

# Racial/ethnic disparities in awareness and attitudes towards the HPV vaccine among women living in the United States and Puerto Rico



Nelybeth Santiago-Yance<sup>1,2</sup>; Mildred Vera-Rios<sup>1</sup>; Vivian Colón-López<sup>1,2</sup>

<sup>1</sup>University of Puerto Rico, Medical Sciences Campus, Graduate School of Public Health, Department of Health Services Administration, Evaluative Research of Health Systems Program;

<sup>2</sup>Comprehensive Cancer Center; Division of Cancer Control and Population Sciences; University of Puerto Rico, Medical Sciences Campus.

## Background

- Human Papillomavirus (HPV) is the most common sexually transmitted infection in the United States (US).<sup>1</sup>
- In Puerto Rico (PR), cervical cancer is the sixth leading cause of cancer death in women.<sup>1</sup> Hispanic women in the U.S., have a higher incidence and mortality rate of cervical cancer in comparison to white non-Hispanic women.<sup>5</sup>
- The HPV vaccine is the most effective preventive method against cervical cancer.<sup>2</sup>
- Studies have shown racial/ethnic disparities in knowledge and attitudes towards HPV and its vaccine.<sup>3</sup>
- Few national studies have explored these disparities including Puerto Rican women.<sup>4</sup>

## Study Objectives

1. Determine awareness and attitudes towards HPV vaccine among women living in the U.S. and P.R.
2. Describe the association between the racial/ethnic group (non-Hispanic White, non- Hispanic Black, Hispanic and P.R. women) with awareness and attitudes about HPV vaccination, adjusting for confounding variables.

## Methods



Data Collection

- Secondary analysis was performed using data from the Health Information National Trends Survey (HINTS). HINTS is a biennial, cross-sectional survey that collects representative data about knowledge, attitudes and use of cancer health-related information.

