

Oral Healthcare During Pregnancy: Analyzing Maryland PRAMS Data from 2001 to 2006

Presented By:

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Introduction



Why is Oral Health during Pregnancy Important?

■ For the Mother:

- Increased incidence of certain oral conditions during pregnancy
- Change in oral microflora: anaerobic-to-aerobic bacterial ratios, *Bacteriodes* species and *Prevotella intermedia*
- Other changes that may have an effect on oral health such as dietary patterns
- Oral health care during pregnancy is beneficial and can be performed safely

Introduction

■ For the Baby:

- Baby's future oral health: Infants acquire cariogenic bacteria from their mothers
- Early bacterial colonization, higher caries experience
- Mother's periodontal disease during pregnancy (?)



Source: <http://www.mchoralhealth.org/>

■ Unique Opportunities:

- Pregnant women generally more open to behavioral changes to improve health
- For many low-income women, pregnancy- the only time when they are eligible to receive dental services



Source: <http://www.mchoralhealth.org/>

Background

PRAMS: Pregnancy Risk Assessment Monitoring System

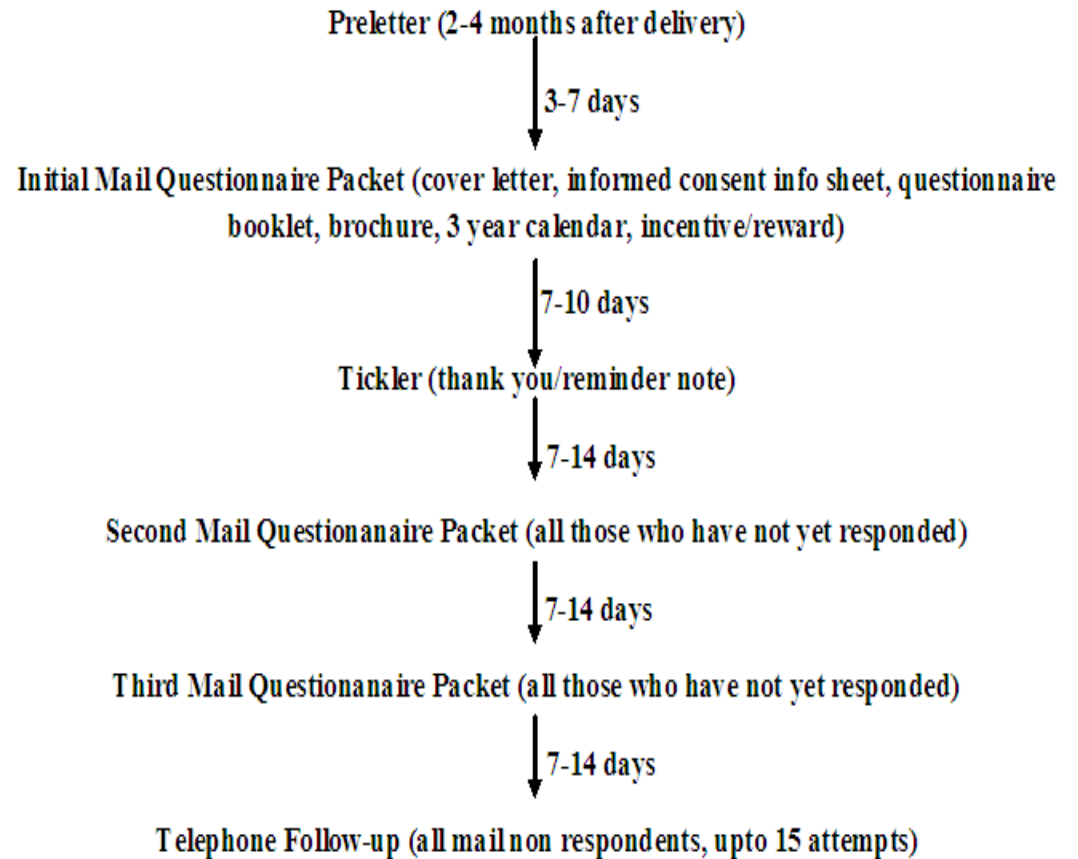
- Surveillance project of the CDC and state health departments.
- Collects state-specific, population-based data on maternal attitudes and experiences before, during, and shortly after pregnancy.
- Questionnaire:
 - English and Spanish.
 - Core and Standard Questions.
 - Mailed and telephone follow up.

Objectives

- To assess the trends in characteristics of pregnant women and oral health need, oral health care service utilization and dental counseling during pregnancy from 2001 to 2006.
- To assess the characteristics of women who reported having a dental visit during/before pregnancy and how it varies from 2001 to 2006.

Methods

- **Maryland PRAMS:**
 - Stratified random sample of women who deliver live-born infants.
 - Oversamples women who delivered low birth-weight infants & women >35 years of age



Methods

- Maryland PRAMS 2001 to 2006 data obtained from:
 - Public Data Query System
 - Annual Reports.
- Socioeconomic and demographic characteristics across six years were assessed.
- Dental needs, dental service utilization, dental counseling during prenatal care visits were analyzed using SAS v9.1 and EpiInfo.
- Trends were assessed among women who had a dental visit before/during pregnancy according to age, education level and race-ethnicity.

