

Oral Health as Part of Pregnancy

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Disclosures

- Relevant Financial Disclosures
 - None
- Non-FDA Approved uses
 - None

Beyond Mum's Bright Smile!

- Gestational Diabetes
- Pre-term birth
- Child's oral health



Gestational Diabetes

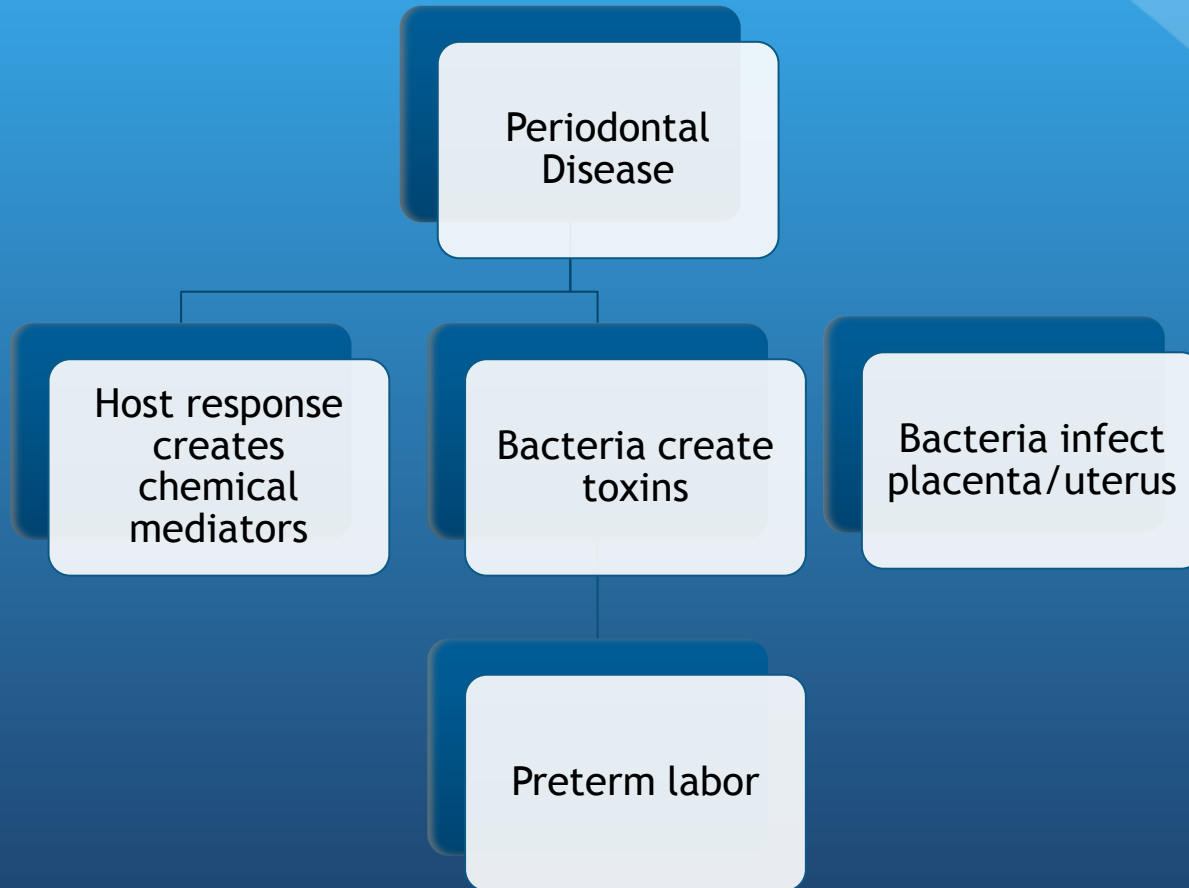
Gestational Diabetes	Prevalence Periodontal Disease
+	45%
-	13%

Gestational Diabetes	Later Onset Diabetes	Prevalence Periodontal Disease
+	-	9%
-	-	5%
+	+	30%
-	+	12%