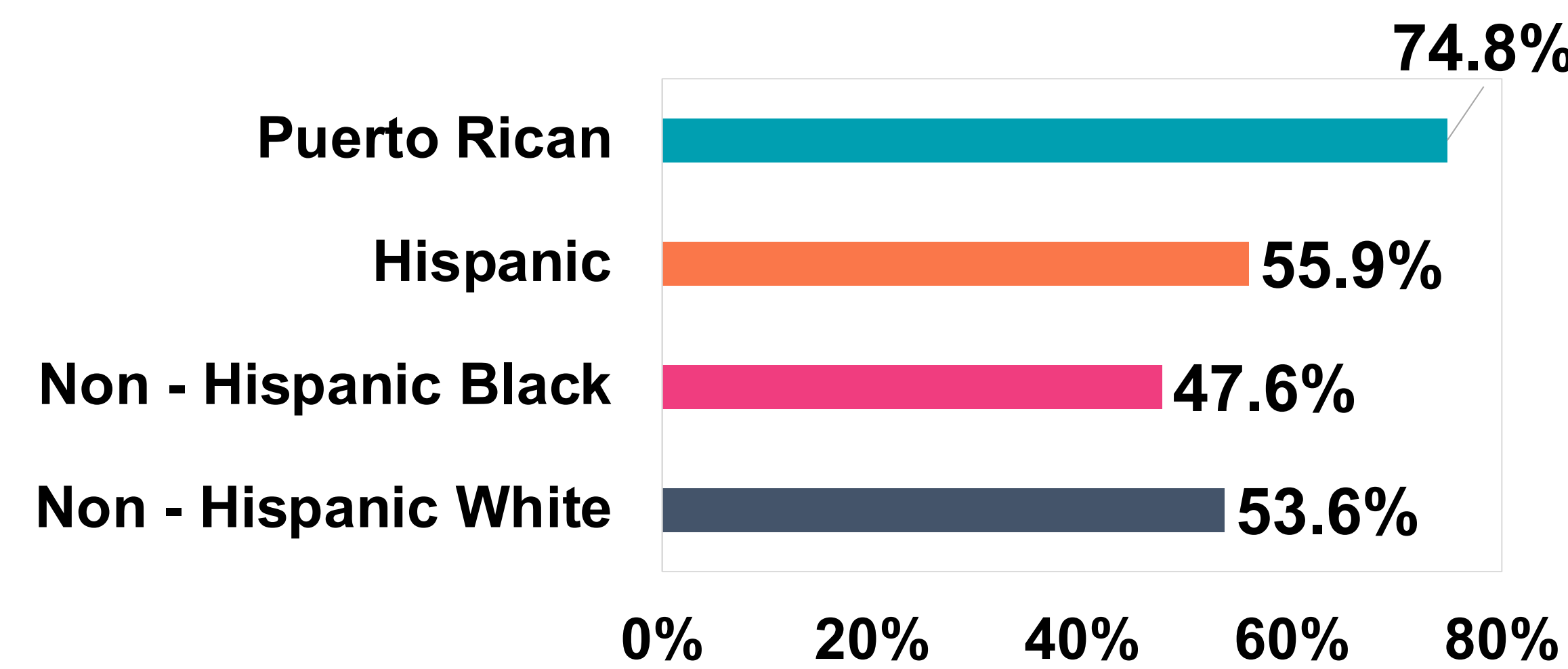


Statistical Analysis

- Multivariate logistic regression analysis assessed the association between racial/ethnic group (non-Hispanic White, non- Hispanic Black, Hispanics and P.R. women). The analysis also assessed HPV vaccine awareness and attitudes, whilst adjusting for age, education, marital status and health insurance. All analyses were performed using the statistical software SPSS version 23.

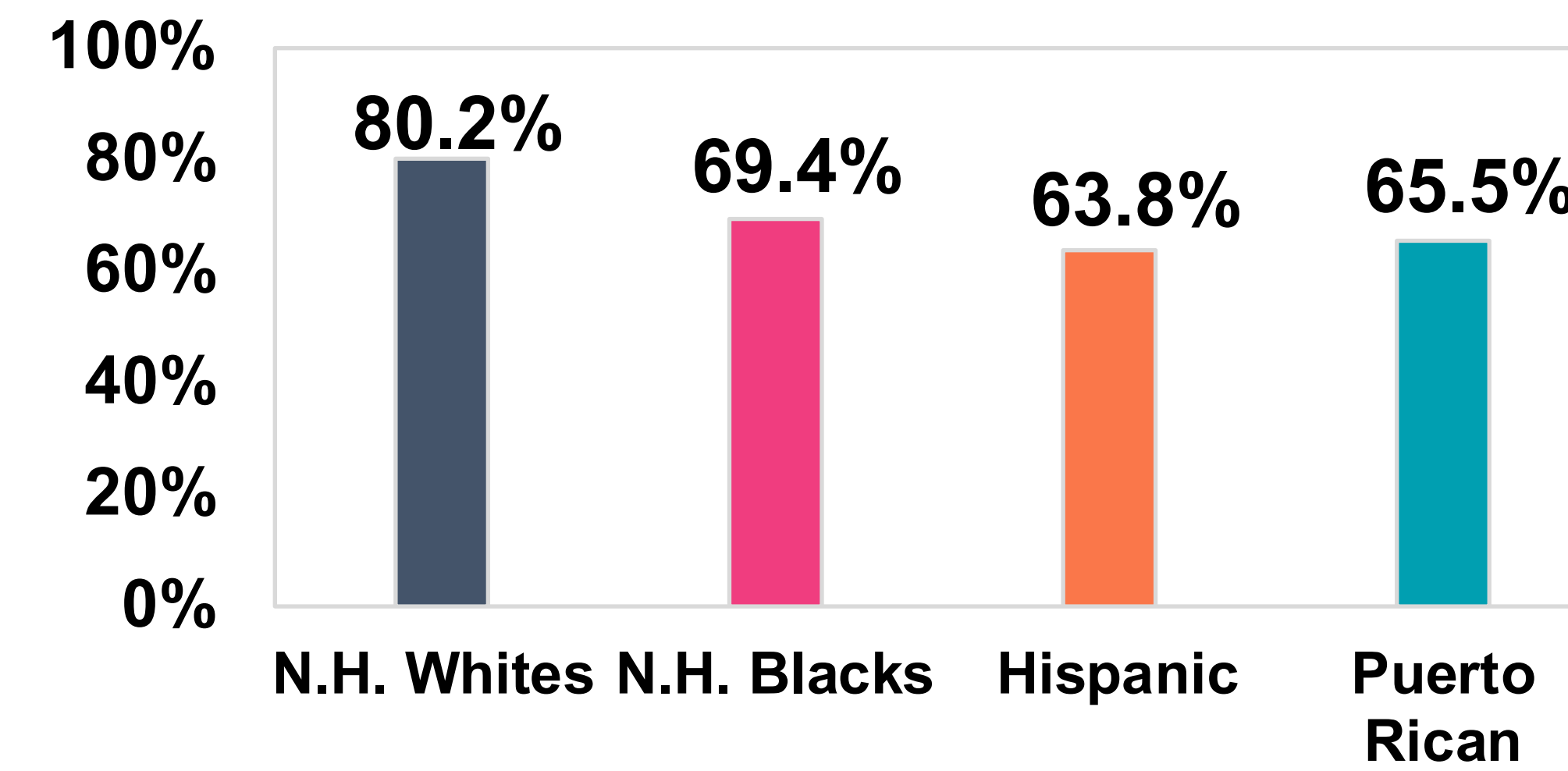
## Results

If you had a daughter age 9-12 years old, would you vaccinate her against HPV?

