oral Health Issues More Likely to Occur in Children with Special Health Care Needs

Physical Conditions

- Cleft lip and palate
- Abnormal tooth eruptions, malocclusion, crowding
- Tooth abnormalities

Mental and behavioral health issues

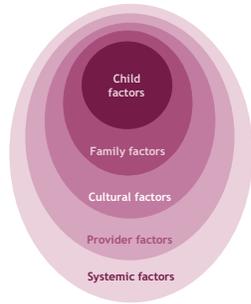
- Anxiety based on previous history
- Excessive grinding and clenching
- Oral aversions or sensitivities



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Barriers Impacting Oral Health



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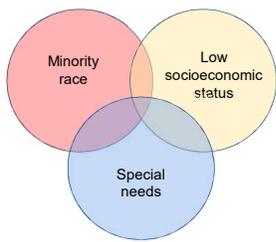


Oral Health Care System

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Oral Health Care Disparities



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The 5 A's of Access to Care



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Risks Can Be Compounded in Children with Special Health Care Needs

Increased risk for infection and sepsis among those with:

- Compromised immunity (leukemia, HIV)
- Endocarditis and related cardiac conditions

Increased Medical Trauma

- Extensive medical intervention to the head, neck, face, and mouth

Limited self-sufficiency:

- Children with mental or developmental disabilities may face challenges taking the lead in oral hygiene
- Individuals with chronic physical illnesses may experience limited movement or motor function interfering with self-care

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Oral Health and Nutrition

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Oral Health & Occupational Therapy

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Diet/Nutrition Concerns

Increased tartar build-up and gingivitis can occur, due to:

- Enteral Nutrition
 - lack of normal clearance of the oral cavity
 - Oral hygiene may be neglected
 - Exclusive tube-feed alters oral microbiota
 - **Narayana to revise**
- Sugary medicines, especially outside of meal times

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OT/Therapeutic Intervention Examples

- Positive thought jar
- DIY toothpaste
- Nuk brush
- Routine checklist
- Social Stories
- Sensory adapted dental environment (SADE)



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Diet/Nutrition Concerns

- Oral dysphagia
 - pocketing food increases decay
 - puréed foods adhere to teeth longer
 - gagging/choking expose teeth to stomach acid
- Poor diet quality
 - Cariogenic diet
 - highly fermentable carbohydrate content, sticky consistency, breaks into small pieces in the mouth, reduce the pH in the mouth to less than 5.5, highly processed
 - Choose non-cariogenic foods between meals
 - soda increases demineralization
 - sugary drinks (juice, sports drinks) increase bacterial activity

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“I’m not a dentist;
I don’t *do* oral health.”

But what role *could* you play?

Add a countdown timer

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Interdisciplinary Roles in Oral Health



- OT
- Nutrition
- Medicine
- Nursing
- Psychology
- Case Mgmt
- Speech
- Education

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Case Study: "Matthew"



- What are Matthew's strengths and challenges?
- How does oral health impact his occupational functioning?
- What would you do in your intervention with Matthew?

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Case Study: "Matthew"



- 6 years old
- Dx: Feeding Disorder, ASD, DD
- Referral reason: texture/taste aversions, poor growth, challenging mealtime behaviors
- h/o dental pain, oral trauma from hospitalizations, force feeding
- Drinks milk from bottle, eats Greek yogurt
- Ped MD: "be patient"
- ER hx: throat infection, dehydration, stool impaction

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Case Study: "Matthew"



- What was done:
 - Co-treat w/ psychologist and OT
 - Gradual process of desensitization, oral motor skill building, reduce anxiety
 - Nutrition recommendations:
 - Avoid dehydration and constipation by adding water to yogurt, offering Pedialyte popsicles/ice to lick
 - Blend frozen fruits w/ water
 - Introduce complete multivitamin for kids - crush & lick or give chewable/gummy if accepted

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Case Study: "Matthew"



- Several cavities (dental caries)
- Refuses tooth brushing
- Dental visit every 3 months
- Physically restrained during dental visits
- Refuses oral motor OT assessment

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Case Study: "Jorge"



- 10 years old
- Dx: ADHD, profound medical history including extreme prematurity, extreme short bowel syndrome, Epilepsy, chronic diarrhea
- History of dental trauma
 - Moderate gingivitis
 - No dental carries, assessed to be low-risk
 - Very anxious at dentist, sometimes vomits during dental exam. Minimal exams performed annually
 - Referred to dental clinic for swollen temples due to persistent jaw clenching when anxious

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Case Study: "Jorge"



- Nutrition
 - Exclusively fed via g-tube (blenderized tube feeds) and home TPN.
 - Swallows 5-6 spoons of yogurt by mouth with significant coaxing by mom
 - Loves to prepare food with family
 - Loves chicken soup; will put it in his mouth is unable to swallow. Reports he wants to be a chef.