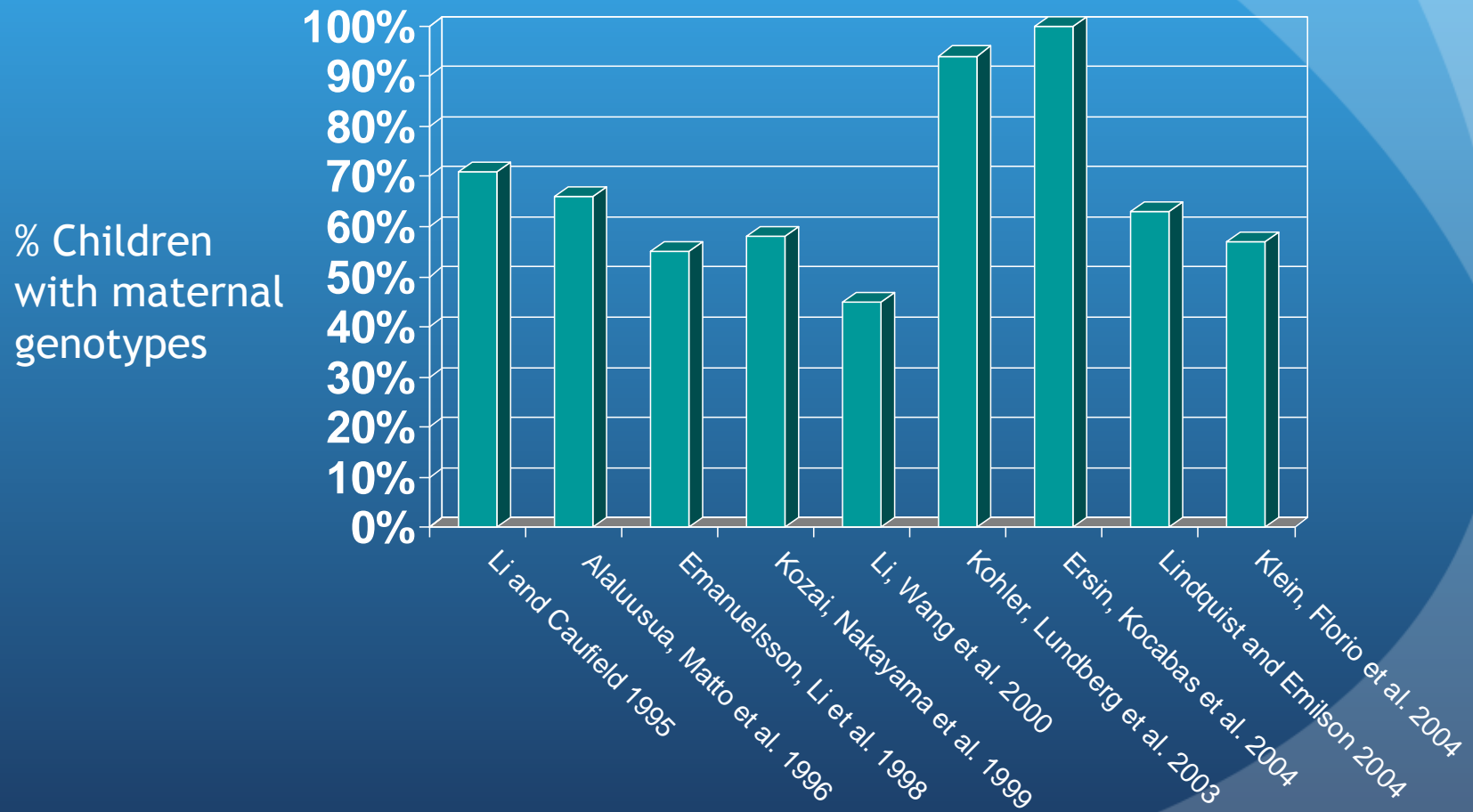
Periodontal disease and gestational diabetes mellitus. Xiong et al, 2006

Periodontitis and Gestational Diabetes Mellitus: Exploring the Link in NHANES III. Novak et al , 2006.