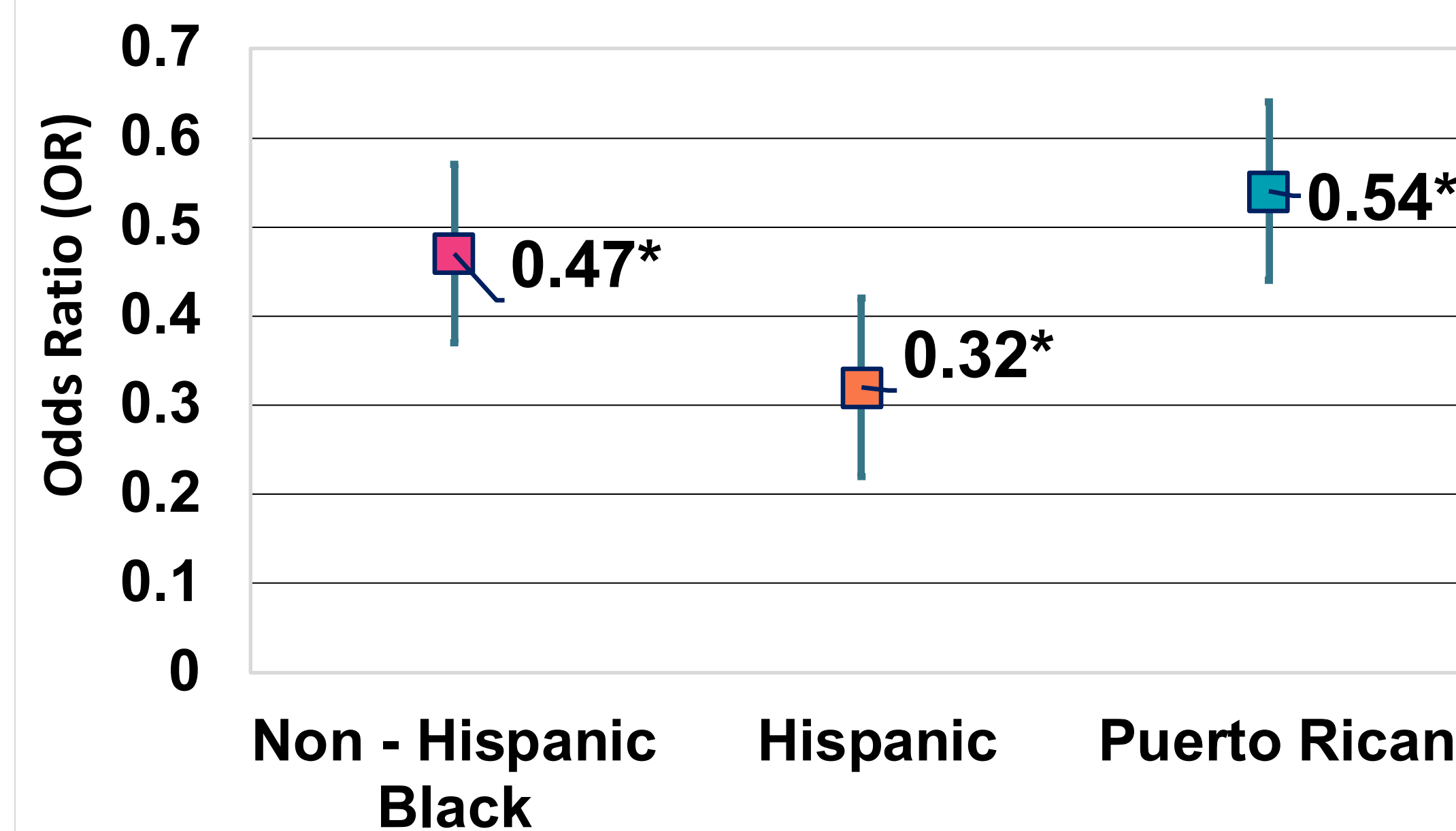


Panel 1. Awareness and attitude of HPV vaccine among race/ethnicity (n = 4,562).

Have you heard about a vaccine that prevent cervical cancer?



Have you heard about a vaccine that prevent cervical cancer?



