Wisconsin Health Literacy Summit
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A Multidisciplinary Approach to Improving the Oral Health Status of Wisconsin Children
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Objectives…

- Increase knowledge of the oral disease burden in Wisconsin
- Understand the oral disease process and its relationship to overall health
- Demonstrate effective collaborative strategies to resolve health issues
- Utilize oral health literacy tools with patients, providers, and caregivers
Health literacy - the ability to read, understand and act on health information - is one of the least recognized yet most widespread challenges to achieving better health outcomes and lowering health care costs in the United States.
Nearly half of the U.S. adult population (90 million people) have low functional health literacy (National Adult Literacy Survey (NALS) data).

11 million adults are non-literate in English (2003 National Assessment of Adult Literacy (NAAL) data).
More Statistics...

- Literacy skills are a stronger predictor of health status than age, income, employment status, education level or racial/ethnic group (Partnership for Clear Health Communication)
- Lower caregiver literacy has been associated with poorer oral health status of children
- Caregiver oral health literacy has a multidimensional impact on oral health outcomes of infants and young children

In Wisconsin…

Percentage of Wisconsin's Head Start Children with Caries Experience, Untreated Decay, Early Childhood Caries, and Need for Dental Care, 2008-09

- Caries Experience: 36%
- Untreated Decay: 26%
- Early Childhood Caries (ECC): 10%
- Need Dental Care: 27%
In Wisconsin…

Percentage of Wisconsin's Third Grade Children with Caries Experience, Untreated Decay, and Dental Sealants, by Race/Ethnicity, 2007-08

Race/Ethnicity

- White: 51% Caries Experience, 31% Untreated Decay, 15% Dental Sealants
- African American: 58% Caries Experience, 32% Untreated Decay, 55% Dental Sealants
- Hispanic: 70% Caries Experience, 48% Untreated Decay, 35% Dental Sealants
- Asian: 75% Caries Experience, 35% Untreated Decay, 44% Dental Sealants
Tooth decay remains a substantial problem in young children and is made worse by existing barriers that prevent them from obtaining dental care.
Why the Message is So Critical…

- In Wisconsin less than 38% of all Medicaid eligible enrollees received any dental services
- Statewide financial constraints will potentially impact service provision
- The need for restorative dental care can be prevented with increased knowledge
Baby Teeth Do Matter!

- A common myth is that baby teeth don’t matter…they fall out anyway right?
- Well…really wrong!
Early Childhood Caries...
What is Dental Caries?

- Dental caries is an infectious disease known to most of us as decay.
- Bacteria organize into a biofilm and feed on the sugars and starches in our diets and produces an acid that is the catalyst to dental decay.
What is Early Childhood Caries…

- An infectious transmissible disease - bacteria passed from parent/caregiver to child very early on
- Completely preventable
- Progresses rapidly
Early Childhood Caries

- Early Childhood Caries
  - The presence of 1 or more decayed, missing (due to caries) or filled tooth surfaces in any primary tooth in a child 71 months of age or younger.
Early Childhood Caries…

- Increased in children 2-5 years-old
- Associated with:
  - Facial and oral infections
  - Hospitalization and emergency department visits
  - Failure to thrive (insufficient development in height & weight)
  - Loss of school days
  - Decreased ability to learn
  - Increased treatment costs
• Dental caries is the most common infection of children in the USA
• The prevalence of caries is decreasing in every segment of the population except children under 5
• 28% of children will experience a cavity by the time they enter kindergarten
Early Childhood Caries

- ECC is a particularly virulent form of dental caries
- Develops rapidly (occurs in six months or less)
- Affects the upper front teeth first (these teeth erupt at about 8 months of age)
- Primary molars, which erupt at about 12 months of age are next to be affected
- Lower front teeth are affected when the disease is severe
Early Childhood Caries...

- 28% of children will develop caries/ECC by age 5.
- Early childhood caries progresses through stages:
  - White line lesions
  - Cavitated lesions
  - Rampant decay
  - Pulpal infection
  - Oral infection
  - Facial infection
**Disease Progression**

**Oral Health Screening Guide**

White spot lesions lead to progressive decay

- Normal primary teeth
- White spot lesion
- White spot lesion
- White spot lesion
- Early cavitated lesion
- Early childhood caries
- Moderate decay
- Severe decay
- Abscess
High-Risk Groups for Caries

- CYSHCN
- Children from low socioeconomic and ethno cultural groups
- Children whose caregivers or siblings have caries
- Children with poor diets
- Children who don’t have optimal exposure to fluoridated community water
Early Childhood Caries Risk Factors

We know how to prevent or control dental caries with the appropriate use of fluorides and dental sealants.

- Diet high in fermentable carbohydrates and sugars
- Bottle feeding
- Sweetened pacifiers, sippy cups
- Sweetened/non-sweetened medication
- Parent/caregiver issues
- Lack of appropriate fluorides
How Do We Prevent Early Childhood Caries?