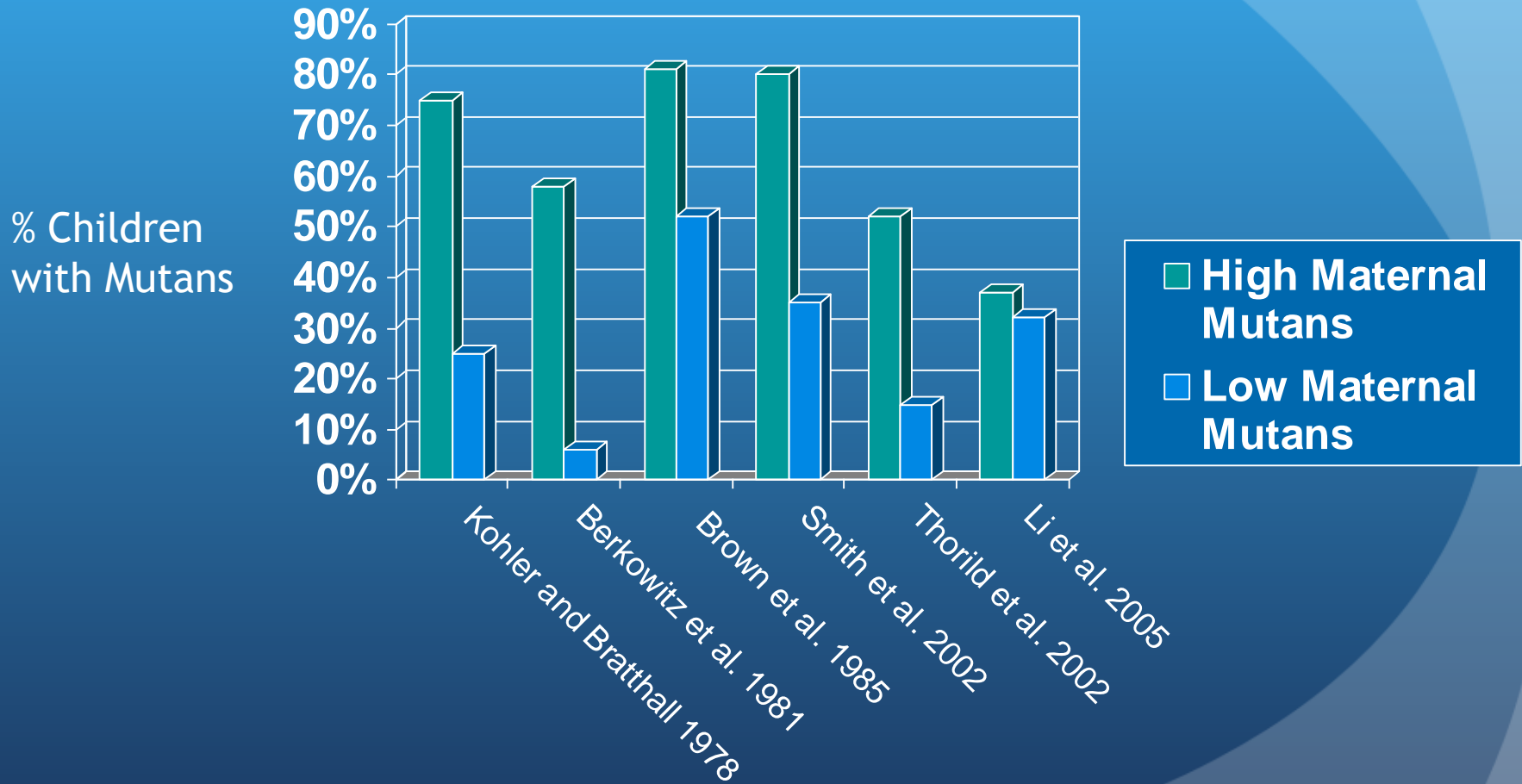
Preterm Birth & Periodontal Disease



Child's Oral Health - Bacteria!



Child's Oral Health - Bacteria



Child's Oral Health - Bacteria

- Early colonization increases caries risk
- Age of colonization variable
- Permanent colonization probably only possible after tooth eruption

Colonization Age	Caries score
<2 yrs	11
2-4 yrs	3

Alaluusua and Renkonen. Streptococcus mutans establishment and dental caries experience in children from 2 to 4 years old. *Scand J Dent Res* 1983

Child's Oral Health - Bacteria

- Improving mother's oral health:
 - Decreases her caries causing bacteria
 - Decreases the risk of bacteria transmission to the child
 - Improves her oral health behaviors which in turn will improve the child's oral health behaviors

Mother's who receive dental care are more likely to take their children for dental care.