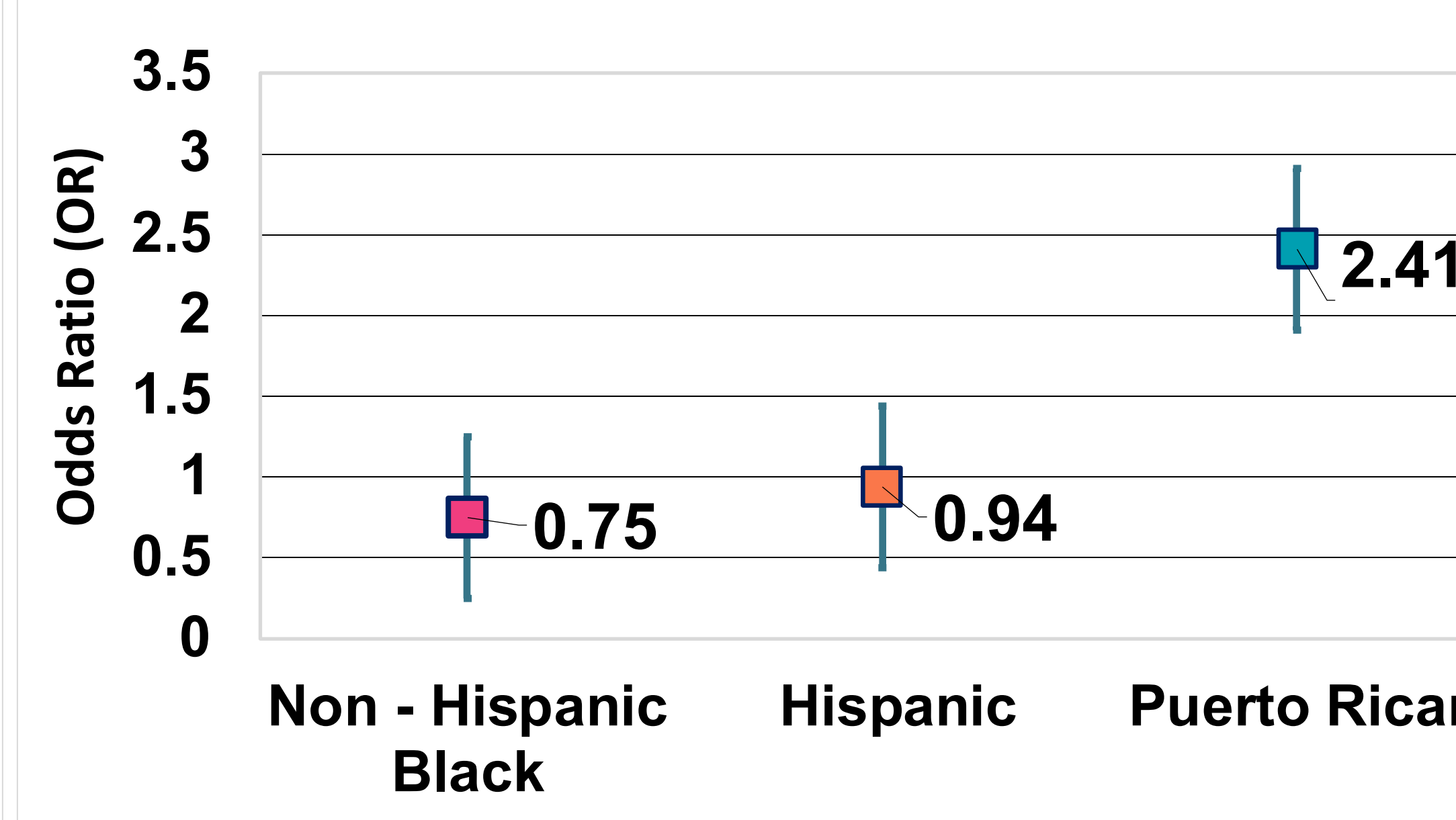
Panel 2. Multivariate logistic regression model to evaluate the association between race/ethnicity and awareness of HPV vaccine on women.

Logistic regression model adjusted by age, education, marital status and medical insurance.

Reference group: Non Hispanic White Women

\*Statistical significance: p-value (p<0.001).

If you had a daughter age 9-12 year old, would you vaccinate her against HPV?



## Conclusions

- In comparison to U.S. White women, all races ethnicities studied in this analysis were less likely to have heard about the HPV vaccine. Hispanic women were 68% less likely to have heard about the HPV vaccine.
- Women living in P.R. showed a greater disposition toward the HPV vaccine.
- Non-Hispanic Black women in the U.S. were least likely to show a positive attitude towards the HPV vaccine.
- These disparities observed suggests racial and ethnic differences in the awareness and attitudes toward the HPV vaccine, which deserve further investigation in order to develop targeted educational interventions aiming to increase awareness and knowledge about HPV and its vaccination by racial/ethnic populations.

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