

The Hispanic Paradox and Black, Non-Hispanic, Mothers in New Jersey, 2012-2015

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Background – The Hispanic Paradox

- Not a novel idea – has been researched and developed for decades
- Suggests that Hispanics, generally, have better health outcomes despite rates of poverty that are similar to those of Black, non-Hispanics (NH)
- Suggests that Hispanics are often more comparable to White, NHs despite socioeconomic status (SES) (i.e. income, education, occupation)
 - Potential explanations: selective migration of healthy individuals, better social support, and access to kin networks [1]
- Evidence to suggest that foreign-born Hispanic mothers show better pregnancy outcomes compared to mothers of other race/ethnicities

Background – NJ PRAMS

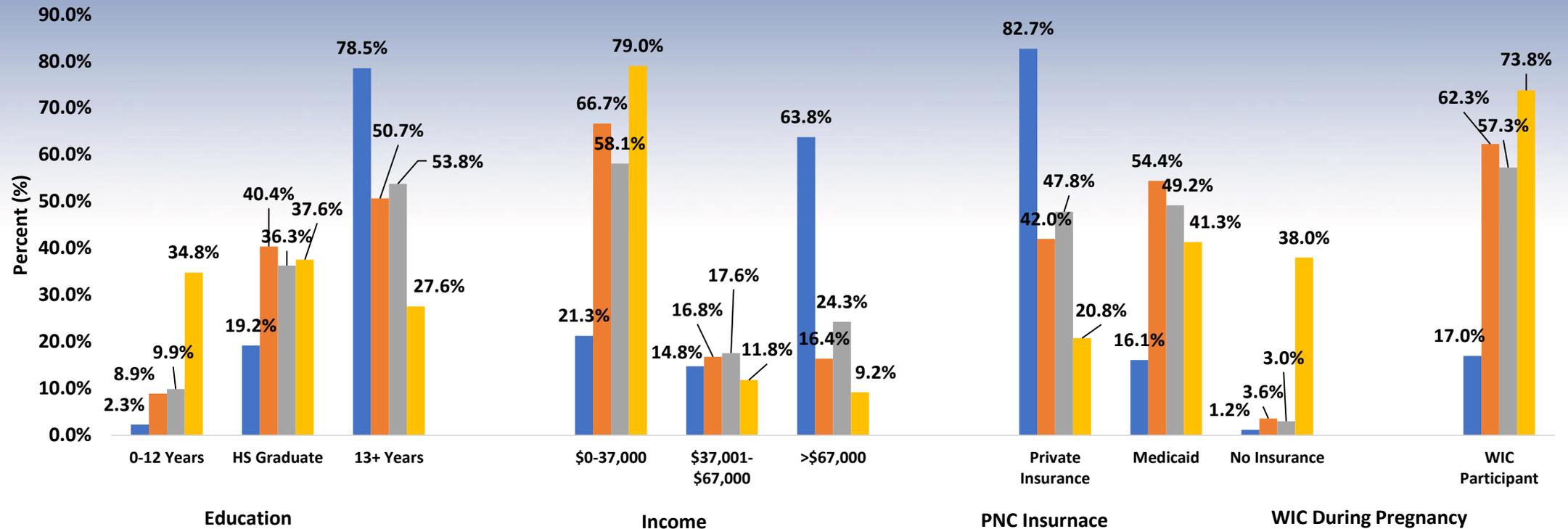
- New Jersey Pregnancy Risk Assessment Monitoring System (NJ PRAMS)
- Joint project of the New Jersey Department of Health (NJ DOH) and the Centers of Disease Control and Prevention (CDC) since 2002
- Mothers are surveyed on their feelings and experiences before, during, and after their pregnancy
- One out of 50 mothers are sampled each month, when newborns are between 2-6 months of age
 - Sampling frame used to identify and select new mothers with electronic birth certificates
 - Stratified by two variables: Maternal race/ethnicity and smoking status
- Data is used to help plan better health programs for NJ mothers and infants