Efforts to Work with Physicians

State Beginnings to National Successes

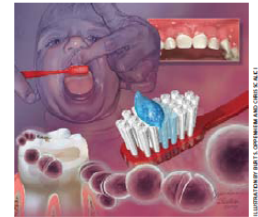
Physician Oral Health Education

- Student
 - Medical school curriculum requirements
- Residency training
 - Family medicine requirements
 - Pediatric medicine requirements
- Professional Education
 - American Family Physician
 - AAFP Monographs
 - Print CME course
- National Meetings
 - Presentations at all main meetings

A Practical Guide to Infant Oral Health

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Early childhood caries is the most common chronic disease in young children and may develop as soon as teeth erupt. Bacteria, predominantly mutans streptococci, metabolize simple sugars to produce acid that demineralizes teeth, resulting in cavities. Physicians should examine children's teeth for defects and cavities at every well-child visit. Any child with significant risk factors for caries (e.g., inadequate home dental care and poor oral hygiene, a mother with a high number of cavities, a high sugar intake, enamel defects, premature birth, special health care needs, low socioeconomic status) should be referred to a dentist by 12 months of age. Promoting appropriate use of topical and systemic fluoride and providing early oral hygiene instruction can help reduce caries in young patients, as can regularly counseling parents to limit their child's consumption of sugar. (*Am Fam Physician* 2004;70:2113-20,2121-2. Copyright © 2004 American Academy of Family Physicians.)



Editorial: page 2074

Patient information:
A handout on infant oral health, written by the authors of this article, is provided on page 2121.

See page 2055 for definitions of strength-of-recommendation labels.

Early childhood caries initially presents as white spots or lines on the maxillary incisors.

The most common chronic disease of childhood is early childhood caries (dental caries in children younger than six years).¹ It is five times more prevalent than asthma.² Most children do not receive dental care until they are three years old, yet by that time more than 30 percent of children from lower socioeconomic groups already have caries.³

Despite its high prevalence, early childhood caries is a preventable disease. Primary care physicians see children at least 11 times for well-child visits through age three and serve as the entry point into the dental care system. Family physicians caring for both pregnant mothers and infants are uniquely situated to provide early risk assessment, prevention, detection, and referral. Addressing oral health during well-child visits requires little time and involves refocusing existing activities rather than introducing new ones.

Etiology

Early childhood caries (*Figure 1*) can develop as soon as teeth erupt. Cavities (*Figure 2*) may be visible as early as 10 months of age.⁴

Caries typically presents in children as white spots or lines (*Figure 3*) on the maxillary incisors, which are among the first teeth to erupt and the least protected by saliva. If untreated, these white areas will rapidly break down into yellow-brown cavities (*Figure 4*), and the disease will spread to the posterior teeth.

Early childhood caries is an infectious bacterial disease of teeth. Bacteria, predominantly mutans streptococci, metabolize monosaccharide and disaccharide sugars to produce acid that demineralizes teeth and causes cavities. The interplay of these three etiological factors (teeth, bacteria, and sugar) controls the severity of the disease.

Eruption of teeth in infants is highly variable. The primary incisors typically begin to erupt between six and 12 months of age. The first molars erupt at about one year and the second molars at about two years. Teeth that erupt with enamel defects, typically areas of white, brown, or rough enamel, are at greater risk of caries.⁵ Defects are more prevalent in children who are born prematurely or have a low birth weight, and in children of low socioeconomic status.⁶

The exact age at which mutans streptococci colonization occurs in children is



Smiles for Life: A National Oral Health Curriculum ^{3rd edition}

Smiles for Life is the nation's only comprehensive oral health curriculum. Developed by the Society of Teachers of Family Medicine Group on Oral Health and now in its third edition, this curriculum is designed to enhance the role of primary care clinicians in the promotion of oral health for all age groups through the development and dissemination of high-quality educational resources.

For Individual Clinicians



We've made it easy for individual physicians, physician assistants, nurse practitioners, students, and other clinicians to access the curriculum and learn on their own time and at their own pace. Each of the courses is available online.

For Educators

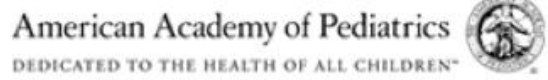


The curriculum is available in a presentation format easily implemented in an academic setting. Included is a comprehensive set of educational objectives based on the Accreditation Council for Graduate Medical Education (ACGME) competencies, test questions, resources for further learning, oral health web links, an implementation guide, and detailed outlines of the modules.

