

# Examining HPV-Related Beliefs and Health Information Use Through the Health Belief Model Lens: Towards Cancer Prevention Among Racial-Ethnic Minorities

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## Background

Human papillomavirus (HPV) is a common sexually transmitted infection that can cause cancers of the cervix, vulva, vagina, penis, anus, and throat.<sup>1</sup> HPV awareness, and HPV-vaccine awareness, are essential in the prevention of HPV-related cancers. Although racial/ethnic minorities have high incidences and mortality rates from cervical cancer,<sup>2,3</sup> previous studies have reported low HPV and HPV-vaccine awareness and knowledge among these groups.<sup>4,5</sup>

## Objective

We examined the associations between participant characteristics and HPV awareness, HPV-vaccine awareness, and HBM constructs, which include cancer-related beliefs and health information-seeking behavior.

## Methods

The 2019 Health Information National Trends Survey (HINTS) 5 Cycle 3 was used (N=5438).

### Outcome Variables:

- Six HBM constructs: perceived susceptibility, perceived severity, perceived benefits, perceived barriers, cues to action, and self-efficacy
- HPV and HPV vaccine awareness

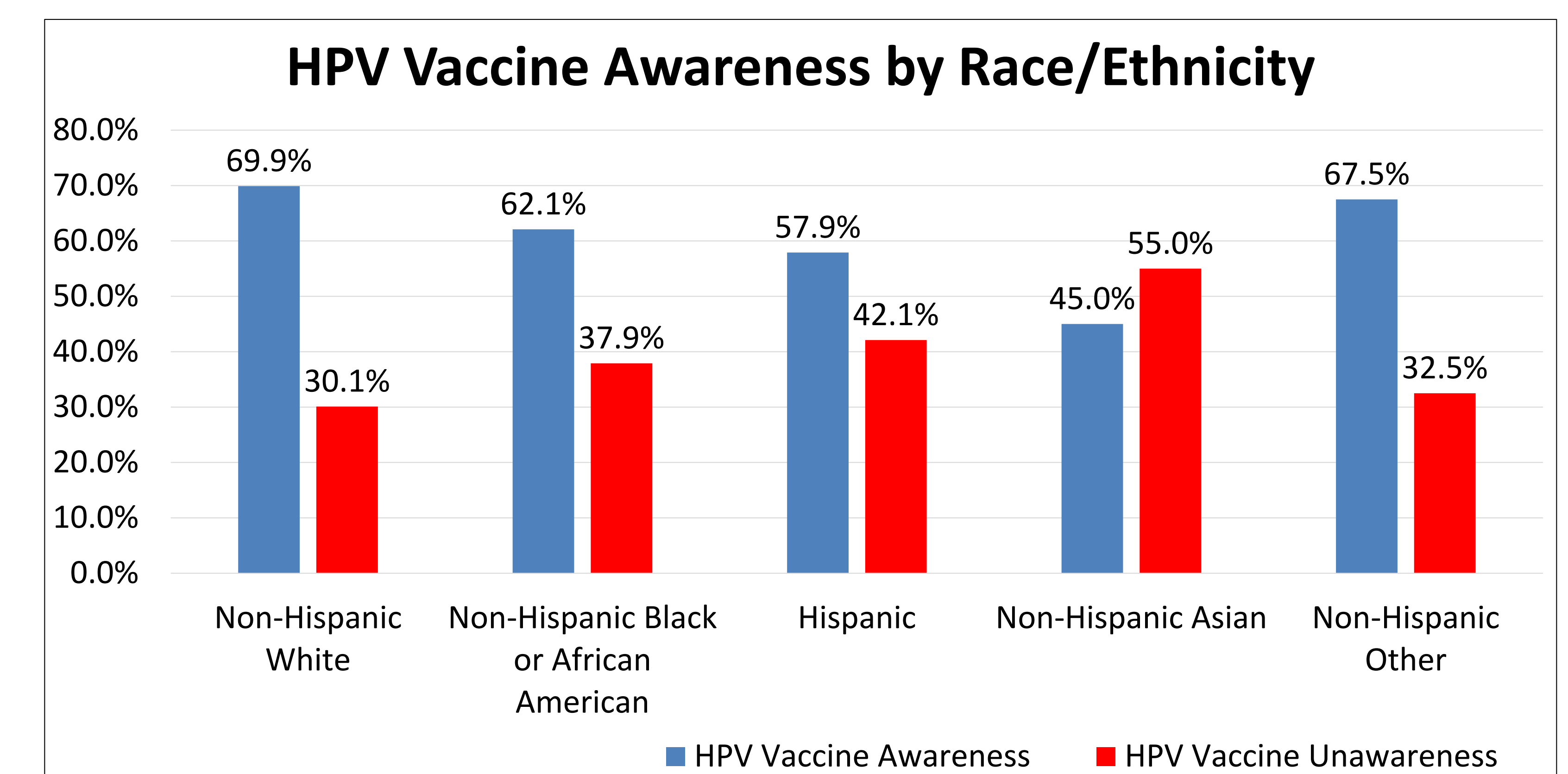
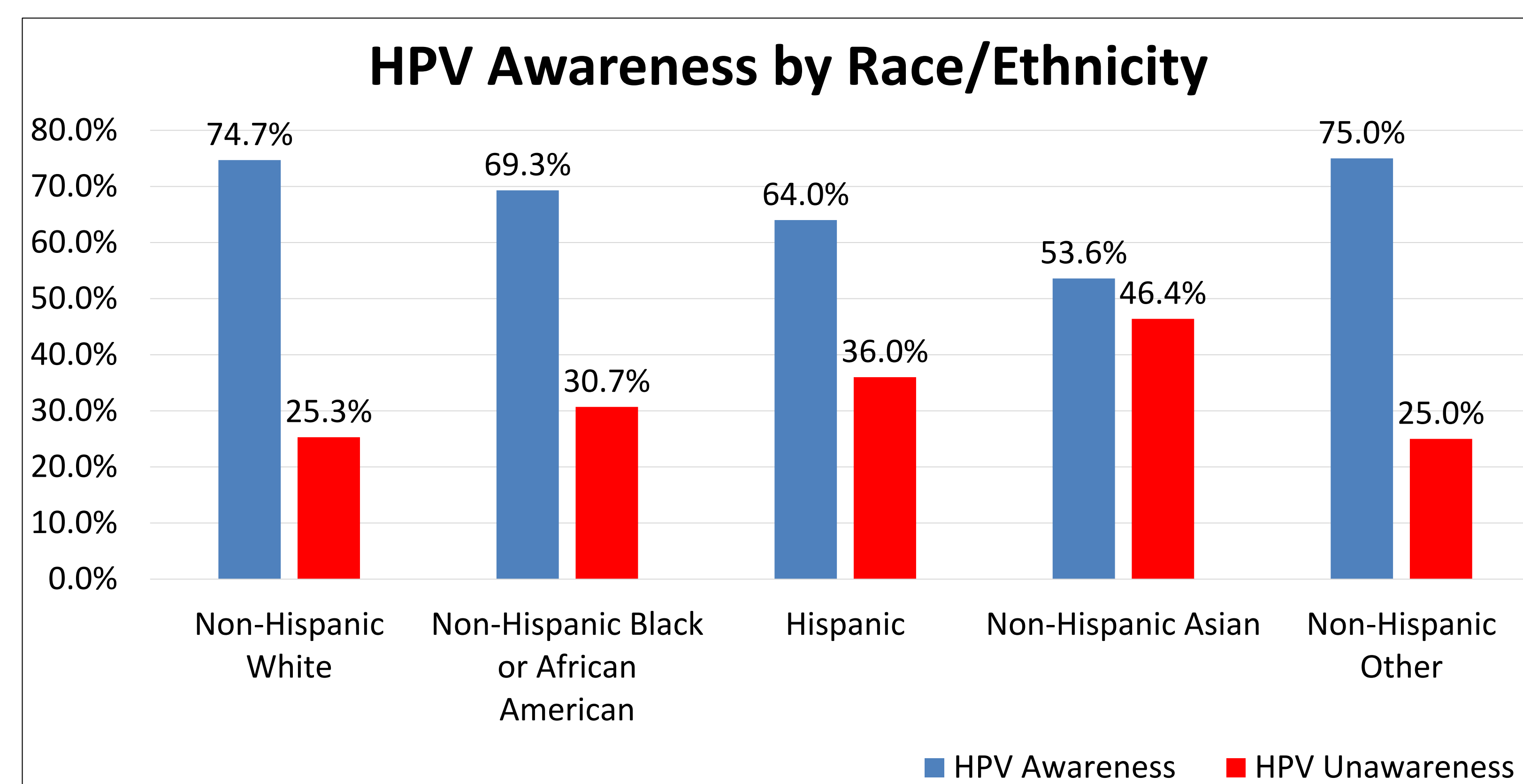
### Data Analysis:

- Descriptive statistics
- Binary logistic regression

## Main Findings

Asians and Hispanics had the *lowest* HPV and HPV-vaccine awareness. More than half of participants who did not speak English well or not at all were unaware of HPV and HPV vaccine. Yet, 64.7% of these participants indicated doctors or health care providers as the first source of health information.

- Most of the participants were non-Hispanic Whites (63%), female (58%), over the age of 50 (69%), had at least some college (76%), and had income of \$50,000 or more (55%).
- All of the HBM constructs were significantly associated with HPV ( $p < .001$ ) and HPV-vaccine awareness ( $p < .001$ ).
- Similarly to the 70% of participants who believed that it was unlikely, or were uncertain, that they would develop cancer the future ( $p < .001$ ), approximately 70% also disagreed with the statement that there was nothing that they could do to lower their chances of getting cancer.
- While 64% of participants reported confidence in their ability to get health information when they needed it, an even larger proportion (74%) perceived “having too many recommendations” as a barrier.
- In multivariate analysis, race, gender, age, education and income were associated with HPV ( $p < .001$ ) and HPV-vaccine knowledge ( $p < .001$ ). Non-Hispanic Blacks, Hispanics, Asians, and older age participants had less knowledge of HPV and HPV vaccine. Females, participants with higher education and higher income had higher knowledge of HPV and HPV vaccine. Not having insurance was associated with lower HPV-vaccine awareness ( $p < .05$ ) and but not HPV awareness.



## Conclusion

Culturally-relevant health education/promotion interventions need to be developed and tailored to (1) increase HPV and HPV-vaccine awareness and knowledge among Asians and Hispanics and (2) educate racial/ethnic minorities about their susceptibility and risk perception for cancer.

## References

