

Teeth Cleaning During Pregnancy in Texas PRAMS

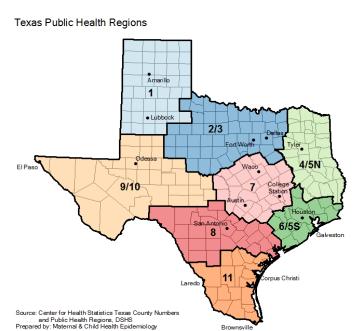
2012-2016

Overview

Oral health plays an important role in healthy pregnancy outcomes for both mother and infant. According to recommendations from the American College of Obstetricians and Gynecologists (ACOG), dental work, x-rays, and dental hygiene appointments are safe for pregnant women.² A study analyzing racial ethnic disparities in dental utilization among pregnant women in 10 states found that on an average, 44 percent of women had a dental visit during pregnancy.³ Additionally, other studies show rates as high as 56-74 percent in pregnant women who have reported no dental visits.⁴⁻⁵ Maternal periodontal disease is found in ≤40 percent of pregnant women.⁶ Furthermore, maternal salivary bacterial challenge is not only associated with oral infection among children but also predicts increased early childhood caries occurrence.⁷ This report uses Pregnancy Risk Assessment Monitoring System (PRAMS) survey data from combined years 2012-2016 to show the prevalence of teeth cleaning by a dentist or dental hygienist during pregnancy by select demographic characteristics. It also provides the prevalence of select maternal behaviors, stressful life events, and other dental measures by the status of reported teeth cleaning during pregnancy. The intent of this handout is to support data-driven actions to increase teeth cleaning for women during pregnancy. Only statistically significant results are presented here.

Background

PRAMS provides the most comprehensive population-based data on maternal health care before, during and after pregnancy in Texas. Questions cover health topics such as prenatal care, pregnancy intention, alcohol use, smoking and others. The results of survey analyses are generalizable to the population of women who are residents of Texas and gave birth to a live infant.



Texas is a vast state, with regional differences in geography, population size, demographic and socioeconomic characteristics, as well as various maternal and infant health indicators. Given the immense size of Texas, distance that some individuals, especially those living in rural counties, must travel to receive health care services can be a significant challenge to accessing and receiving those services. For administrative purposes, each of the 254 Texas counties

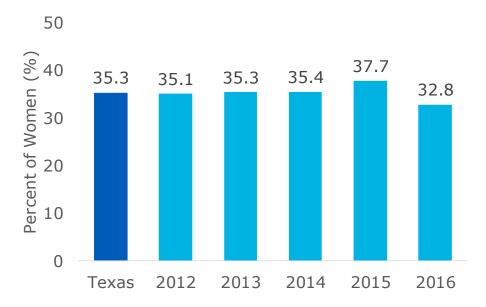
assigned to one of 8 public health regions (see map). Public Health Region 1 (PHR 1) is administered from a regional office in Lubbock. Public Health Region 2/3 (PHR 2/3) is administered from a regional office in Arlington. Public Health Region 4/5 North (PHR 4/5N) is administered from a regional office in Tyler and Public Health Region 6/5 South (PHR 6/5S) is administered from a regional office in Houston. Public Health Region 7 (PHR 7) is administered from a regional office in Temple. Public Health Region 8 (PHR 8) is administered from an office in San Antonio, Public Health Region 9/10 (PHR 9/10) is administered from an office in El Paso, and Public Health Region 11 (PHR 11) is administered from an office in Harlingen. PHR 1 and 9/10 as well as PHR 8 and 11 are combined to insure adequate numbers of women for analyses.



Results

Overall, 35.3 percent of Texas women had a teeth cleaning during pregnancy (Figure 1). This prevalence remained stable from 2012 to 2016.

