



Oral Health in Primary Care

Center for Rural Health
University of North Dakota



Importance of Discussion and Addressing Oral Health among Pregnant Persons

June 10, 2021

Vanessa Bopp, RDH
Public Health Hygienist
North Dakota Department of Health
Oral Health Program
Vbopp@nd.gov



Housekeeping Items

- All attendees are muted and attendees cannot share video during this session.
- Remember to ask questions using the chat box.
- Slides and resources for today's session can be accessed on our [program website](#).
- Continuing education credits are available for today's session. To receive a certificate for continuing education, you must complete the evaluation.
- We have made every attempt to make today's presentation secure. If we need to end today's presentation unexpectedly we will follow-up with you using your registration information.

Land Acknowledgement Statement

[UND Land Acknowledgement Statement](#): Today, the University of North Dakota rests on the ancestral lands of the Pembina and Red Lake Bands of Ojibwe and the Dakota Oyate - presently existing as composite parts of the Red Lake, Turtle Mountain, White Earth Bands, and the Dakota Tribes of Minnesota and North Dakota. We acknowledge the people who resided here for generations and recognize that the spirit of the Ojibwe and Oyate people permeates this land. As a university community, we will continue to build upon our relations with the First Nations of the State of North Dakota - the Mandan, Hidatsa, and Arikara Nation, Sisseton-Wahpeton Oyate Nation, Spirit Lake Nation, Standing Rock Sioux Tribe, and Turtle Mountain Band of Chippewa Indians.

3



Objectives:



- Reduce the risk of caries transmission from mother to child
- Counsel patients about the safety of common dental interventions in pregnancy
- Improve dental care access for pregnant women through interprofessional collaboration



Oral Health in Primary Care
Center for Rural Health
University of North Dakota

4

Why it is so important to discuss oral health with expectant parents?



Oral Health in Primary Care
Center for Rural Health
University of North Dakota

5

The Maternal-Child Linkage



DENTAL CARIES IS A TRANSMISSIBLE DISEASE!

- Mothers or main caregiver are the main source of passing the bacteria responsible for causing caries to their infants
- Transmission occurs via saliva contact such as tasting food
- If mom's bacterial level is high, transmission is more likely
- If colonization is delayed (>age 2), child may have fewer caries
- Caregivers with caries also often pass on bad habits (high sugar intake, poor oral hygiene)
- Fathers can pass on bacteria, but this is less common
- Message is: BRUSH FOR TWO!



Oral Health in Primary Care
Center for Rural Health
University of North Dakota

6



Reduce the Risk!!

Untreated caries can lead to:

- Infections
- Missed school/Work
- Pain
- Nutritional deficiencies
- Poor self-esteem
- Sleep disruption



Caregivers can decrease their own caries levels by:

- Receiving regular comprehensive dental care, including during pregnancy
- Limiting the frequency of sugar in the diet
- Maintaining excellent oral hygiene



Oral Health in Primary Care
Center for Rural Health
University of North Dakota

7

Oral Conditions in Pregnancy



Oral Health in Primary Care
Center for Rural Health
University of North Dakota

8

Pregnancy Granuloma

Symptoms

- Occur in 5% of pregnant women
- Erythematous, non-painful, smooth or lobulated mass
- Bleeds easily when touched
- Usually develops on the gingiva

Etiology

- Develops as a response to local irritation such as poor hygiene or trauma and hormonal changes



Treatment

- Observe unless lesions are bleeding excessively, interfere with eating, or do not resolve spontaneously after delivery



Oral Health in Primary Care
Center for Rural Health
University of North Dakota

9

Hyperemesis Gravidarum

- Gastroesophageal reflux and excessive vomiting (Hyperemesis gravidarum) are both common in pregnancy and can cause enamel erosion

Management

- Rinse with water bicarbonate to reduce acid in mouth immediately after vomiting
- Avoid brushing too firmly or just following vomiting



Oral Health in Primary Care
Center for Rural Health
University of North Dakota

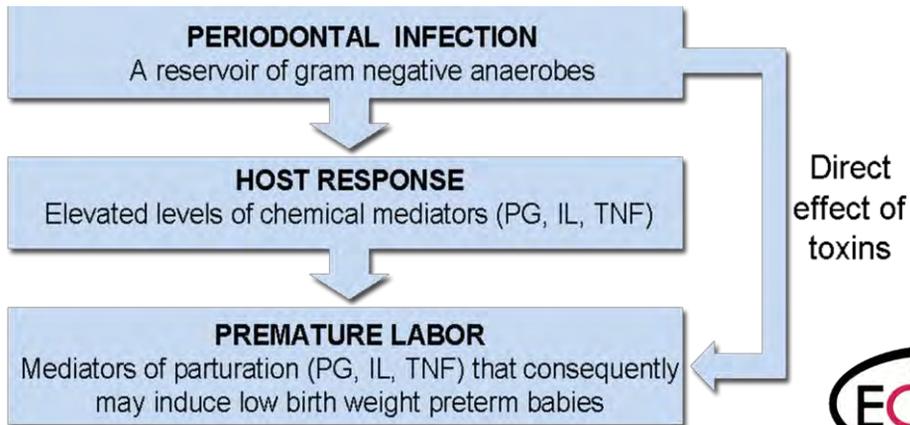
10

The Effects of Periodontal Disease on Pregnancy



Oral Health in Primary Care
Center for Rural Health
University of North Dakota

Mechanisms for Preterm Birth



Oral Health in Primary Care
Center for Rural Health
University of North Dakota

Chart courtesy of: Kumar J and Samelson R. Oral Health Care During Pregnancy and Early Childhood: Practice Guidelines. Albany, NY. New York State Department of Health. 2006. P. 23

The Bottom Line

- Periodontal disease is *associated* with preterm birth and low birth weight
- Periodontal treatment during pregnancy has not been shown to improve birth outcomes
- Periodontal treatment does improve the women's oral health
- Periodontal treatment is safe during pregnancy
- Need additional research to determine if pre-pregnancy treatment would lower risk



Oral Health in Primary Care
Center for Rural Health
University of North Dakota

13

Dental Treatment in Pregnancy is Safe!