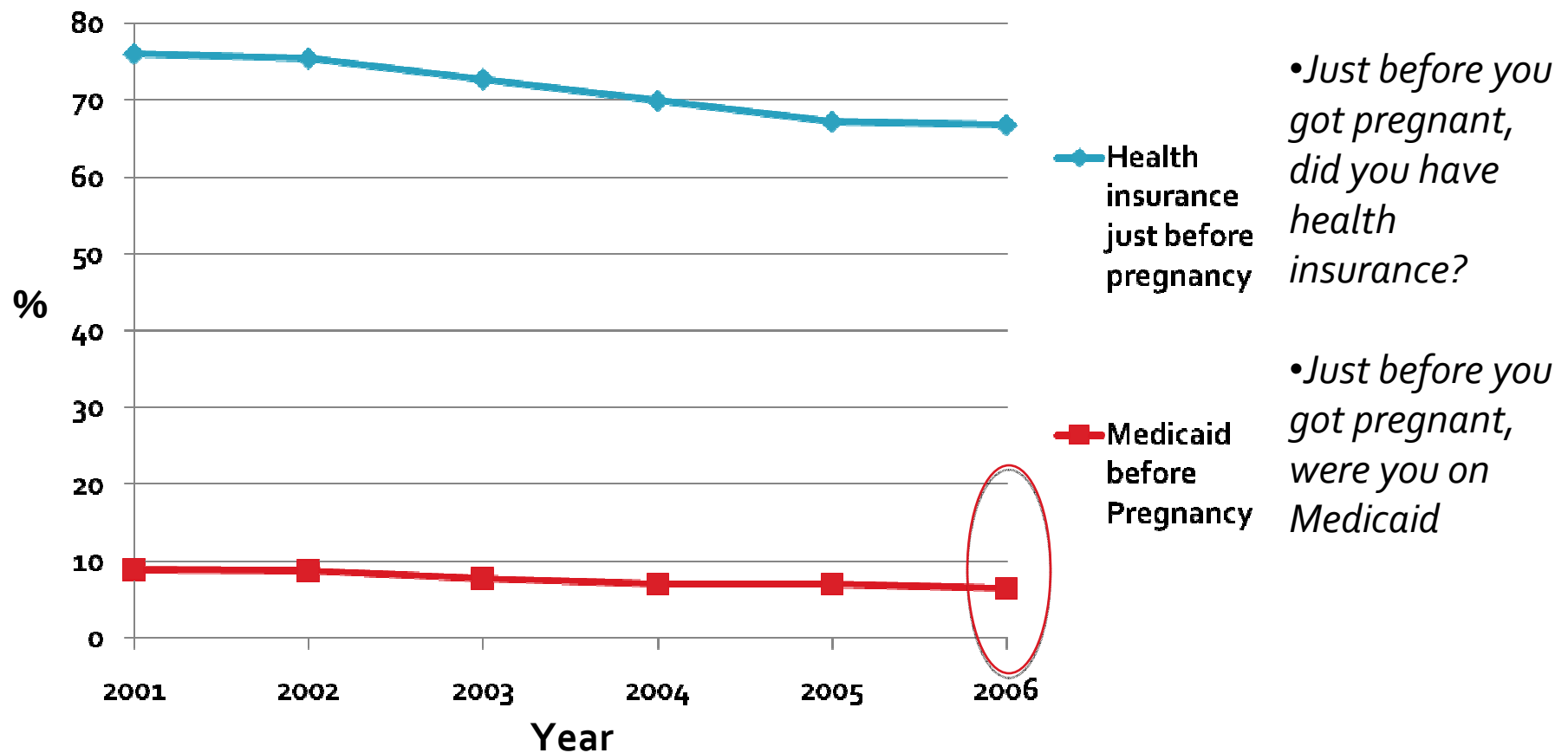
Sample Description

Year	Unweighted N	Weighted N	Births to White Women	Births to Black Women
2001	1447	58982	38834	16333
2002	1463	64292	40051	19676
2003	1627	66063	39779	20375
2004	1617	65736	34202	20417
2005	1359	55609	28267	17242
2006	1712	69014	33415	21990