NJ Data

- Between 2012-2015 (4 years), the known Hispanic/Latino population in NJ was over 6 million [2]
- The Hispanic birthrate, during this time frame, was 16.1 per every 1,000 live births compared to the Black, NH birthrate of 12.6 per every 1,000 live births [3]
- According to 2012-2015 NJ PRAMS data, most Black, NH mothers had:
 - 13 years or more of education (50.7%)
 - An annual household income of \$0-\$37,000 (66.7%)
 - Used Medicaid for prenatal care (PNC) (54.4%)
 - Participated in Women, Infants, and Children (WIC) during pregnancy (62.3%)
 - The lowest rates of breastfeeding initiation (78%)
- NJ has experienced an increase in the Hispanic population due to immigration and birth rates

NJ PRAMS Data – Maternal Demographics

Maternal Demographics by Race/Ethnicity in NJ, 2012-2015



Source: NJ PRAMS, NJ Birth Certificate Database, Office of Vital Statistics and Registry, NJ DOH

■ White, NH
 ■ Black, NH
 ■ US-born Hispanic
 ■ Foreign-born Hispanic



Project Aim

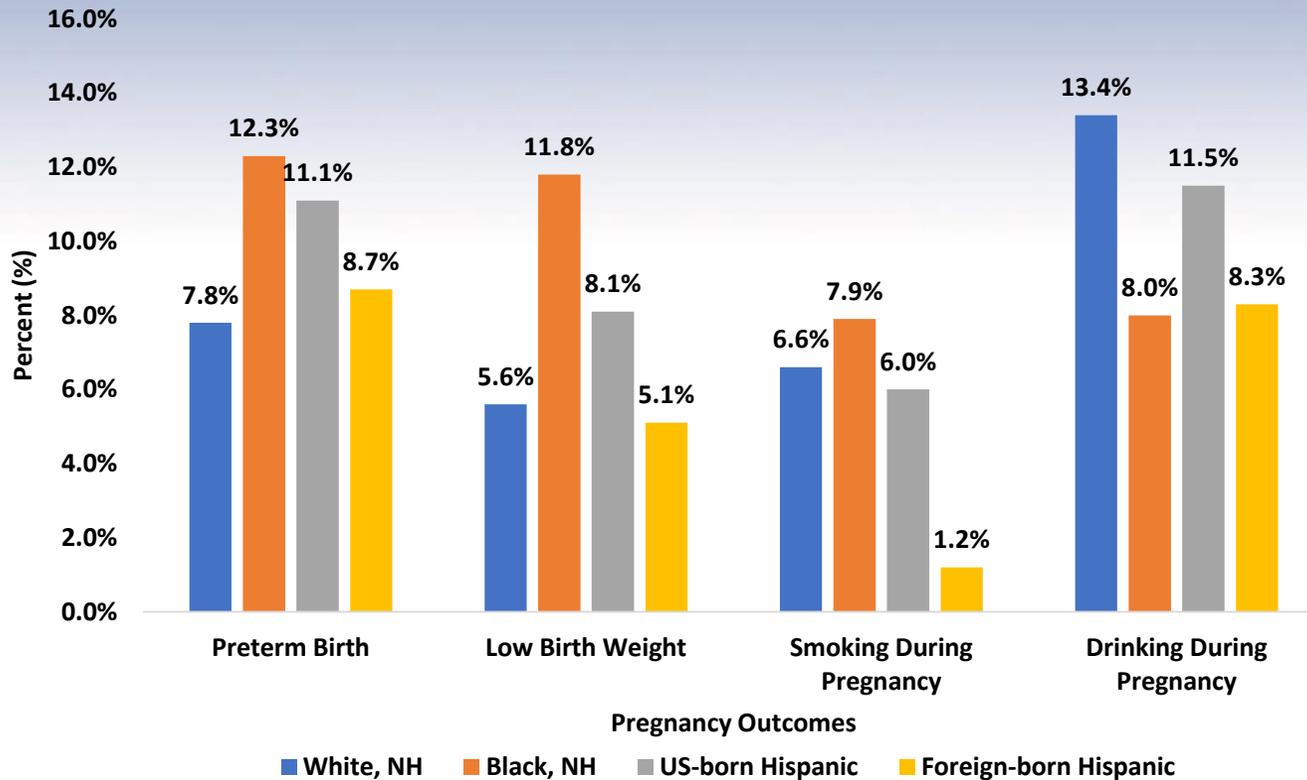
- To focus on comparing Black, NH, White, NH, and US-born Hispanic mothers to foreign-born Hispanic mothers to determine whether effects of the Hispanic Paradox are present in NJ
- If evidence of this paradox exists, would Hispanic mothers thus make a better reference group when comparing to Black, NH mothers versus White, NH mothers