Course Quick Links

- 
Course 1:
The Relationship of Oral to Systemic Health
- 
Course 2:
Child Oral Health
- 
Course 3:
Adult Oral Health
- 
Course 4:
Acute Dental Problems
- 
Course 5:
Oral Health & the Pregnant Patient
- 
Course 6:
Fluoride Varnish
- 
Course 7:
The Oral Examination

Endorsed by:

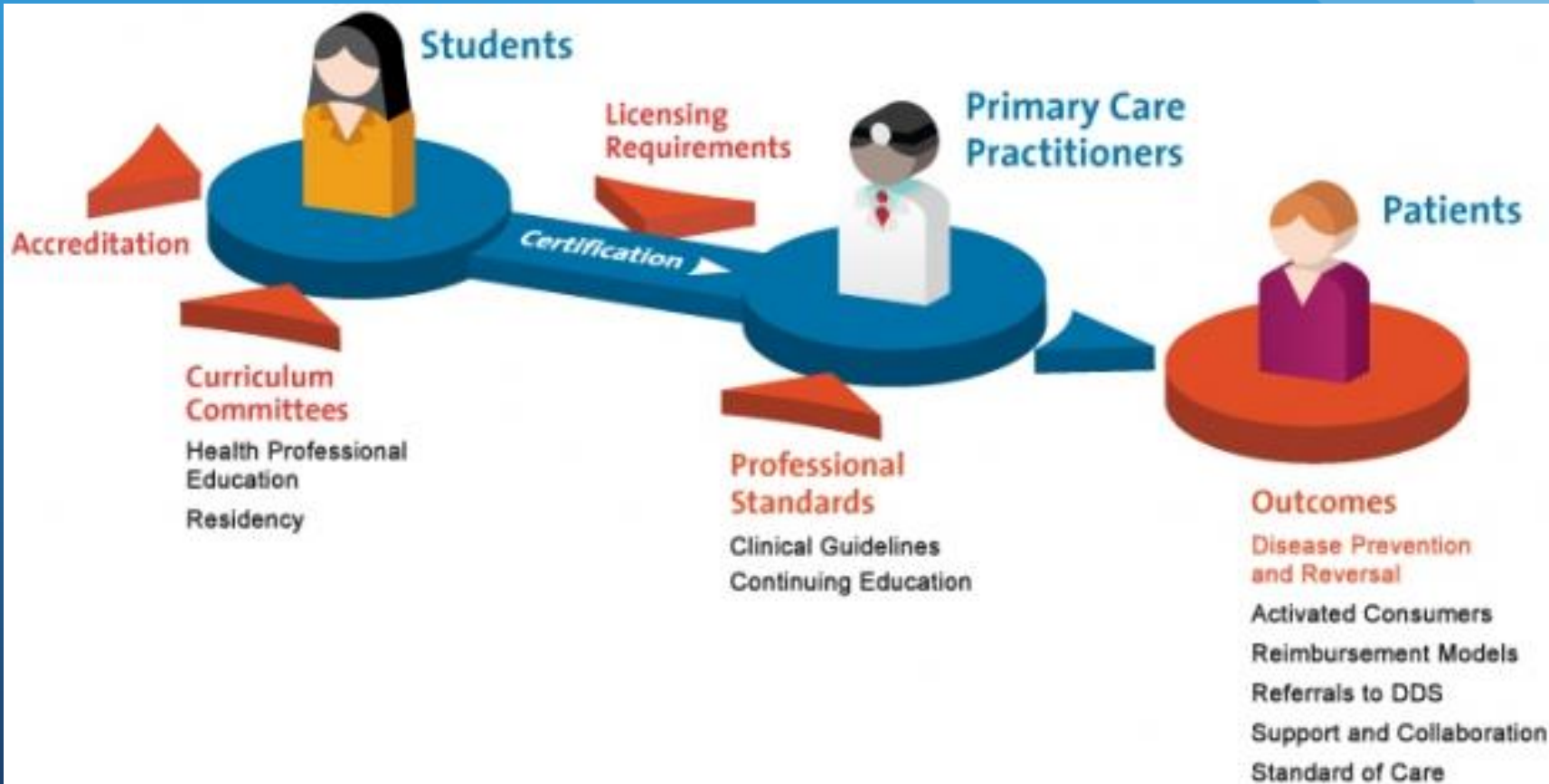


A Product of:



National *Interprofessional Initiative* on Oral Health

*engaging clinicians
eradicating dental disease*



Oral Health: A Team Sport!