The Texas Tooth Steps Program

Presenting author: Sherdeana Owens, DDS, MPA
President, Texas Oral Health Coalition.

Program Coordinator, College of Nursing and Health Sciences,
Texas A&M University-Corpus Christi.
Objective

• By the end of this presentation, participants will be familiar with a collaborative model on Perinatal Oral Health [POH] education targeting low SES women in Texas.
The Texas Oral Health Coalition’s (TxOHC) Texas Perinatal Oral Health Project was developed in 2015 with funding provided (in part) by a Harris Grant from the ADA Foundation.

- The TxOHC Maternal Child Oral Health Work Group developed and disseminated oral health education materials aimed at low-income perinatal women targeting teen pregnancy programs in Title I schools and perinatal populations in San Marcos, Corpus Christi and Houston.
Goals

• The goal of this program was to provide perinatal oral health education for parents and caregivers and enforce specific oral health behaviors following oral health education.

• Studies have shown that education and motivation are important, but alone are not enough to achieve long-term change. Researchers state that although knowledge can be improved by education and attitudes can be changed as a result, behavior is more complex, therefore, more challenging to modify.

• This project seeks to use oral health messages printed on baby clothing to repeatedly reinforce three specific oral health behaviors: a healthy oral health diet, dental attendance, and oral hygiene.
Tasks

1. Create oral health education products for a perinatal audience.
2. Perform data collection and analysis to measure behavior change following perinatal oral health education.
3. Investigate the use of text messaging to distribute and collect data.
4. Recruit perinatal audiences from different community groups and settings.
5. Provide the perinatal audience with age-specific oral health messages on baby items whose use will reinforce the education portion of the project.
6. Assess and revise as needed.
Phase 1: Methods

- Participants were selected from Hospital/Insurance Baby Showers, Community Health Centers, and appropriate non-profit agencies.
- Participation (Including due date or child birth date) and Photo Release Forms were signed.
- Participants were queried immediately prior to and following POH education to gauge understanding of the information.
- Participants were followed over a 24 month period via short text questionnaires. The questionnaire is designed to measure the oral health behavior and its determinants in the parents of young children with regard to the three specific oral health behaviors.
Procedure

• This program addressed three specific oral health behaviors, a healthy diet for infants, oral hygiene and dental attendance. Participants first listened to a brief oral health presentation then signed up to participate, agreeing to complete several short survey up until their child is two years of age to measure the success of the project.

• After agreeing to participate, expectant mothers received a gift sack containing a set of three onesies for their baby imprinted with an age-specific oral health message corresponding to the size of the onesie, (6 months, 12 months and 18 months).
Sweet Dreams not Sweet Drinks
Brush My Teeth Twice a Day
First Dental Visit by Age One
- Postcards relating to each size and message contained oral health instructions and pictures demonstrating this information, as well as, a one-page educational piece that included all three oral health behaviors we are looking to enforce in the home.

- Agreed upon training materials to educate allied health professionals about the importance of good perinatal oral health such as existing PowerPoint presentations and online voice over videos in English and Spanish were used to maintain accuracy and consistency among presenters for oral health messaging.
SWEET DREAMS
DO NOT REQUIRE
SWEET DRINKS

Never put your baby to bed with a bottle containing anything other than plain water.

Do not let your baby sleep with milk in the bottle; infants should be removed from the breast when they finish feeding.

Never put sugary or sports drinks in a bottle or sippy cup.

Breast milk, formula, juice and other sugary drinks have sugars that stay on the teeth and can lead to tooth decay.

Courtesy of the Texas Oral Health Coalition, Inc.
Funding provided (in part) by a grant from the ADA Foundation.
Letting your baby sleep with a bottle can lead to tooth decay!

- Don’t use a bottle as a pacifier
- Don’t put your baby to sleep with a bottle
- Avoid putting sugary drinks in bottles
CLEANING YOUR BABY’S MOUTH

Clean your baby’s gums with a clean damp cloth after feeding.

When you see the first tooth, begin brushing with a children’s soft-bristled toothbrush.

Do not share spoons or forks with your child.
Do not clean pacifiers or bottle nipples with your spit or saliva.

Courtesy of the Texas Oral Health Coalition, Inc.
Funding provided (in part) by a grant from the ADA Foundation.
Texas Oral Health Coalition

DO NOT SHARE

Use a smear for children under age 3.

Use a peas-size for ages 3 to 6.
First Dental Visit

VISIT THE DENTIST BY YOUR FIRST BIRTHDAY

Children should visit the dentist by age one.

The dentist will check to see if everything is normal and to look for areas of early tooth decay or cavities.

Baby teeth are important because they hold a place for the permanent teeth.

Healthy baby teeth help your child to chew food, talk clearly and have a good self image.

This is also a time for the dentist to answer your questions about your child’s teeth.

Courtesy of the Texas Oral Health Coalition, Inc.
Funding provided (in part) by a grant from the ADA Foundation.
White spots today, see your dentist right away!
Procedure (cont)

• Professional credentialed oral health representatives provided training to all participating health personnel that included instructions on how to register moms into this perinatal program.