Methods

- **Linked and utilized NJ PRAMS weighted data and birth certificate data from 2012-2015**
- **Investigated prevalence of each outcome measure:**
 - Preterm birth and low birth weight
 - Tobacco and alcohol usage during pregnancy
 - Obesity
 - Breastfeeding initiation
- **Logistic regression was applied to compare racial/ethnic disparities during pregnancy for outcome measures**
 - Foreign-born Hispanic mothers chosen as reference group
- **Odds ratios were reported after controlling for:**
 - Educational attainment
 - Annual household income
 - PNC insurance coverage
 - WIC participation during pregnancy

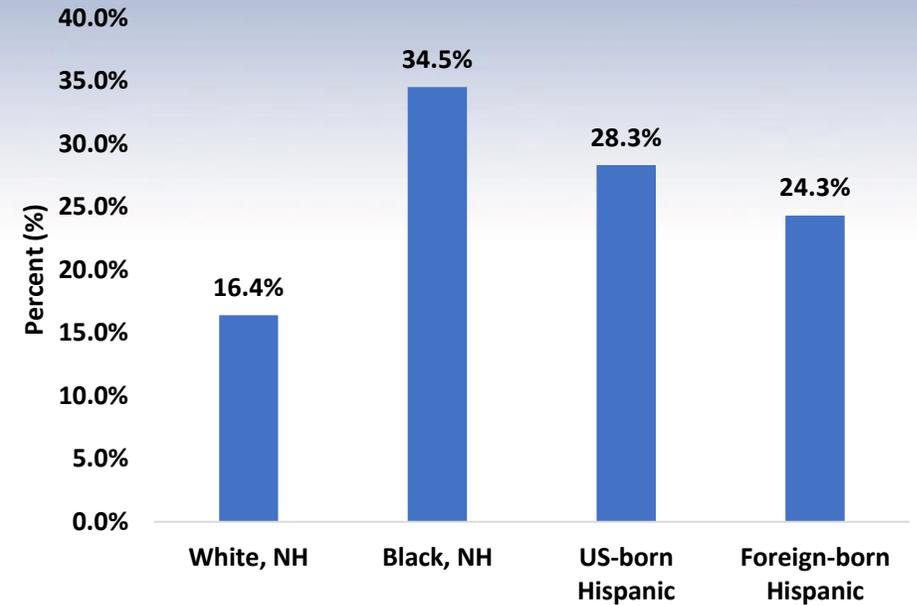
Prevalence of Pregnancy Outcomes

Pregnancy Outcomes by Race/Ethnicity in NJ, 2012-2015



Source: NJ PRAMS, NJ Birth Certificate Database, Office of Vital Statistics and Registry, NJ DOH