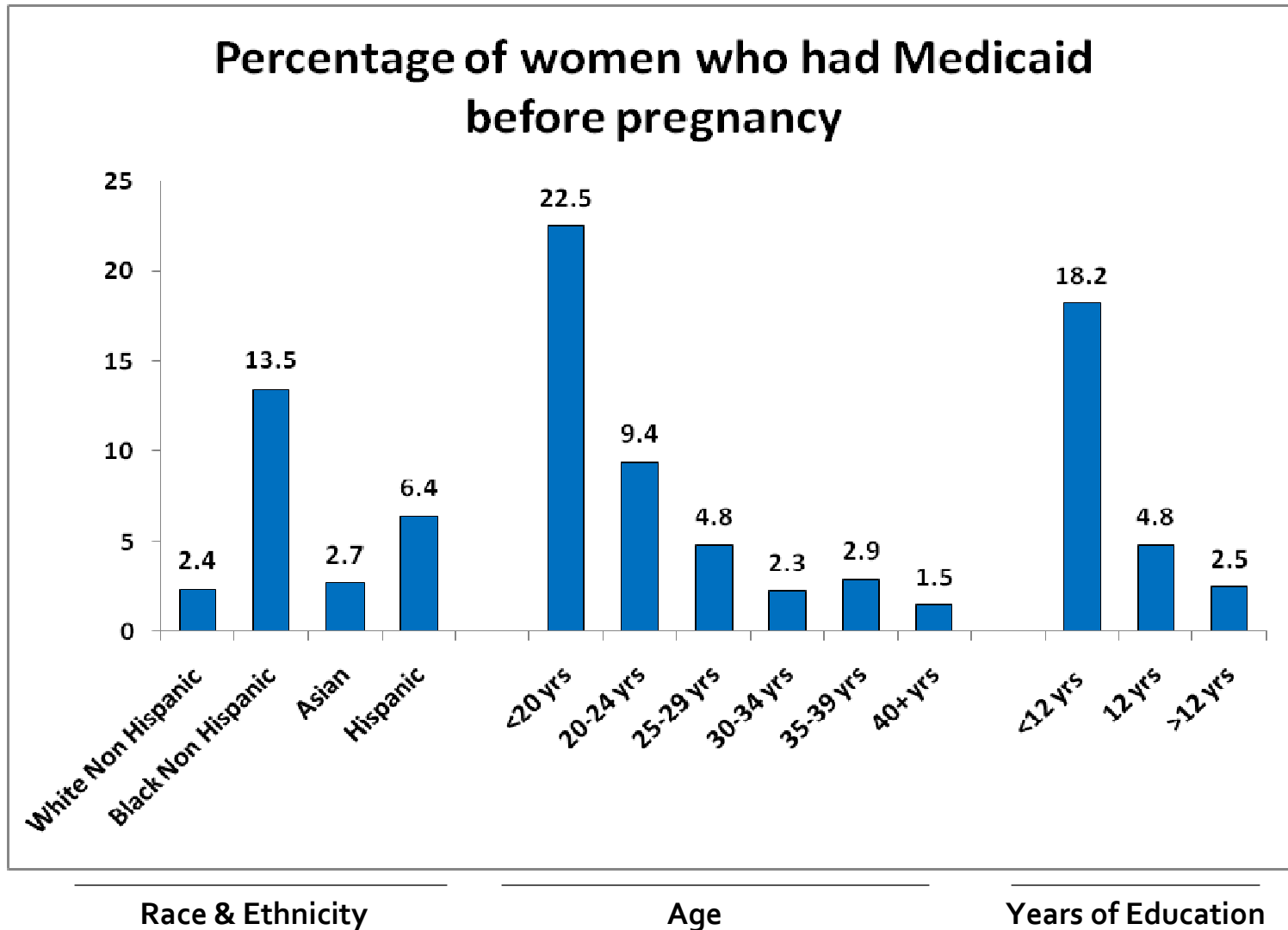
- For each year, response rate was $> 70\%$
- For all the variables of interest, missing values were $< 5\%$

Results

■ Health Insurance/ Medicaid Before Pregnancy:

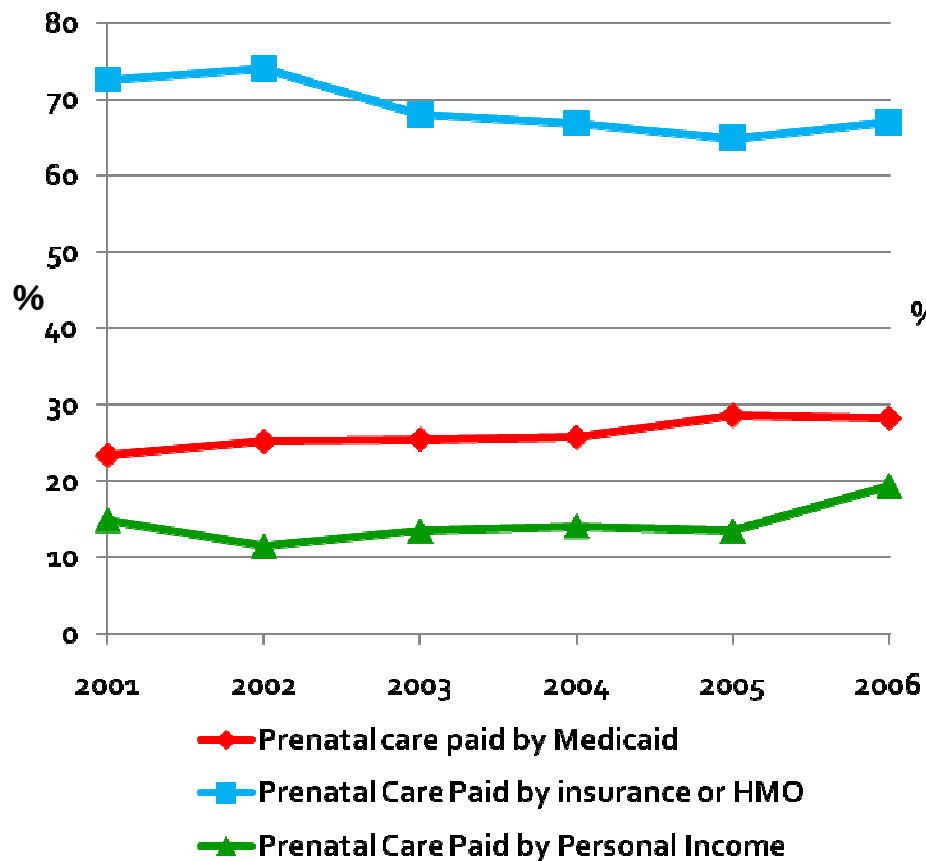


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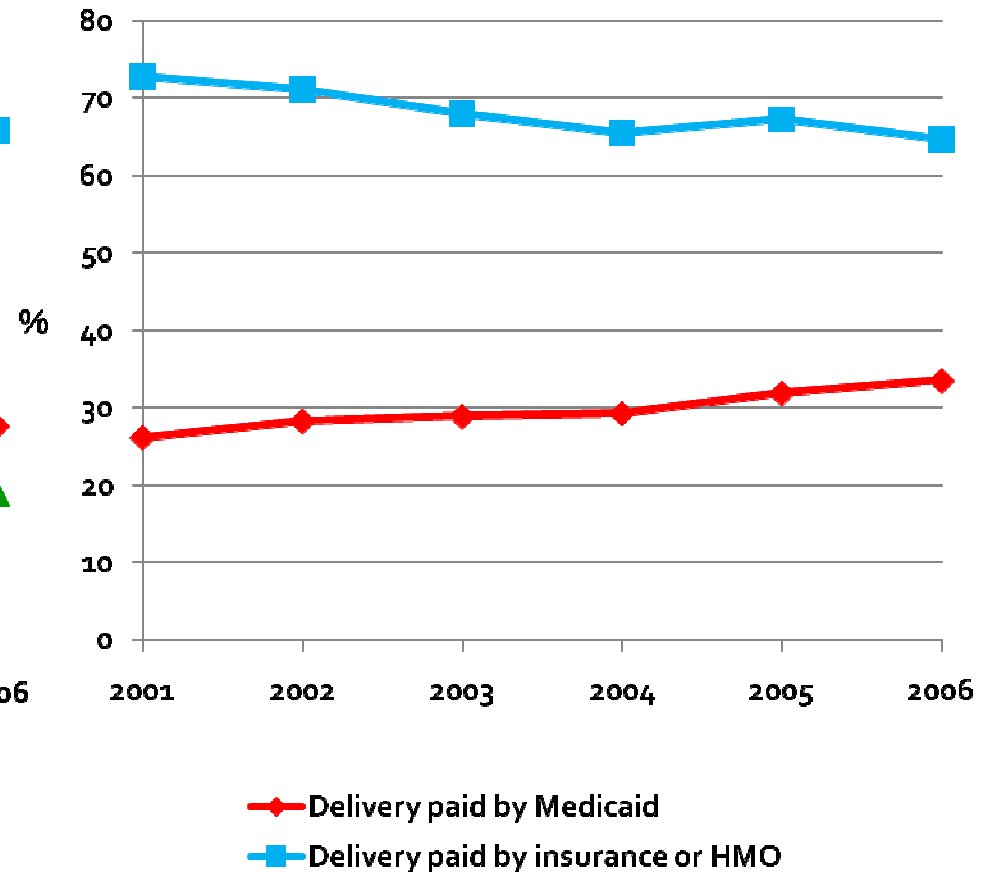


