



# Knowledge and Perceptions Surrounding Human Immunodeficiency Virus & HIV Testing in the South Asian American Population

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## Introduction

- One in five Asians living with Human Immunodeficiency Virus (HIV) in the U.S. do not know that they are infected.
- According to the Centers for Disease Control and Prevention (CDC), HIV testing rates are low among Asians; surveillance data shows that Asian Americans and Pacific Islanders (AAPI) are significantly less likely than other races/ethnicities to report having ever been tested for HIV.
- AAPI constitute approximately 1% of prevalent and 2% of incident HIV infections in the U.S. The numbers of HIV/AIDS cases may be larger than reported because of underreporting or misclassification of AAPI.
- Low HIV testing rates affect the stage of disease at diagnosis. In 2004, 44% of AAPI received an AIDS diagnosis within 1 year after their HIV infection was diagnosed. This is in comparison to 37% of whites, 40% of blacks, and 43% of Hispanics.
- The region of South Asia includes India, Pakistan, Bangladesh, Nepal, Sri Lanka, and Bhutan.
- The data on HIV awareness and prevalence among South Asians living in the United States (South Asian Americans) is sparse; this community is often included in the category of AAPI.



## Study Aim

- We examined the beliefs, attitudes, knowledge, and barriers related to HIV testing among South Asian Americans.

## Methods

### Study Design:

- Cross Sectional Survey

### Study Population:

- South Asian community members aged 18-90 years from the central New Jersey area.
- Surveys were conducted at South Asian community based organizations and religious groups as well as health fairs, art and cultural events, and university student programs.



### Data Collection:

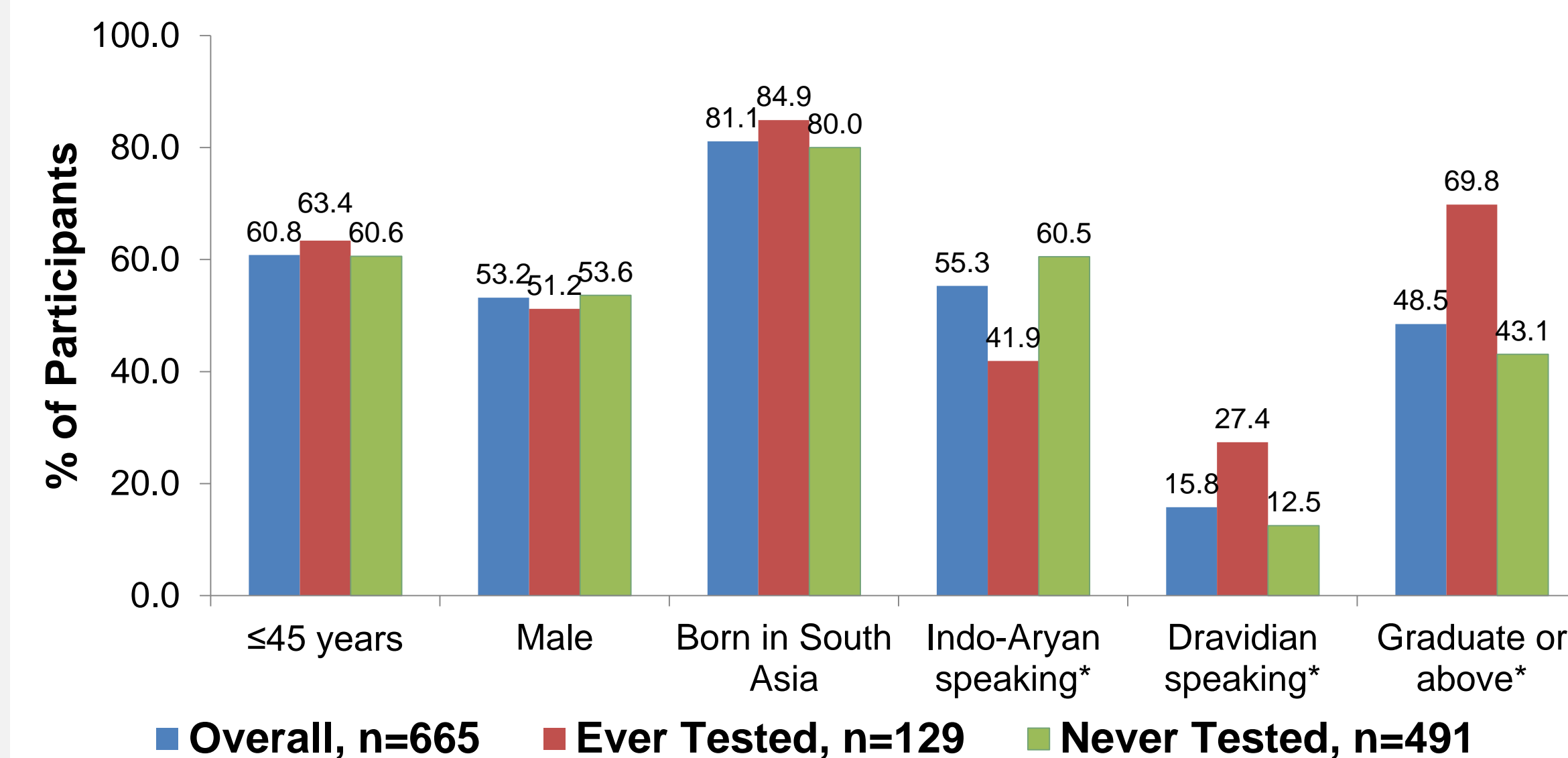
- Ten-minute paper-based structured survey to assess the knowledge, perceptions, and beliefs regarding HIV were administered.
- Surveys assessed demographic and acculturation status including age, gender, country of birth, primary language, English language fluency, and highest level of education completed.
- Surveys also assessed participants' familiarity with HIV or knowing someone with HIV or AIDS, testing history, beliefs about management of HIV and its impact on daily life, and knowledge and perception about HIV transmission.
- Surveys were available in English and four additional commonly spoken South Asian languages including Hindi, Gujarati, Tamil, and Telugu.
- Surveys were conducted between June 2014 and May 2015.
- 665 community members completed the survey and were included in the analysis.