• Program participants received various survey tweets/texts at regular intervals during the two-year program to measure predetermined benchmarks.
Results

- Perinatal oral health education was provided to 200 low-income women in Houston, Corpus Christi, and San Marcos, Texas.
- The pre-post testing uncovered general lack of information on infant/child oral care.
- Initial data from the text questionnaires was collected with an approximately 25% return rate; however, the majority of respondents showed compliance with oral health instructions.
Texas Oral Health Coalition
Assessment and Revision

- It was noted that perinatal women who were attended by NFP or community health workers had a higher response rate to the questionnaires.
- A decision was made to use only NFP or community health workers in the oral health educator role.
- The use of a 4-page brochure rather than individual postcards was deemed more cost effective.
- Inclusion of additional oral health and general health information was approved.
- A second ADA Harris Grant was obtained in 2017 and the above revisions were implemented.
Phase 2: Methods

• An agreement was made with the Texas Nurse Family Partnership to act as oral health educators in the Texas Tooth Steps Program.

• Sites in Dallas, Houston, Corpus Christi, and Tyler, Texas, were selected.

• Sites were provided with imprinted infant clothing, adult and infant toothbrushes, educational brochures in English and Spanish, participant agreement forms, and pink gift bags.

• An instructional train-the-trainer presentation was created for the NFP staff.

• NFP staff was tasked with completion of the agreement forms, provision of the oral health training, and reinforcement of the training over time.
Phase 2 Train-the-Trainer Texas Oral Health Coalition
The Texas Tooth Steps Program

Your Baby’s Oral Health is the First Step Towards Total Health!
• Oral health is key to a healthy pregnancy and to overall health and well-being

➢ Babies and children whose mothers have poor oral health are more likely to have tooth decay

➢ Poor oral health has been associated with poor birth outcomes (e.g. preterm labor)

• Many changes occur during pregnancy, which may adversely affect oral health

➢ e.g. Pregnancy gingivitis
4 out of 10 pregnant women have tooth decay and/or some form of gum disease.
COMMON ORAL HEALTH ISSUES DURING PREGNANCY

Healthy mouth

Pregnancy gingivitis

Periodontitis

Mild

Moderate

Severe

Photo sources: Dozenist | Wikipedia | CC BY-SA 3.0 (upper left), Parveen chopra | Flickr | CC BY-NC 2.0 (lower right) via the National Center on Early Childhood Health and Wellness
KEYS TO GOOD ORAL HEALTH DURING PREGNANCY

Good Oral Hygiene

Oral Health Care

Eating Healthy and Other Healthy Behaviors

Courtesy of the Texas Oral Health Coalition, Inc.
Funding provided (in part) by a grant from the ADA Foundation.

Image courtesy of Stuart Miles at FreeDigitalPhotos.net
GOOD ORAL HYGIENE

- Brush at least **twice a day** (morning and night)
- Floss **daily**, every night
- For morning sickness, make sure to rinse mouth after each episode.

Courtesy of the Texas Oral Health Coalition, Inc. Funding provided (in part) by a grant from the ADA Foundation.
EATING HEALTHY

• What you eat affects the development of your baby

• A baby’s teeth begin to develop between the third and sixth month of pregnancy

• Ensure sufficient quantity of nutrients especially Vitamins A, C, and D, Protein, and Calcium

• If snacking, eat healthy and nutritious foods such as fruits, vegetables, yogurt, and cheese

• Avoid foods high in sugar such as candy, cookies, cake, soda, and fruit-flavored drinks

• Most importantly, follow your physician’s dietary recommendations.
Due to changes in the body, it is important to visit your dentist. Preventive, diagnostic, and restorative dental treatment is **safe** throughout pregnancy.

This includes:
- Dental X-rays
- Cavity fillings
- Root canals
- Extractions

✓ Any delay in care may result in more complex problems
✓ Inform dental office of your pregnancy and due date.
✓ Work with dental team to find the best plan of care during and after pregnancy.

Courtesy of the Texas Oral Health Coalition, Inc. Funding provided (in part) by a grant from the ADA Foundation.
OTHER HEALTHY BEHAVIORS

- **Do not** consume any alcoholic beverages, use any tobacco products, be exposed to secondhand smoke, or take any illicit drugs.
BREASTFEEDING

- Breastfeeding provides ideal nutrition and supports the best possible growth and development.
- Breast milk does contain sugar.
- Lower risk of tooth decay compared with bottle feeding.
- Remove child from breast when finished feeding.

Courtesy of the Texas Oral Health Coalition, Inc.
Funding provided (in part) by a grant from the ADA Foundation.
FEEDING PRACTICES

- Never put your baby to bed with a bottle containing anything other than plain water
- Hold child while feeding
- Do not prop a bottle to hold it in child’s mouth
- Do not add cereal to a bottle unless recommended by a pediatrician or dietitian (e.g., for gastroesophageal reflux disorder [GERD])
FEEDING PRACTICES

- Do not dip pacifiers in sweetened foods like sugar or honey
- Do not introduce juice into infant’s diet before age one
- Serve juice only in a cup; serve juice with other foods
- Make sure child drinks plenty of water throughout the day
- Don’t offer food as a reward for good behavior

Fruit Juice Recommendations
Children under 12 months = zero
1-3 years = max 4 oz. / day
4-6 years = max 4-6 oz. / day
7-18 years = limit to 8 oz. / day
Gently wipe the baby’s gums with a clean damp cloth after each feeding.