Results

■ Source of Payment: Prenatal Care

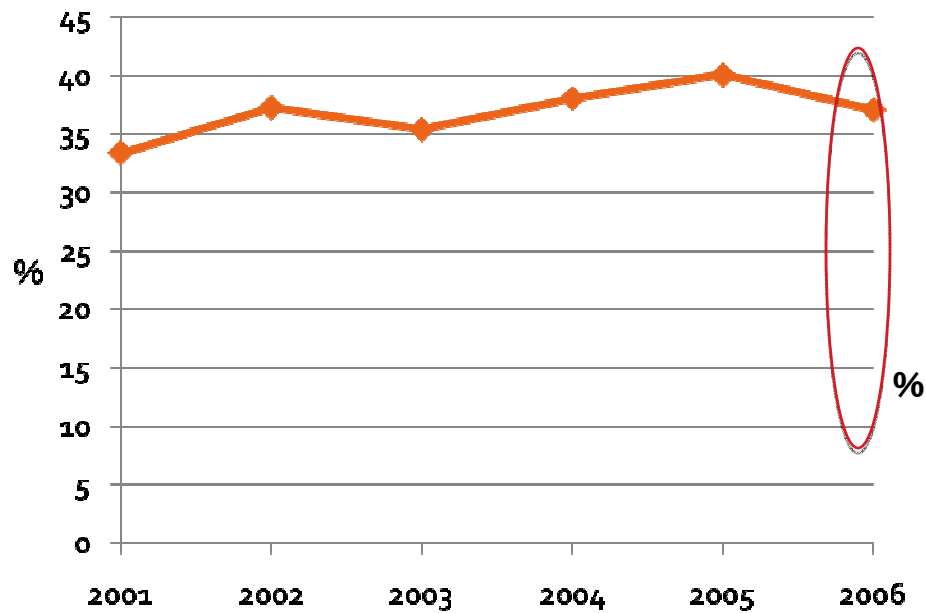


Delivery

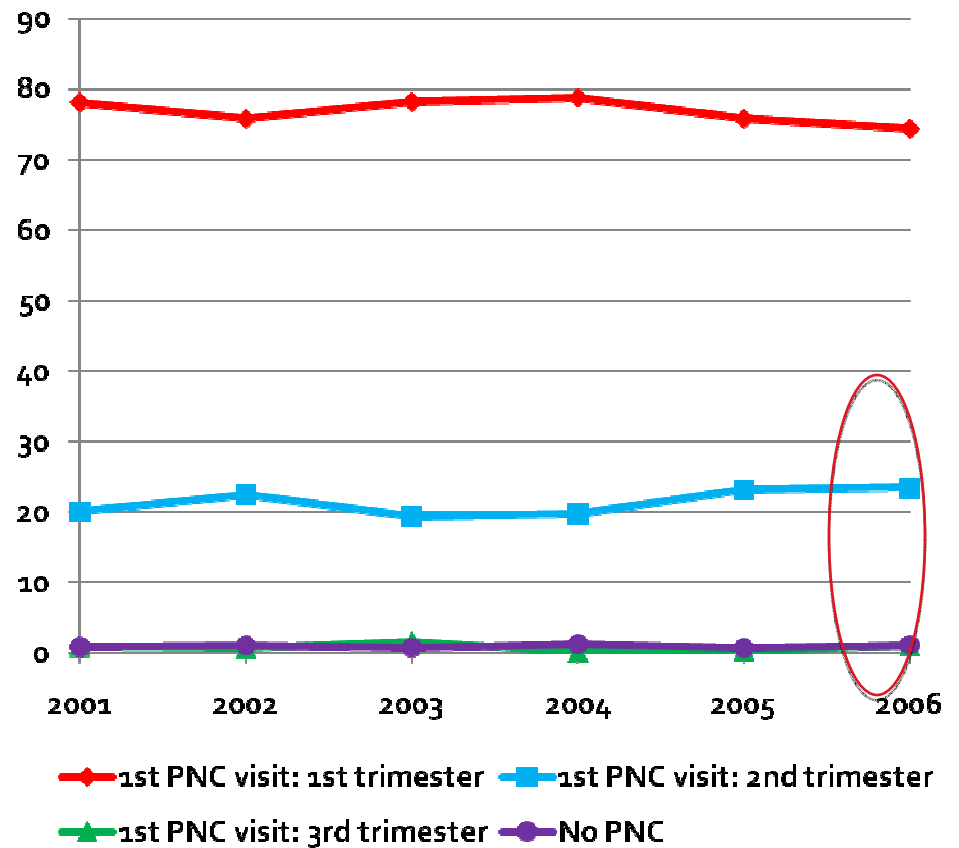


Results

WIC Participation

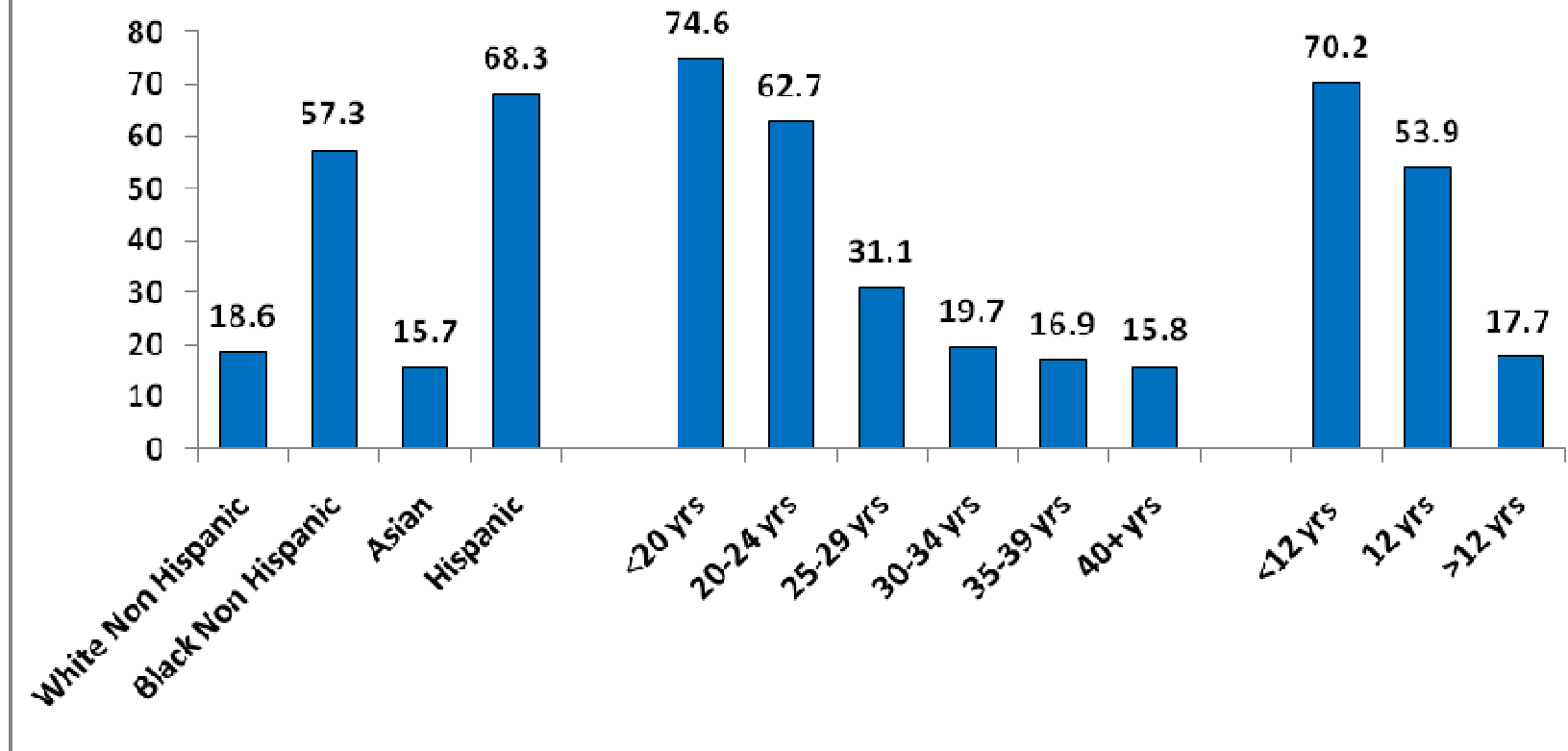


1st Prenatal Care Visit Timing



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Percentage of women who participated in WIC program during pregnancy