### Statistical Analysis:

- Comparisons were made in the characteristics of members who were tested for HIV/AIDS versus those who were not using frequency distributions and unadjusted logistic regression.
- Independent predictors of being tested for HIV/AIDS were identified using a multivariable logistic regression model. The associations were summarized as odds ratios (OR) and their corresponding 95% confidence intervals (CI).
- All analyses were performed using SAS® version 9.4 (SAS Institute Inc., Cary, NC, USA).

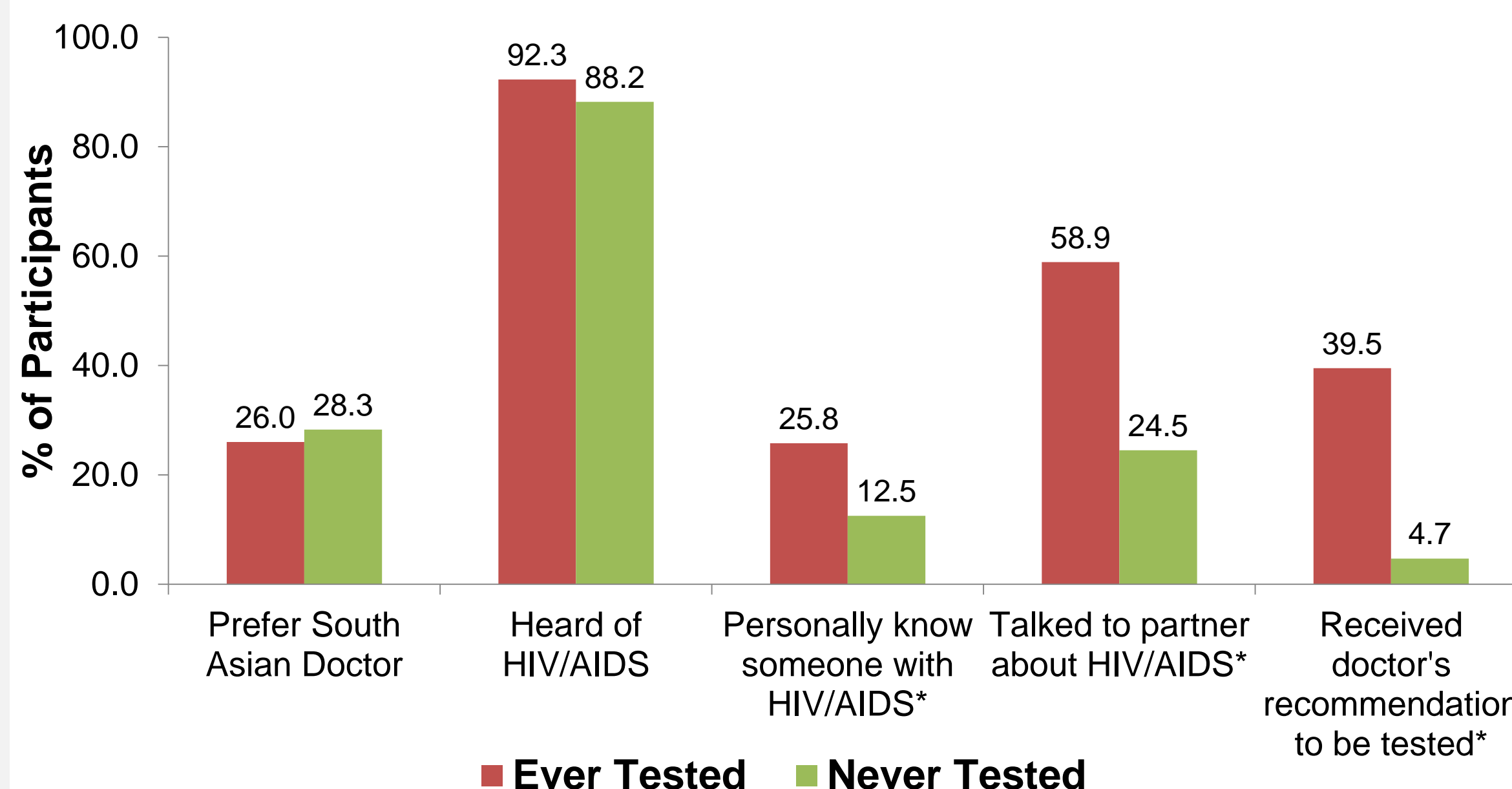
## Results

Figure 1. Participant Demographics



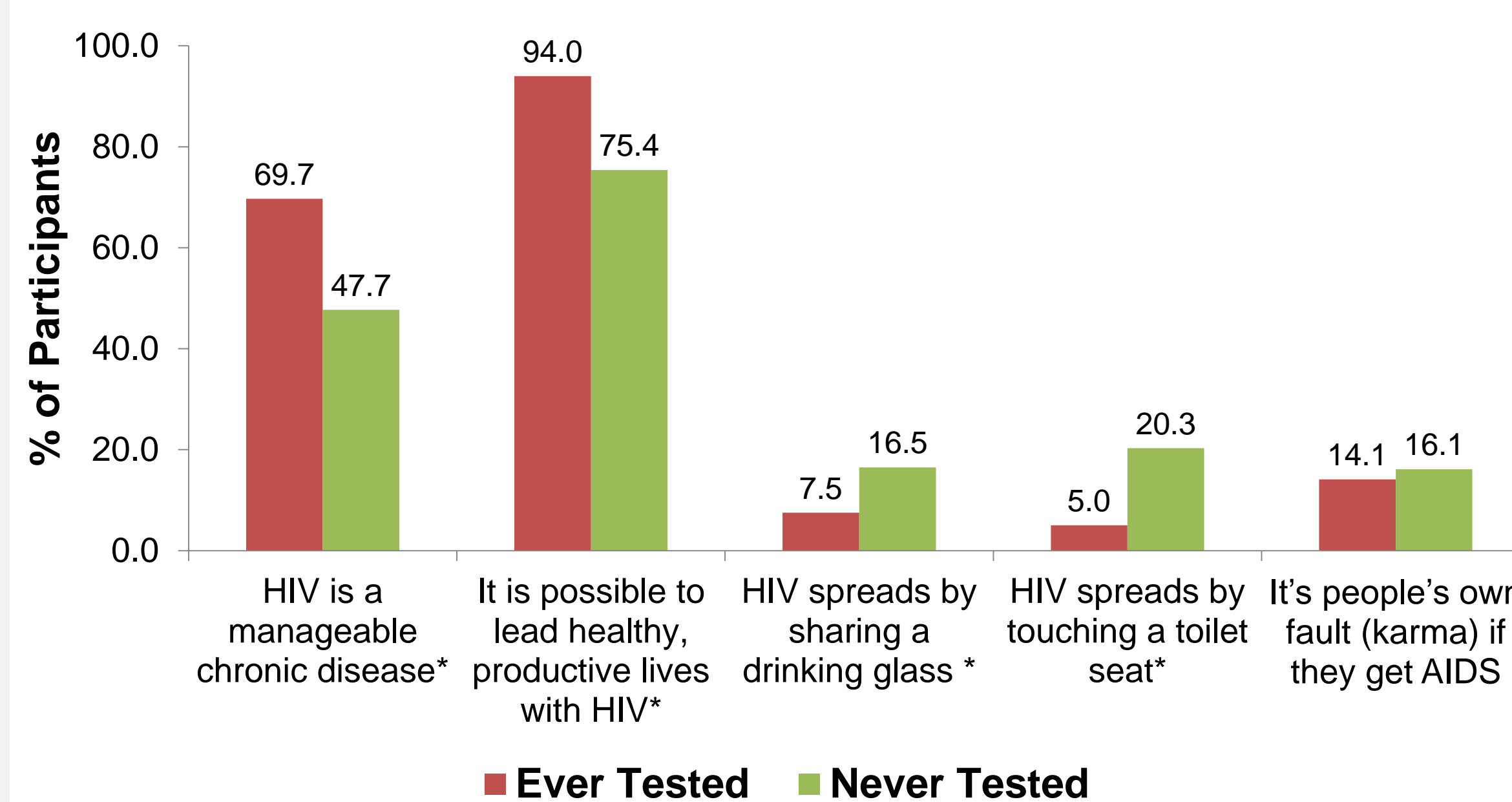
\*p<0.05

Figure 2. Participant Attitudes and Beliefs about HIV



\*p<0.05

Figure 3. Participant Knowledge and Perceptions regarding HIV



\*p<0.05

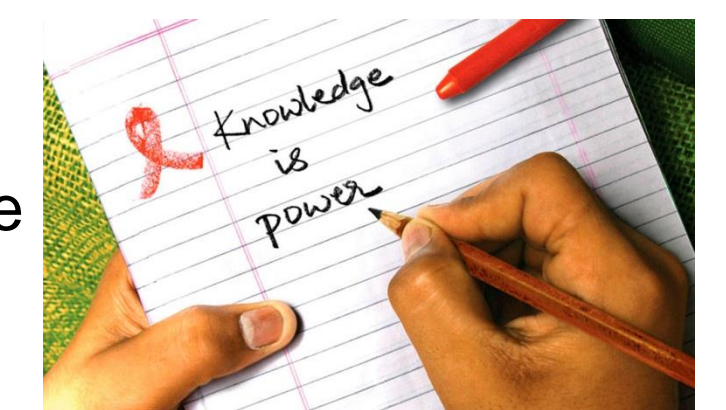
## Results

Table 1. Independent Predictors of Ever Tested for HIV

Characteristics	Adjusted Odds Ratio	(95% Confidence Interval)	P-value