Oral Health in Primary Care
Center for Rural Health
University of North Dakota

14

The Dental Disconnect

Women frequently do not see a dentist when pregnant

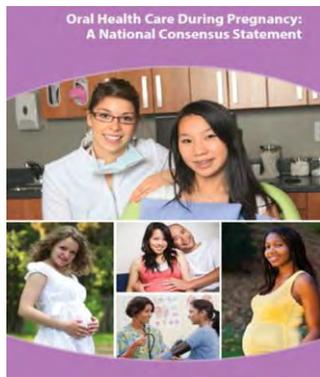
- Only 26-34% of all pregnant women visit the dentist
- Percentage is even lower for Hispanic women, low SES, and those not aware of oral-systemic linkages
- Only 50% of pregnant woman with a dental problem visit a dentist
- Even among women with dental insurance, dental care rated decline during pregnancy



Oral Health in Primary Care
Center for Rural Health
University of North Dakota

15

Treatment Guidelines



American Congress of Obstetricians and Gynecologists (ACOG) states “A dental checkup early in pregnancy will help ensure that your mouth stays healthy. Pregnant women are at an increased risk for cavities and gum disease”



Oral Health in Primary Care
Center for Rural Health
University of North Dakota

16

Treatment Tips

First Trimester

- Care should begin early especially if extensive care is needed
- Schedule visits in the afternoon to avoid morning sickness

Second Trimester

- Ideal time for dental care
- The fetus is not large, making it easier for mothers to recline in the dental chair for prolonged periods
- Organogenesis is complete, reducing fear of harm to the baby (even though dental procedures are safe throughout pregnancy)

Third Trimester

- Position woman slightly on left side with a towel prop to avoid vena cava compression
- Encourage standing and walking periodically
- Elevating the head helps avoid shortness of breath



Oral Health in Primary Care
Center for Rural Health
University of North Dakota

17

Dental Radiographs

Risks

- Radiation exposure to the fetus from dental x-rays is so low, it cannot be measured by conventional techniques

Procedures

- X-ray as necessary to make diagnosis
- Proper radiographic techniques to minimize radiation exposure
 - Utilize lead apron shielding
 - Avoid retakes when possible
 - Use a long cone to focus radiation only on mouth
 - Newer digital X-rays (80% less radiation)



Oral Health in Primary Care
Center for Rural Health
University of North Dakota

18

Preventive Agents

The following are appropriate for use during pregnancy at standard dental doses:

- Fluoride**

- Inhibits bacteria growth and strengthens enamel
- Used topically to prevent dental caries

- Xylitol Gum**

- Decreases level of bacteria in saliva and plaque
- Selects for less virulent strains of mutans streptococci

- Chlorhexidine**

- Used as mouthwash to decrease bacteria
- Reduces gingivitis and plaque



Oral Health in Primary Care
Center for Rural Health
University of North Dakota

19

What Can We Do as a Team?



Oral Health in Primary Care
Center for Rural Health
University of North Dakota

20



Ask.....

- Do you have any oral health issues currently?
 - If yes => make referral, give patient contact information for local dental office
- When was the last time you saw a dentist?
 - If > 6 months => make routine referral
 - If < 6 months => advise to see dentist at 6 months



Oral Health in Primary Care
Center for Rural Health
University of North Dakota

21

Integrating Oral Health into Pregnancy Clinical Exam

Screening

- Evaluate oral health risk history
- Perform an oral exam
- Document findings in prenatal record
- Include oral handouts in prenatal packets

Anticipatory Guidance

- Brush with soft toothbrush twice daily with fluoride toothpaste
- Floss daily
- Limit sugary snacks and drinks to meal times only
- Chew xylitol gum four to five times per day after eating
- Establish a dental home for the family
- Regular dental visits q 6 months
- Reassure regarding safety of dental treatment during pregnancy



Oral Health in Primary Care
Center for Rural Health
University of North Dakota

22

Case Presentation



Oral Health in Primary Care
Center for Rural Health
University of North Dakota

23

Smiles for Life



[All Courses | Smiles for Life Oral Health](#)



Oral Health in Primary Care
Center for Rural Health
University of North Dakota

24



Oral Health in Primary Care
Center for Rural Health
University of North Dakota

25

CONTACT INFORMATION



Julie Reiten
Project ECHO Coordinator
Center for Rural Health
Julie.a.reiten@UND.edu



Oral Health in Primary Care
Center for Rural Health
University of North Dakota

Vanessa Bopp, RDH
Public Health Hygienist
North Dakota Department of Health
Oral Health Program
Vbopp@nd.gov