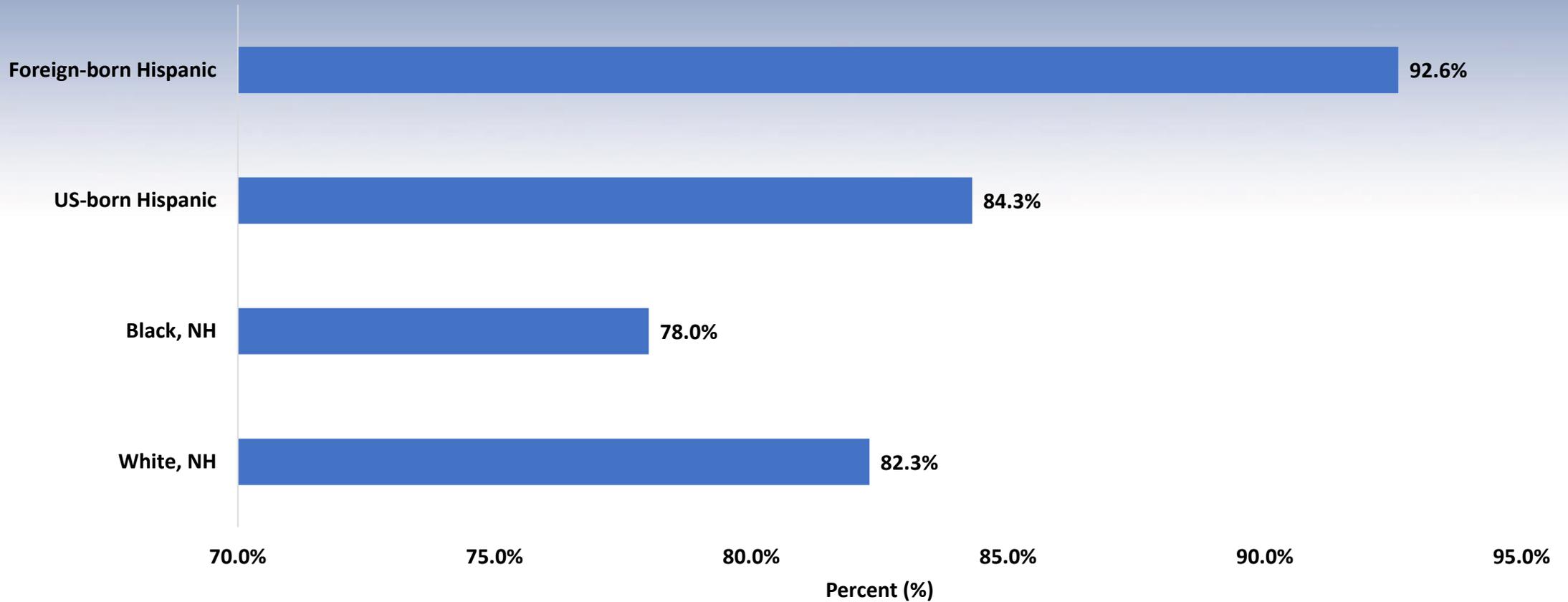
Obesity by Race/Ethnicity in NJ, 2012-2015



Source: NJ PRAMS, NJ Birth Certificate Database, Office of Vital Statistics and Registry, NJ DOH