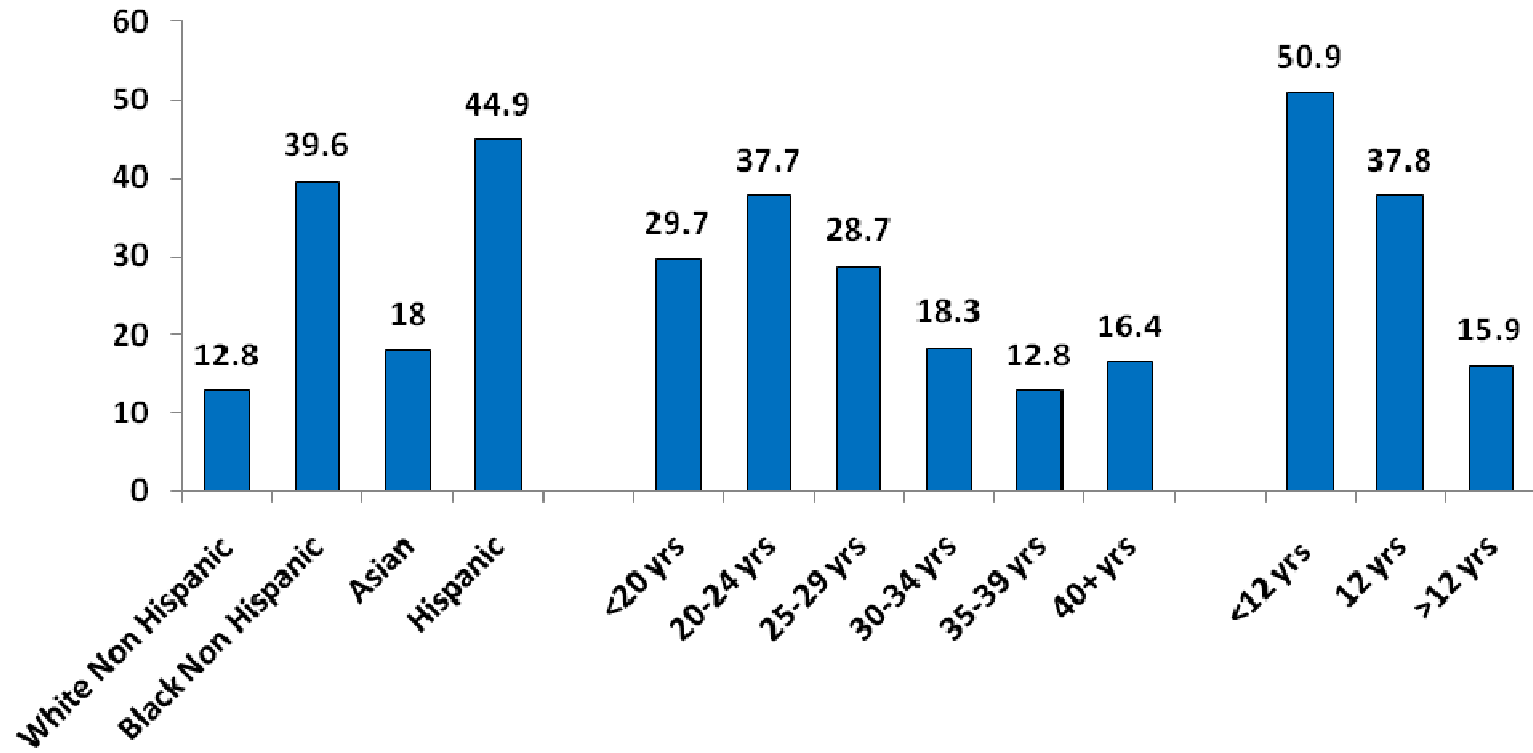
Race & Ethnicity

Age

Years of Education

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Percentage of women who did not begin prenatal care in 1st trimester