- Identify and control individual risk factors
- Address cultural or health literacy concerns so the message can be broadly understood
- Get parent/caregiver and siblings healthy
Nutritional Habits—
Frequency is the Culprit

20 Minutes of destruction for each sip and bite

Reinforce need for making healthy food choices, especially low sugar choices.
The WIC Program

- Supplemental Nutrition Program for Women, Infants and Children (WIC)
- Funded by USDA, administered primarily by State Health Departments
- The DHS in WI contracts with 70 agencies (local health departments, tribes, private non-profit health agencies, CAPs)
Key Nutrition Goals

- Increase recommended prenatal weight gain: reduce low birth weight
- Increase BF incidence, duration, and exclusivity
- Increase normal weight gain/growth in infants and children: reduce overweight/obesity
- Improve dietary intake
WIC Eligibility

- Pregnant women, breastfeeding women (up to 12 months postpartum), nonbreastfeeding women (up to 6 months postpartum), infants, children through age 4 years
- Lower income: 185% FPL or higher if enrolled in BadgerCare/BC+ or FoodShare
- At nutritional risk
WIC Benefits

- Supplemental foods: specific nutritious foods based on age and nutritional need
  - Milk, high iron/low sugar cereals, eggs, 100% juice, peanut butter/legumes
  - 100% whole wheat bread/buns/rolls or brown rice or corn or whole wheat tortillas; cash value check for fruits and vegetables ($6 or $10) (in addition to WIC Farmers’ Markets checks in summer)
  - Breastpumps (if not provided by BadgerCare)
  - Baby fruit, vegetables, cereals (meats for fully breastfed), some special formulas/medical foods and regular formula
  - Tuna or salmon (fully breastfeeding mothers)

- Breastfeeding promotion and support
- Nutrition education
- Referrals
Examples of Risks

- Anthropometric: underweight, overweight, low of high prenatal weight gain, low birth weight, prematurity
- Biochemical: low hemoglobin, elevated blood lead
- Clinical/Health/Medical: diabetes, young age, short interconceptional period, multifetal gestation, nutrition-related medical condition, smoking, dental problems
- Dietary: failure to meet Dietary Guidelines, inappropriate nutrition practices
- Other: special breastfeeding needs, homeless, victim of abuse
Check Pick-up/Education

- Check pick-ups days:
  - Individual appointments with dietitian and/or breastfeeding counselor
  - Group, interactive displays, review of on-line nutrition education results, self-paced modules, ideal for this tool

- Breastfeeding support starting after delivery:
  - Breastfeeding Peer Counselors
  - Protect milk supply!
WIC Projects, Caseload

- 70 WIC Projects in WI
- # WIC participants/project range: ~80/mo (Florence Co) to ~7,450 (Milwaukee City)
- Current # served/month (2/11): 117,490
  - 26,254 W, 27,328 I, 63,908 C
- Served in 2010 (1/11): 205,988
  - 32,841 W, 38,871 I, 108,872 C
  - 68% White, 19% Black, 3% American Indian, 4% Asian, 6% 2 or more races (23% Hispanic)
Oral Health-Related WIC Risk Factors for Infants and Children

- Using bottle to feed fruit juice or giving more than 10-12 oz juice/day;
- Feeding soda/soft drinks, sweetened tea;
- Propping the bottle or allowing to fall asleep or be put to bed with bottle;
- Allowing all day use of bottle or covered or training cup/bottle (note: frequent BF does NOT cause tooth decay).
The Benefits of Collaboration…

- ~40% of children have one or more of these risk factors!
- Over 4% have severe dental problems (e.g., ECC)
- Thus, WIC has a need to provide education and increase health literacy related to good oral health practices!
The Wisconsin Dental Association

- 2900 member dentists, 85% of all actively practicing licensed dentists in Wisconsin
- WDA’s Focus on Prevention through Education
- Current public education TV campaign “Why Baby Teeth Matter”
- Dental Home Initiative educational materials developed for general dentists
The Tool...

Something to smile about...
Designed To Be Interactive...

Start now to give your child a healthy smile...

- Did you know that baby teeth are important for your child’s healthy smile?

- Baby teeth help your child chew food, talk clearly, and they save space for the permanent teeth.

- A healthy smile will make your child look and feel great.

- Good overall health depends on good dental health.

- You can give your child a healthy smile... the time to start is now.
Companion Tool...

Oral Health Screening Guide

White spot lesions lead to progressive decay

Normal primary teeth
White spot lesion
White spot lesion
White spot lesion
White spot lesion
Early cavitated lesion
Early childhood caries
Moderate decay
Severe decay
Abscess
Motivational Interviewing

**ORAL HEALTH PARENT / CAREGIVER GOALS**

- **Wear off bottle.**
- **Brush with a proper toothbrush 2 times per day.**
- **Healthy meals.** (2-6 meals or less per day).
- **Only water in sippy cup.**
- **Drink water with meals.**
- **Parents use xylitol gum or mints.**
- **No soda.**
- **Drink only water.**
- **Less or no candy and junk food.**
- **Less or no juice, 1-2 oz. or less per day.**
- **Drink only water.**

Circle three goals you will focus on.

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**Circled goals**

- On a scale of 1 – 10 (1=least likely, 10=most likely) how confident was the caregiver/parent that goals could be accomplished?  1   2   3   4   5   6   7   8   9   10
- Parent/Caregiver name
- Date________________________ Comments_________________________________________________________________________ --__________ Staff initials_____
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- Date________________________ Comments_________________________________________________________________________ --__________ Staff initials_____
Who Should Use This Tool…..Why?

- Primary care providers
  - Children are 3x more likely to see a medical provider than a dental provider
- Home visitors
- Family advocates
- WIC staff
- Public Health Nurses
- Health and Nutrition Counselors
Why this Partnership Works…

- Three components essential for success
  - WIC – to convey the literacy level of their clientele and to help develop a piece that will be easy to use in WIC facilities
  - WDA – to convey the clinical aspects of ECC and potential steps for prevention
  - State Oral Health Program – to facilitate meetings and develop state-sanctioned educational materials based on input from both WIC educators & dental providers
Never doubt that a small group of thoughtful citizens can change the world.
Indeed it is the only thing that ever has.

Margaret Mead