Prevalence of Pregnancy Outcomes

Breastfeeding Initiation by Race/Ethnicity in NJ, 2012-2015



Results – Pregnancy Outcomes

	White, NH		Black, NH		US-born Hispanic		Foreign-born Hispanic	
	Crude OR (CI) (95% CI)	Adj. OR (CI)+ (95% CI)	Crude OR (CI) (95% CI)	Adj. OR (CI)+ (95% CI)	Crude OR (CI) (95% CI)	Adj. OR (CI)+ (95% CI)	Crude OR (CI) (95% CI)	Adj. OR (CI)+ (95% CI)
Pregnancy Outcomes								
Preterm birth	0.9 (0.55, 1.33)	0.7 (0.44, 1.24)	1.5 (0.92, 2.31)	1.4 (0.83, 2.49)	1.4 (0.81, 2.49)	1.3 (0.72, 2.33)	1.0 (referent)	1.0 (referent)
Low birth weight	1.2 (0.66, 2.03)	1.1 (0.57, 2.12)	2.9 (1.62, 5.07)*	2.6 (1.39, 4.87)*	1.7 (0.82, 3.41)	1.5 (0.72, 3.23)	1.0 (referent)	1.0 (referent)
Drinking during pregnancy	1.5 (0.96, 2.20)	1.0 (0.60, 2.19)	0.7 (0.45, 1.19)	0.7 (0.41, 1.26)	1.4 (0.82, 2.45)	1.3 (0.71, 2.50)	1.0 (referent)	1.0 (referent)
Obesity	0.8 (0.61, 1.05)	1.0 (0.74, 1.36)	1.3 (1.00, 1.78)	1.4 (1.06, 1.97)*	0.8 (0.59, 1.18)	0.9 (0.64, 1.32)	1.0 (referent)	1.0 (referent)
Breastfeeding initiation	0.3 (0.16, 0.52)*	0.2 (0.10, 0.36)*	0.3 (0.15, 0.51)*	0.3 (0.13, 0.51)*	0.3 (0.15, 0.67)*	0.3 (0.15, 0.66)*	1.0 (referent)	1.0 (referent)

OR = odds ratio; CI = confidence interval; Adj. = adjusted
 + Adjusted for education, annual household income, PNC insurance, and WIC participation
 * Indicates significant p-value



Conclusions

- Using foreign-born Hispanic mothers as a reference group and after adjusting for education, income, PNC insurance, and WIC participation:
 - The odds of having a low birth weight baby for Black, NH mothers were over two-and-a-half times that of foreign-born Hispanic mothers, with an odds ratio (OR) of 2.6 (95% CI: 1.39, 4.87)
 - Black, NH mothers were 40% more likely (OR=1.4; 95% CI: 1.06, 1.97) than foreign-born Hispanic mothers to be obese
 - Both Black, NH and US-born Hispanic mothers were 70% less likely (OR=0.3; 95% CI: 0.13, 0.51 and 0.15, 0.66, respectively) than foreign-born Hispanic mothers to initiate breastfeeding while White, NH mothers were 80% less likely (OR=0.2; 95% CI: 0.10, 0.36) to initiate breastfeeding
- There is evidence of the Hispanic Paradox in play among NJ mothers

Conclusions

- Despite having high rates of Medicaid and no insurance for prenatal care, foreign-born Hispanic mothers showed more favorable outcomes when compared to mothers of other racial/ethnic groups examined here
- Foreign-born status may serve as a protective factor
- Black, NH mothers still demonstrated poorer health outcomes even though they were comparable to US-born Hispanics in terms of SES
 - May be a result of:
 - Stronger ties within the Hispanic community
 - Social support systems
 - Practicing better health behaviors
- More attention needs to be paid to interventions targeted at Black, NH mothers with regards to accessing better social support systems

Public Health Implications

- The Hispanic Paradox links better social support and kin networks to better health outcomes for Hispanics
- A greater access to such social/community services would increase better social support systems for pregnant women and mothers

Strengths and Limitations

- **Strengths**

- NJ PRAMS sample is representative of the population
- Impact of maternal nativity on breastfeeding initiation
- Compared racial/ethnic groups of similar SES and showed differences

- **Limitations**

- Availability of data/data lag – 2015 most current
- No grasp on how long foreign-born mothers have been in the United States with respect to acculturation
- Lack of responses for questions surrounding alcohol consumption before, during, and after pregnancy

Sources

[1] Shaw RJ, Pickett KE. The Health Benefits of Hispanic Communities for Non-Hispanic Mothers and Infants: Another Hispanic Paradox. *American Journal of Public Health*. 2013;103(6):1052-1057.

[2] Centers of Disease Control and Prevention (CDC) and the National Center of Health Statistics (NCHS)

<https://wonder.cdc.gov/controller/datarequest/D143>

[3] New Jersey State Health Assessment Data (NJ SHAD)

<https://www26.state.nj.us/doh-shad/query/result/birth/BirthPopCnty/BirthRate.html>