When the first tooth appears, start brushing with an infant’s soft-bristled toothbrush and fluoride toothpaste.

Use a smear for children under age 3.

Use a pea-size for ages 3 to 6.
CLEANING YOUR BABY’S MOUTH

• The bacteria that causes dental cavities is infectious and transmissible

• Do not share eating utensils, pre-chew food, clean pacifiers with your mouth, share cups, bottles, or toothbrushes, or let children put fingers in anyone’s mouth.

• Clean pacifiers in soapy water and rinse well. Never clean with saliva or cleaning products.

• An adult needs to brush the child’s teeth until 7-8 years of age to avoid cavities

Courtesy of the Texas Oral Health Coalition, Inc.
Funding provided (in part) by a grant from the ADA Foundation.
Dental visits, by age 1, are important because they:

- Reduce fear of dentist
- Identify oral health problems early
- Provide preventive care
- Offer guidance to parents

Courtesy of the Texas Oral Health Coalition, Inc. Funding provided (in part) by a grant from the ADA Foundation.

Photo Source: National Center on Early Childhood Health and Wellness
RESOURCES

• Nutrition - Visit http://www.choosemyplate.gov/moms-pregnancy-breastfeeding
  ➢ Daily Food Plans for Moms-to-be and for Breastfeeding moms
  ➢ Pregnancy Weight Gain Calculator

• Healthy Habits for Healthy Smiles – https://eclkc.ohs.acf.hhs.gov/oral-health/article/healthy-habits-happy-smiles
  ➢ This series of handouts for pregnant women and parents of infants and young children provides simple tips on oral health issues.

• American Dental Association information on pregnancy and oral health visit http://www.mouthhealthy.org/en/pregnancy/

Please remember to be a good role model.
Many Thanks to Our Partners for Their Support and Contributions!

Texas Oral Health Coalition

 Courtesy of the Texas Oral Health Coalition, Inc. 
 Funding provided (in part) by a grant from the ADA Foundation.

Image courtesy of David Castillo Dominici at FreeDigitalPhotos.net
Questionnaire

• Question measuring: No sugar in the bottle

• (Send at 4 months)
• How often does your child drink something other than water in their bottle in bed or at night?
  • 1 - never
  • 2 - more than once a week
  • 3 - at least once a day

• (Send at 7 months)
• How many times does your child drink fruit juice or soda in their bottle?
  • 1 - never
  • 2 - more than once a week
  • 3 - at least once a day
• Question measuring: Brush your baby's teeth twice a day

• (Send at 5 months)
• How often do you clean your baby’s gums after feeding?
  • 1 - never
  • 2 - at least once a week but not every day
  • 3 - once a day
  • 4 - after every feeding

• (Send at 20 months)
• How often do your child’s teeth get brushed?
  • 1 - less than once a week
  • 2 - at least once a week but not every day
  • 3 - once a day
  • 4 - twice a day or more
Questionnaire (cont)

- Question measuring: Take your baby to the dentist by age one
  
  (Send at 18 months)
- When was the first time your child visited a dentist?
  - 1 - never
  - 2 - before 12 months of age
  - 3 - after 12 months of age
  
  (Send at 24 months)
- What was the result of your child’s dental visit?
  - 1- no dental cavities
  - 2 - had one cavity
  - 3 - had more than one cavity
The perinatal pilot project found a key element to program success is follow-up and maintaining contact with the participants for the duration of the program.

Our recommendations include to continue training and utilizing FNP and community health workers as presenters and for follow-up, the development of a downloadable infographic poster, and the continuation of reaching low-income families that utilize WIC, Community Health Centers, and other non-profit agencies for health services.
<table>
<thead>
<tr>
<th>Name</th>
<th>Title and Details</th>
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<tbody>
<tr>
<td>Christina Murphey, RN, PhD</td>
<td>Member, Texas Oral Health Coalition. Undergraduate Chair, College of Nursing and Health Sciences, TAMUCC.</td>
</tr>
<tr>
<td>Jessica Stewart, MA</td>
<td>TxOHC Admin Asst and Social Media Manager</td>
</tr>
<tr>
<td>Kila Johnson, DDS</td>
<td>Member, Texas Oral Health Coalition. Dental Administrator, HCPHES</td>
</tr>
<tr>
<td>Teresita Ladrillo, DMD, MPH</td>
<td>Member, Texas Oral Health Coalition. Senior Public Health Dentist, HDHHS</td>
</tr>
<tr>
<td>Josephine Wolfe, PhD, MSPH, RDH</td>
<td>Member, Texas Oral Health Coalition</td>
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<tr>
<td>Monna Carpenter, RDH</td>
<td>Member, Texas Oral Health Coalition</td>
</tr>
<tr>
<td>Mary Leyendecker, BSHS</td>
<td>Student research assistant, TAMUCC</td>
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