<b>Age Group</b>			
≤ 45	1.06	(0.60, 1.90)	0.834
46 and older	Ref		
<b>Primary Language</b>			
English	1.29	(0.68, 2.45)	0.439
Indo-Aryan	Ref		
Dravidian	2.96	(1.46, 6.00)	0.003*
<b>Education</b>			
Below Graduate Degree	Ref		
Graduate Degree and above	2.15	(1.25, 3.72)	0.006*
<b>Personally know anyone who has HIV/AIDS</b>			
Yes	1.31	(0.67, 2.55)	0.427
No	Ref		
<b>Doctor suggested HIV testing</b>			
Yes	18.63	(39.94, 37.81)	<0.001*
No	Ref		
<b>Level of knowledge about HIV</b>			
≤ 2/4 questions	Ref		
> 2/4 questions	4.71	(2.47, 8.99)	<0.001*
<b>Ever talked to a partner about HIV/AIDS</b>			
Yes	3.34	(1.96, 5.68)	<0.001*
No	Ref		

## Conclusions

- Of the 665 South Asian individuals surveyed, only 129 (19%) reported ever having been tested for HIV. The frequency of testing in this South Asian community is considerably lower than the national average of 44%.
- The strongest predictor of being tested for HIV was recommendation by the individual's doctor to have the test.
- Other significant predictors of having been tested for HIV included having completed a graduate level of education or higher, demonstrating a greater level of knowledge about HIV, and having ever talked with one's partner about HIV/AIDS.
- Educational efforts directed towards the South Asian community are necessary to improve the knowledge of HIV and its transmission in order to increase the rate of testing.
- Further studies should be targeted towards investigating the practice patterns of physicians who care for South Asian patients. Endeavors are needed to increase physicians' compliance with CDC guidelines to offer all individuals aged 18-65, regardless of risk factors, at least one lifetime HIV test.



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- The authors report no relevant financial relationships with commercial interests.
- The study was approved by Rutgers University Institutional Review Board.