



Background

- ❖ Hormonal and immunologic changes during pregnancy predispose women to various oral health problems including gingival/periodontal swelling or inflammation, tooth erosion, and dental decay¹.
- ❖ Research demonstrates the benefits of maintaining good oral health during pregnancy to control other common pregnancy complications, such as gestational diabetes and preeclampsia (pregnancy-induced hypertension)^{2,3}.
- ❖ Little is known about the oral health experiences of pregnant women in Los Angeles County (LAC).

Objective

To assess oral health experiences of pregnant women in a racially diverse county, such as LAC.

Methodology

- ❖ Study population: Women who gave a live birth in LAC during 2012. Mothers were randomly selected from birth certificates.
- ❖ Data source: The 2012 LAMB survey data where n = 6,539 with a response rate of 63%. LAMB is an ongoing population-based surveillance project designed to monitor self-reported experiences that occur before, during and after pregnancy.
- ❖ A survey is mailed to the new mothers (0-7 months post-partum).
- ❖ LAMB utilized stratified sampling design and followed CDC PRAMS
- ❖ Study Variables:
 - Dependent variables: LAMB asks respondents about the care of their teeth during their most recent pregnancy:
 - I needed to see a dentist for a problem.
 - A dental or other health care worker talked with me about how to care for my teeth and gums.
- ❖ Potential Confounders: Educational level, maternal age, Medi-Cal paid prenatal care (PNC), early PNC visit (<3 months), foreign born.

Statistical Analysis

- ❖ Sampling weights were used to account for the complexity of sampling design of the survey.
- ❖ Logistic regression was used to estimate the odds ratios (aORs) for a set of preconception health indicators.
- ❖ SAS Version 9.3 was used to perform all analyses (SAS, Cary, N.C. Version 9.3 software).

Results

Characteristics of Study Population

- ❖ Only included 4 major race/ethnicity categories for this particular analysis: White, Latina, African American, and Asian/Pacific Islander (A/PI) mothers.
 - White: 18.2%
 - Latina: 58.8%
 - African American: 7.8%
 - A/PI: 15.3%
- ❖ Final sample size: 6,330
- ❖ Average age: 28.3 ±7



Figure 1. Prevalence of not receiving dental counseling during pregnancy by selected maternal characteristics

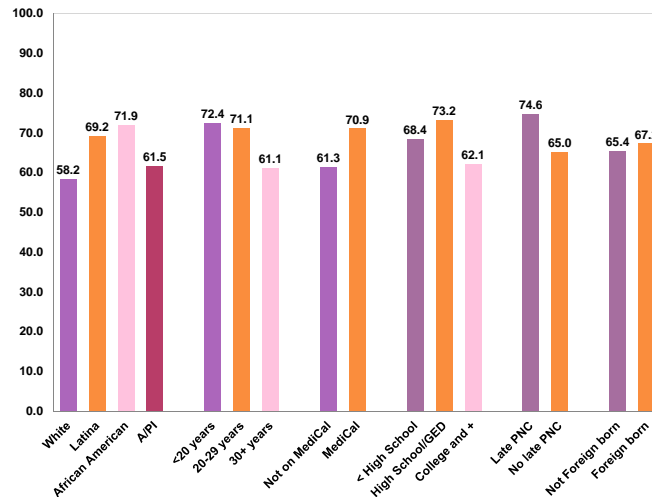


Table 1. Factors associated with not receiving dental counseling during pregnancy: Results from logistic regression model

Effect	Point Estimate	95% Confidence Intervals	
A/PI vs White	1.03	(0.65)	(1.62)
African American vs White	1.56	(1.25)	(1.95)
Latino vs White	1.24	(1.01)	(1.53)
<29 years vs 30+ years	1.43	(1.18)	(1.75)
<20 years vs 30+ years	1.43	(1.12)	(1.84)
HS vs College +	1.25	(0.95)	(1.63)
<12 vs College +	0.89	(0.67)	(1.17)
Medi-Cal vs No	1.19	(0.97)	(1.46)
Late PNC vs Early PNC	1.35	(1.02)	(1.80)
Foreign Born vs No	1.18	(0.96)	(1.45)

Summary

- ❖ 22% of respondents had dental problems before pregnancy. Prevalence by race/ethnicity:
 - White: 19.0%
 - Latina: 26.7%
 - African American: 30.5%
 - A/PI: 10.7%
- ❖ 67% of respondents did not receive dental counseling during pregnancy.
- ❖ Compared to White women, African American and Latina were less likely to be counseled for oral health during pregnancy (aOR=1.56, CI:1.25–1.95; aOR=1.24, CI:1.0–1.5, respectively) (Table 1). However, African American and Latina women have high prevalence of dental problems during pregnancy (30.5% and 26.7%, respectively) among all races/ethnicities.

Discussion

- ❖ **About 1 out of 5 women had dental problems during their pregnancy in LAC.**
- ❖ **About 1 out of 3 women did not receive dental care counseling during their pregnancy.**
- ❖ **Racial/ethnic disparities in maternal oral health experiences exist.** Oral health counseling should target all women, particularly African American and Latina women and those who are less than 30 years old or had late PNC.
- ❖ Attention toward the oral health needs of pregnant women is warranted. A coordinated effort from the dental and obstetric communities to establish guidelines could benefit maternal oral health and perinatal outcomes.
- ❖ Strengths/Weaknesses:
 - Strengths: Population based which increased generalizability; culturally appropriate designed: able to complete the survey through mail in English, Spanish, and Chinese and request a phone interview in multiple languages
 - Limitations: Recall bias, self-reported information

Follow-up/Contact Information

For further information about LAMB, please visit <http://publichealth.lacounty.gov/mch/lamb/LAMB.html>, call (213) 639-6400 or email Shin Margaret Chao at schao@ph.lacounty.gov

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2. Herrera JA, Parra B, Herrera E, Botero JE, Arce R, Contreras A, López- Jaramillo P. Periodontal disease severity is related to high levels of C-reactive protein in preeclampsia. *J Hyperten.* 2007; 25(7):1459-64.
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