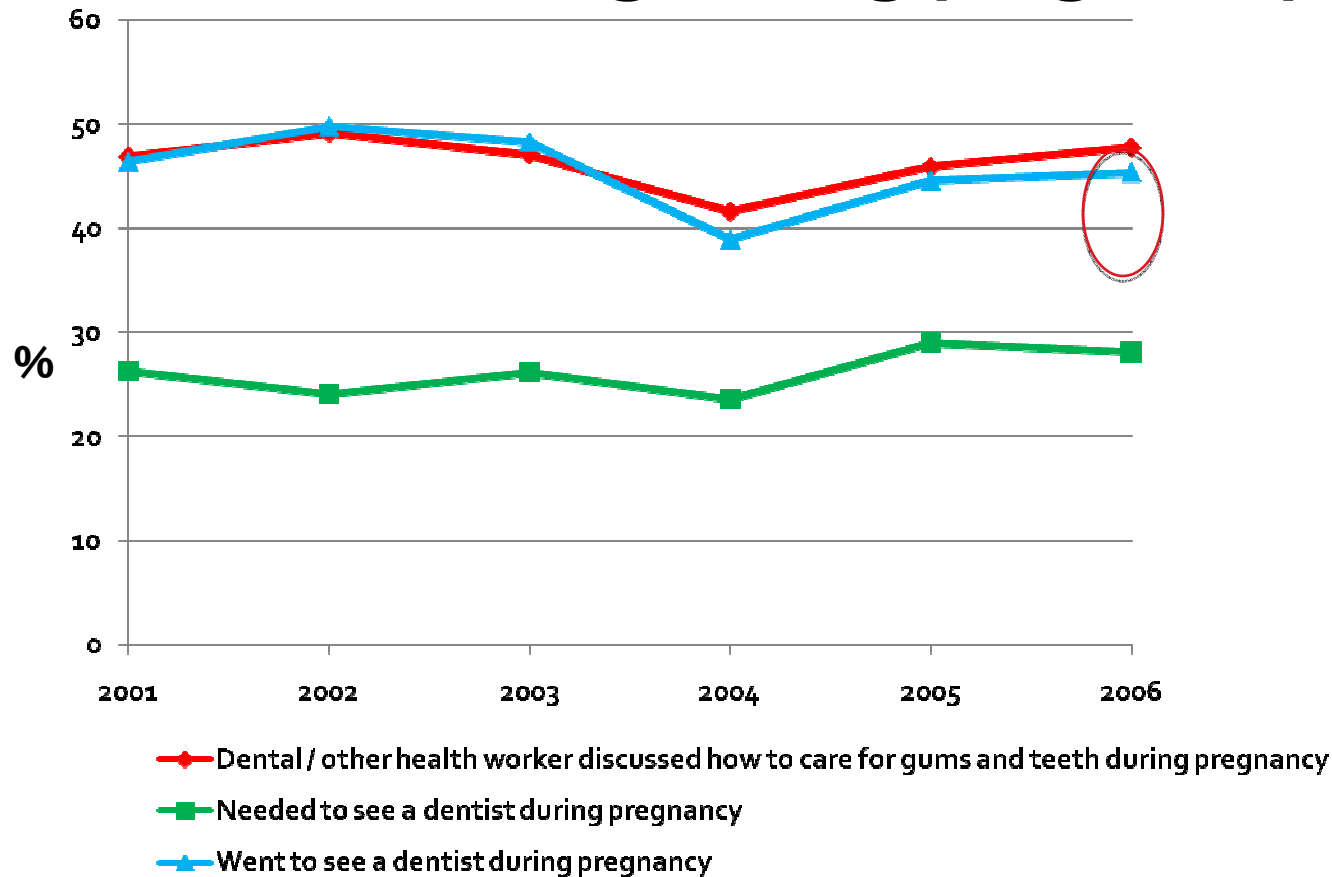
Race & Ethnicity

Age

Years of Education

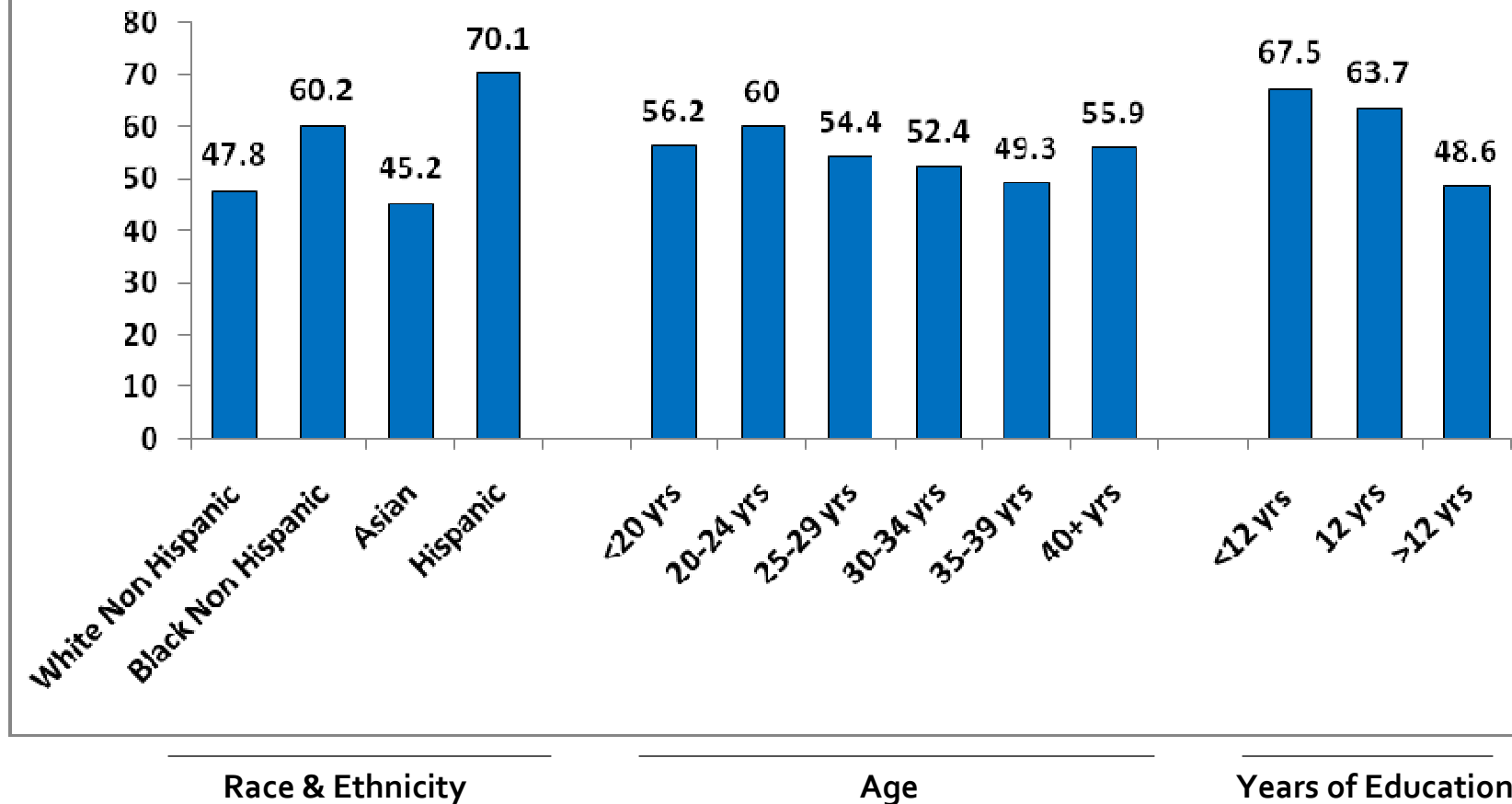
Results

Dental need, dental visits and oral health counseling during pregnancy



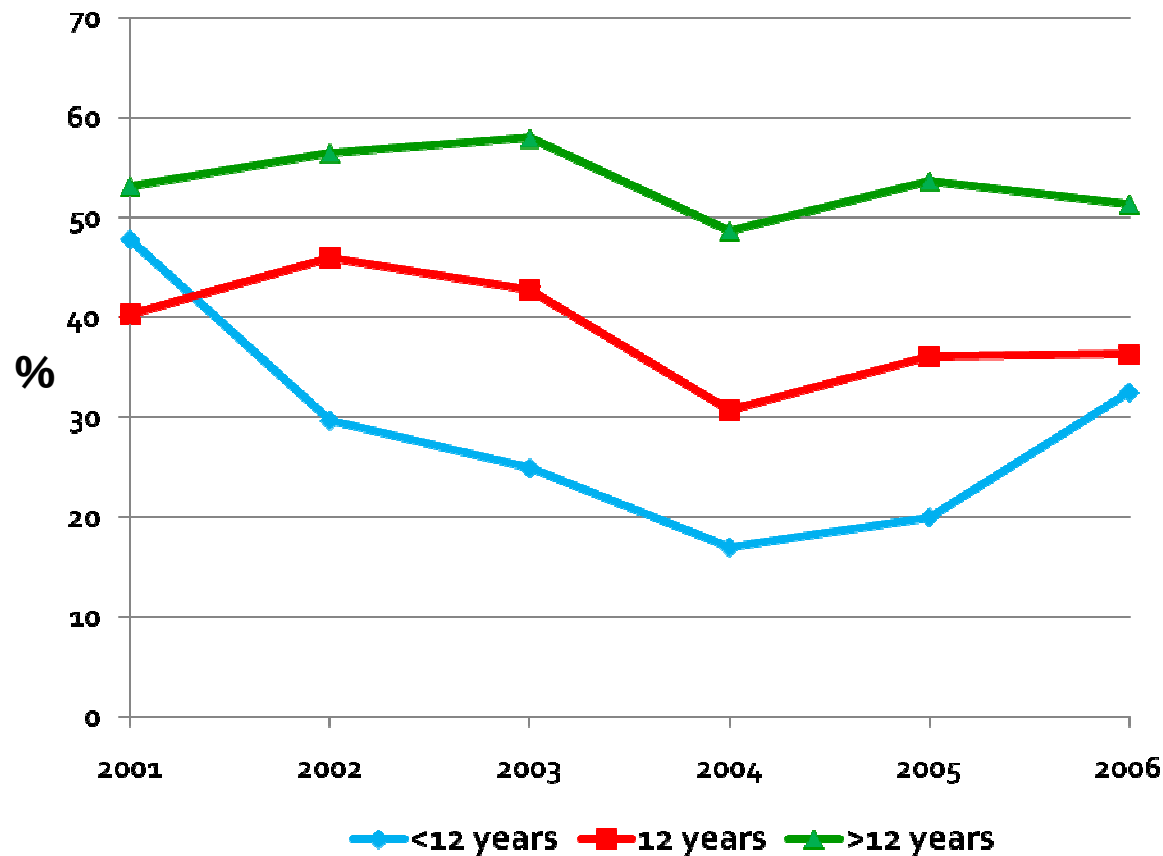
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Percentage of women who did not report a dental visit during pregnancy



Results

Education level for women who reported having a dental visit during/ before pregnancy:



Results-2006

- 27% of pregnant women reported a need to see dentist, of whom 37% did not have a dental visit
- Years of education was positively associated with dental visits ($P < 0.05$)
- Women with:
 - 12 years of education (OR=1.20, 95% CI 0.66 to 2.15)
 - >12 years of education (OR=2.21, 95% CI 1.24 to 3.93)were more likely to visit the dentist than women with <12 years of education.

Conclusions

- No significant yearly trends for: participation in WIC, modes of payment for prenatal care and delivery, timing of 1st prenatal visit.
- Majority (>50%) of women reported not visiting a dentist during their pregnancy.
- Majority (>50%) of women reported not receiving dental advice during their prenatal care visits.
- Education level of pregnant women was directly related to visiting a dentist for each year except 2001.

Next Steps:

- Analyze the data further to assess the characteristics of women who reported unmet need for dental care
- Multivariate analysis to see what factors are associated with having a dental visit during pregnancy:
 - Demographic
 - Economic
 - Content and time of prenatal care
 - Reasons for late enrollment in prenatal care
 - Stressors during pregnancy
 - Previous pregnancy outcomes
 - Other risk indicators and factors
- Currently Phase 4 (2001-2003) detailed analysis ongoing
- Then analyze Phase 5 (2004-2008) data and compare the two phases

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Education level for Women who reported having a dental visit during/ before pregnancy:

