

Maternal Factors Associated with Infant Pacifier Use Florida, 2009

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BACKGROUND

In Florida & the United States, Sudden Infant Death Syndrome (SIDS) ranks as a leading cause of infant death.

Pacifier Use and SIDS Risk Reduction

- Recent research shows significant associations between infant pacifier use and decreased risk of SIDS.
- 2005 meta-analysis shows pacifier use associated with a collective 39% reduction in likelihood of a SIDS death

(Hauck, Olanrewaju, & Siadaty, 2005)

How Pacifiers May Reduce SIDS Risk

- Reduces chance of rolling onto stomach
- Increases arousal
- Helps to keep airway open
- Decreases sleep apnea by decreasing gastroesophageal reflux
- Increases respiratory drive with carbon dioxide retention



Infant Pacifier Use Recommendations

- Since 2005, the American Academy of Pediatrics has recommended infants be placed to sleep with a pacifier.
- However, most pediatricians and family physicians are not consistently recommending proper use of pacifiers. (Moon, Kingston, Iglesias, & Hauck, 2007)

Monitoring Infant Pacifier Use In Florida

- Question added to the 2009 Florida Pregnancy Risk Assessment Monitoring System (PRAMS):

“How often does your new baby go to sleep with a pacifier?”

STUDY OBJECTIVES

- Identify maternal characteristics associated with infant pacifier use
- Examine association of infant pacifier use with other SIDS preventive behaviors
- Determine if differences in pacifier use exist by maternal race, as found with other SIDS risk and protective behaviors

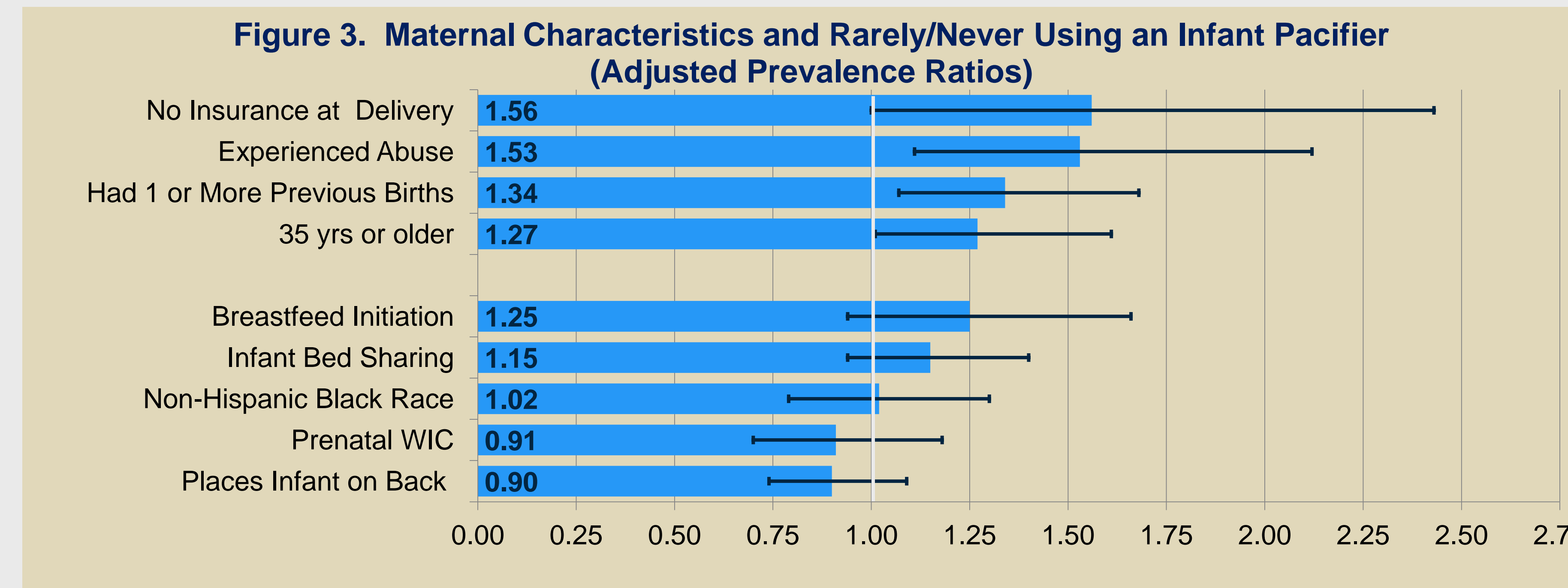
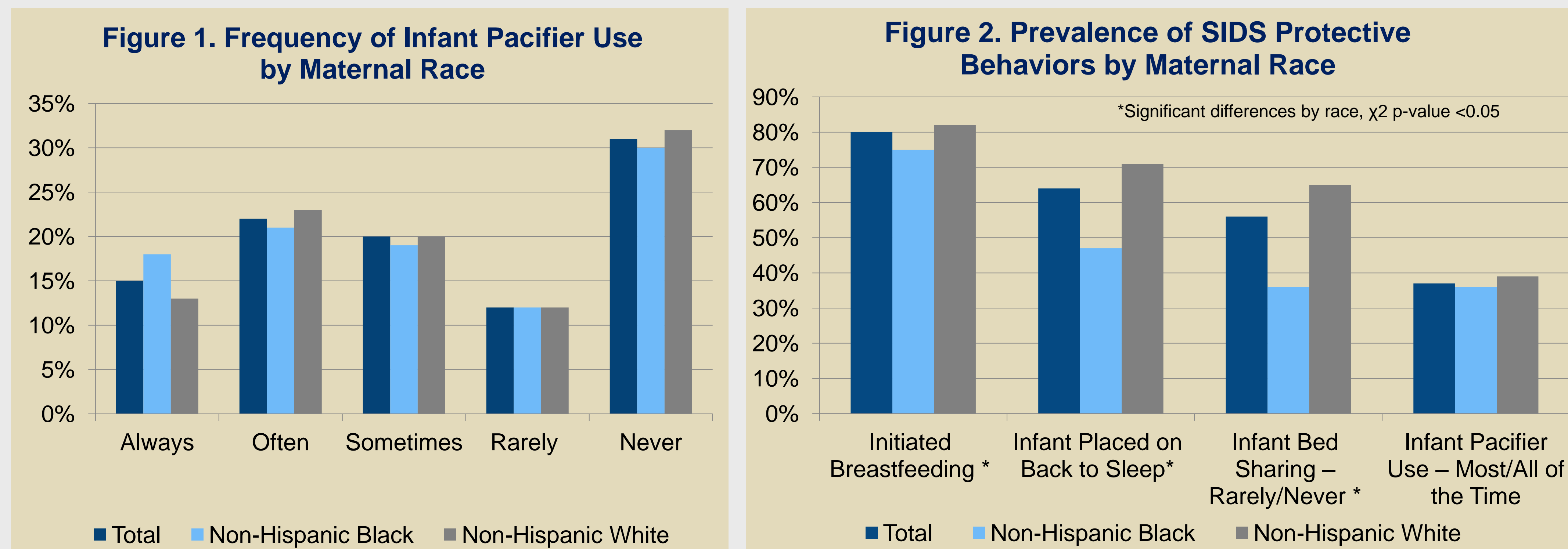
METHODS

- Year 2009 linked Florida birth records and PRAMS records (1,036 un-weighted = 141,635 weighted)
- Study records limited to non-Hispanic Black and non-Hispanic White mothers
- Stata v.10.1 software used for statistical analysis

Statistical Analysis

- Total and race-specific prevalence differences in pacifier use and other protective SIDS behaviors assessed by chi square methods
- Adjusted prevalence ratios of a mother rarely or never placing infant to sleep with an infant pacifier calculated by multivariate binomial regression methods

RESULTS



RESULTS

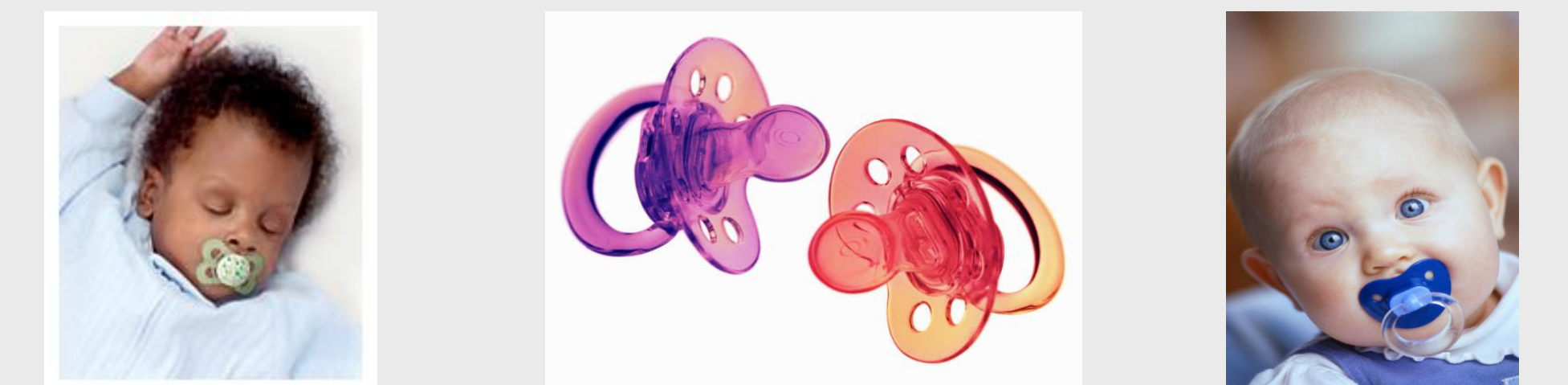
Table 1. Significant Interactions with Maternal Race

	IRR	White IRR	Black IRR
Experienced Depression	0.80 (0.67 – 0.97)	0.90 (0.72 – 1.13)	0.66 (0.46 – 0.92)
Bed Sharing–Rarely/Never	1.15 (0.94 – 1.40)	0.99 (0.79 – 1.26)	1.58 (1.13 – 2.22)

CONCLUSIONS

- A low percentage of Florida mothers use pacifiers all or most of the time (Figure 1)
- No significant differences in infant pacifier use between Black and White mothers
 - Differs from other protective SIDS behaviors (Figure 2)
- Maternal characteristics for the reduced likelihood of pacifier use (Figure 3)
 - 35 years or older
 - No insurance
 - Experienced abuse
 - One or more previous births
- Significant interactions with Black maternal race exists (Table 1)
 - Increased likelihood of pacifier use for depressed Black women
 - Decreased likelihood of pacifier use for Black women who bed-share with infant

PUBLIC HEALTH IMPLICATIONS



- SIDS risk can be decreased through the proper use of infant pacifiers.
- Florida's low prevalence of pacifier use is a missed prevention opportunity for lowering SIDS risk.
- Pacifier use may increase through improved provider health promotion.
- Florida's education and promotion strategies for pacifier use need to be tailored to racial subpopulations for optimal impact.

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