Figure 1: Percent of Women Reporting Teeth Cleaning During Pregnancy by Survey Year, PRAMS 2012-2016

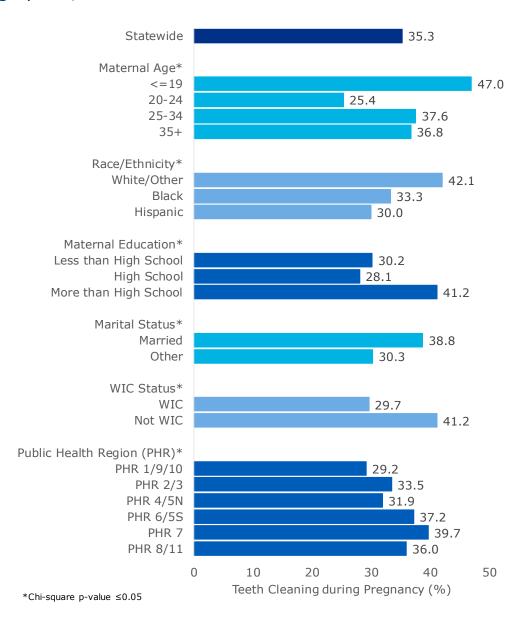


Significant demographic characteristics associated with teeth cleaning during pregnancy include age, race/ethnicity, maternal education, marital status, type of health insurance at birth, Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) status and Public Health Region (PHR) across Texas.

As shown in Figure 2, women age 20 to 24 years, who are Hispanic (30.0 percent), who are not married, or who are on WIC have a lower prevalence of teeth cleaning during pregnancy than their counterparts. Additionally, women who live in PHR 7 (Central Texas) are more likely to have had a teeth cleaning during pregnancy compared to women in any other PHR in Texas. In fact, women in PHR 7 have a significantly higher prevalence of teeth cleaning during pregnancy compared to women in PHR 1/9/10.

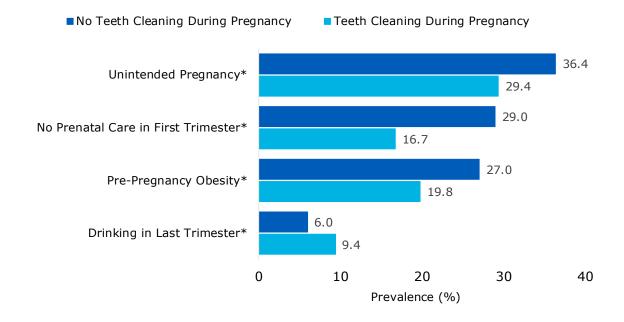


Figure 2: Dental Teeth Cleaning During Pregnancy by Select Demographics, PRAMS 2012-2016



Women who did not get their teeth cleaned during their most recent pregnancy are significantly more likely to also report an unintended pregnancy, to not have prenatal care in the first trimester of their pregnancy, or to be obese prior to pregnancy than women who did get their teeth cleaned during pregnancy (Figure 3).

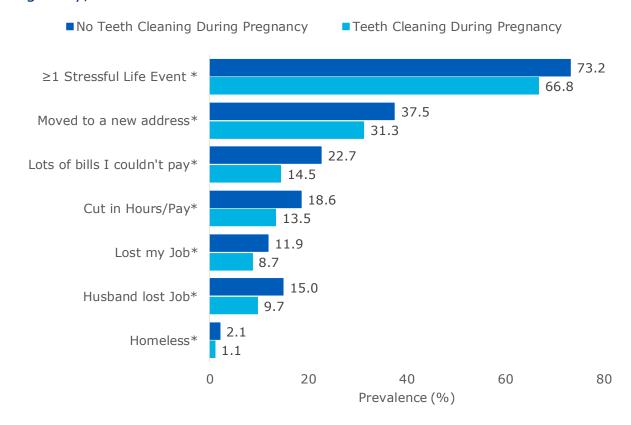
Figure 3: Select Risk Factors by Teeth Cleaning Status During Pregnancy, PRAMS 2012-2016



*p-value ≤0.001

Stressful life events are events or experiences that disrupt an individual's usual activities. These events cause substantial change and readjustment in one's life. Examples include marriage, divorce, illness or injury, and changing or losing a job. According to data from the PRAMS survey for years 2012 through 2016 (Figure 4), Texas women who had a teeth cleaning during their most recent pregnancy were significantly less likely to report having one or more stressful life events 12 months before pregnancy than women who did not have a teeth cleaning during pregnancy. Life events reported by Texas women that are significantly associated with not having their teeth cleaned during pregnancy include: moving to a new address, not being able to pay bills, having a cut in their hours or pay at work, losing their job, having a husband or partner lose their job, and being homeless.

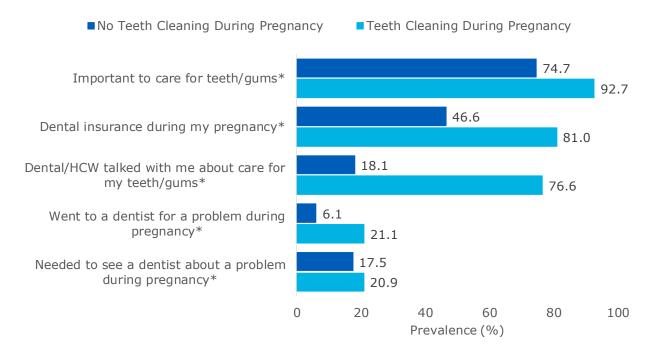
Figure 4: Select Stressful Life Events by Teeth Cleaning Status During Pregnancy, PRAMS 2012-2016



^{*}Chi-square p-value ≤ 0.005

Overall 18.7 percent of women reported needing to see a dentist for a problem during pregnancy, whereas only 11.3 percent of Texas women went to see a dentist for a problem during pregnancy. Texas women who did not get their teeth cleaned during pregnancy are significantly less likely to know about the importance of care for their teeth or gums, have dental insurance during their pregnancy, talk to a dentist or health care worker about caring for their teeth or gums, go to a dentist for a problem during pregnancy, or see a dentist about a problem during their pregnancy than women who did have their teeth cleaned during their most recent pregnancy (Figure 5).

Figure 5: Reported Dental Care by Teeth Cleaning Status During Pregnancy, PRAMS 2012-2016



^{*}Chi-square p-value ≤ 0.05

What's Next

Just over a third of Texas women had their teeth cleaned while they were pregnant. Both the dental and medical communities must educate pregnant women on the importance and safety of dental care during pregnancy. Medical providers should counsel their pregnant patients about seeing a dentist as part of their prenatal care.

All professions who work with at-risk pregnant women should be advocates for oral health. This includes medical providers, nurses, social workers, home visitors, community health workers, and more. They must recognize that pregnant women of lower socioeconomic status, who exhibit certain pregnancy risk factors, or who have recently endured stressful life events are even less likely than other women to have their teeth cleaned while they are pregnant. These women may require additional education and support to ensure they see a dentist as part of their prenatal care.



For additional information and resources, contact Healthy Texas Smiles for Mom and Babies at dental@dshs.texas.gov.

References

- 1. Amini, H. Casamassino, P.S. "Prenatal dental care: A review." General dentistry. May 2010.
- ACOG. Obstetrics & Gynecology, August 2013, Vol. 122:2, pp. 417-422.
- 3. Hwang, S. S., Smith, V. C., McCormick, M. C., & Barfield, W.D. Racial/ethnic disparities in maternal oral health experiences in 10 states, pregnancy risk assessment monitoring system, 2004–2006. *Maternal and Child Health Journal*, 2011;15(6),722–729.
- Boggess KA, Urlaub DM, Massey KE, Moos MK, Matheson MB, Lorenz C: Oral hygiene practices and dental service utilization among pregnant women. J Am Dent Assoc 2010; 141:553–561.
- 5. Marchi KS, Fisher-Owen SA, Weintraub JA, Yu Z, Braveman PA: Most pregnant women in California do not receive dental care: findings from a population-based study. *Public Health Rep* 2010; 125: 831–842.
- Boggess KA, Espinola JA, Moss K, Beck J, Offenbacher S, Carmago Jr, CA. Vitamin D Status and Periodontal Disease Among Pregnant Women. J Periodontology 2011;82:195-200.
- 7. Chaffee BW, Gansky SA, Weintraub JA, Featherstone JDB, Ramos-Gomez FJ. Maternal Oral Bacterial Levels Predict ECC Development. *J Dent Res* 2014;93(3):238-244.