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Case Study: "Jorge"



- What was done:
 - Ongoing family therapy
 - Psychological treatment for Jorge and family to reduce anxiety and phobia
 - Reduce family pressure for oral feeds to avoid further trauma
 - Nutrition recommendations:
 - Increase reliance on enteral feeds to reduce reliance on TPN
 - Blenderize chicken soup and feed through G-tube while Jorge tastes and smells it with his family at the table
 - Recommend Referral to OT

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Case Study: "Jorge"



- Food by Mouth
 - Jorge has seen an OT for a swallowing study but not for any occupational therapy
 - Family strongly desires him to accept food by mouth
 - Jorge exhibits visible discomfort and physical aversion to oral feeding
 - "I will vomit if I try food"
 - Mostly licks, smells, and plays with food
 - Drinks water throughout the day without issue

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Best Practice Recommendations & Resources

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Case Study: "Jorge"



- What are Jorge's strengths and challenges?
- How does medical and oral trauma impact his occupational functioning?
- What would you do in your intervention with Jorge?

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Best Practices: Families

Prenatal:

- takes care of own oral health
- takes prenatal vitamins containing folate
- breastfeeds the baby

Infants and toddlers:

- ◆ Begin tooth brushing when 1st tooth erupts
- ◆ Wipe child's mouth with towel, then transition to soft toothbrush with small amount of paste.
- ◆ Visit pediatric dentist when first tooth erupts or by age 1
- ◆ Minimize juice intake; offer milk/water instead

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Resources for Professionals

For Professionals:

- 10 An Overview of Children with Special Health Care Needs and Oral Health
- National Maternal and Child Oral Health Resource Center's "An Oral Health Professional's Guide to Serving Children with Special Health Care Needs (2nd ed.)"
- Oral Health for Children with Special Health Care Needs Priorities for Action – Recommendations from an MCHB Expert Meeting https://www.cda.org/Portals/0/pdfs/parent_messages_oral_sensitivity.pdf
- <https://www.autismspeaks.org/science/resources-programs/autism-treatment-network/tools-you-can-use/dental>
- https://www.cdafoundation.org/Portals/0/pdfs/poh_guidelines.pdf

Best Practices: Professionals

- Build a relationship with caregiver through praise, validation, and listening
- Build relationships with interdisciplinary team members to effectively combine skills
- Assist families with oral health needs and referrals
- Educate families about their dental coverage
 - what services are and are not covered, how to challenge denials, etc.
- Account for differing health literacy levels
- Dispel myths, but be sensitive to culture
- Motivational Interviewing
- Explore root of oral health issue
- ASK!

Resources for Families

- <http://mouthmonsters.mychildrensteeth.org/>
- <https://www.colgate.com/en-us/bright-smiles-bright-futures/program-materials/for-parents>
- Denti-Cal directory brochures
Developed using: <https://www.insurekidsnow.gov/coverage/find-a-dentist/index.html>
- Healthy Smiles for Children with Autism
English: <http://www.rchsd.org/documents/2014/02/flier-healthy-smiles-for-children-with-autism.pdf>
Spanish: <http://www.rchsd.org/documents/2014/02/flier-healthy-smiles-for-children-with-autism-spanish.pdf>
- Healthy Smiles for Children with Down Syndrome
English: <http://www.rchsd.org/documents/2014/02/flier-healthy-smiles-for-children-with-down-syndrome.pdf>
Spanish: <http://www.rchsd.org/documents/2014/02/flier-healthy-smiles-for-children-with-down-syndrome-spanish.pdf>

Best Practices: Interacting with Families

- Stay positive - encourage good practices alongside area for improvement. Praise small steps toward the goal.
- Linkages to care
 - Establish strong referral networks in family's local area
 - Follow up on referrals given
- Empower families to advocate for accommodations in dental offices such as*:
 - Dim lighting
 - Provide sunglasses for child
 - Play calming music
 - Provide calming sensory toys (i.e. stress ball, fidget toys)

*Cermak, S. A., Duker, L. I. S., Williams, M. E., Dawson, M. E., Lane, C. J., & Polido, J. C. (2015). Sensory adapted dental environments to enhance oral care for children with autism spectrum disorders: a randomized controlled pilot study. *Journal of autism and developmental disorders*, 45(9), 2876-2888.

Acknowledgments

- Nancy Hunt, PhD for guidance and mentorship throughout Leadership Project process
- Jose Polido, DDS, CHLA Dental Clinic for consultation from dental perspective and hands-on experience in pediatric dental clinic
- Shelby Surfas, OTD, OTR/L for supervision and mentorship throughout LEND program
- Alex Krebs, MS Statistics for assistance creating map visuals for dental brochures

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Add contact info

Questions?
Suggestions?



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