Low Acceptance of HSV-2 Testing Among High-Risk Women

INDIANA UNIVERSITY

ITY A. M. Roth^{1,2}, G. D. Zimet¹, B. Van Der Pol^{2, 3,4}, B. Dodge³, J.D. Fortenberry^{1,3}, & M. Reece³
From the Departments of Pediiatrics¹ and Infectious Diseases² Indiana University School of Medicine, Indianapolis, Indiana

³Center for Sexual Health Promotion, School of Health, Physical Education & Recreation, Bloomington, Indiana

⁴Marion County Health Department, Indianapolis, Indiana

BACKGROUND

Genital herpes (HSV-2) remains a highly prevalent sexually transmitted infection; nearly 17% of the US population over the age of 12 has serologic evidence of HSV-2 infection¹. However, the prevalence of infection is higher among certain racial/ethnic groups and among women. There are important medical consequences of HSV-2 infection including a two- to five-fold increased risk for HIV 1 transmission^{2, 3} and neonatal herpes⁴. Thus, HSV-2 is an important contributor to the HIV 1 epidemic, especially in populations where HSV-2 antibody positivity is highly prevalent^{2, 3}.

Although HSV-2 is highly prevalent, antibody testing is not common clinical practice therefore many HSV-2 seropositive individuals are unaware of their diagnosis. These individuals are probably responsible for a large proportion of new infections because they are unaware they are contagious.

A recent study in Indianapolis demonstrated that women of color had the highest prevalence of HSV-2 but were the least likely group to access testing⁵. In an effort to understand reasons for this, we initiated a program to offer low-cost point-of-care HSV-2 antibody testing (\$10 cash) to women with an elevated risk for HSV-2. We then analyzed client characteristics associated with HSV-2 rapid antibody test uptake/refusal.

OBJECTIVES

- To evaluate the acceptability of a community-based HSV-2 screening program for at-risk women
- To understand factors relating to uptake/refusal of point-of-care testing for HSV-2 in this vulnerable sample.
- To determine if brief health education messages could positively impact up-take of point-of-care testing for HSV-2.

METHODS

- Recently arrested women aged 18-57 were recruited from a court handling lower-level misdemeanor cases in Marion County, Indiana.
- Individuals completed an interviewer administered survey assessing factors related to HSV-2 screening intentions.
- Participants were compensated \$20 for participation and were offered an optional HSV-2 test for \$10 cash.

REFERENCES

- 1. Xu F, Sternberg MR, Kottiri BJ, et al. Trends in herpes simplex virus type 1 and type 2 seroprevalence in the United States. *J.A.M.A.* 2006;296:964-973
- 2. Wald A, Link K. Risk of human immunodeficiency virus infection in herpes simplex virus type 2-seropositive persons: a meta-analysis. *J. Infect. Dis.* 2002;185:45-52.
- 3. Freeman EE, Weiss HA, Glynn JR, et al. Herpes simplex virus 2 infection increases HIV acquisition in men and women: systematic review and meta-analysis of longitudinal studies. *AIDS* 2006;20:73-83.
- 4. Kimberlin DW, Whitley RJ. Neonatal herpes: what have we learned. Semin Pediatr Infect Dis 2005;16:7-16.
- 5. Fife, K., et al., Implementation of Routine Access to Herpes Simplex Virus Type 2 Antibody Testing in a Public Health Sexually Transmitted Disease Clinic. Sexually Transmitted Diseases, 2009. 36(11): p. 724-728.

RESULTS

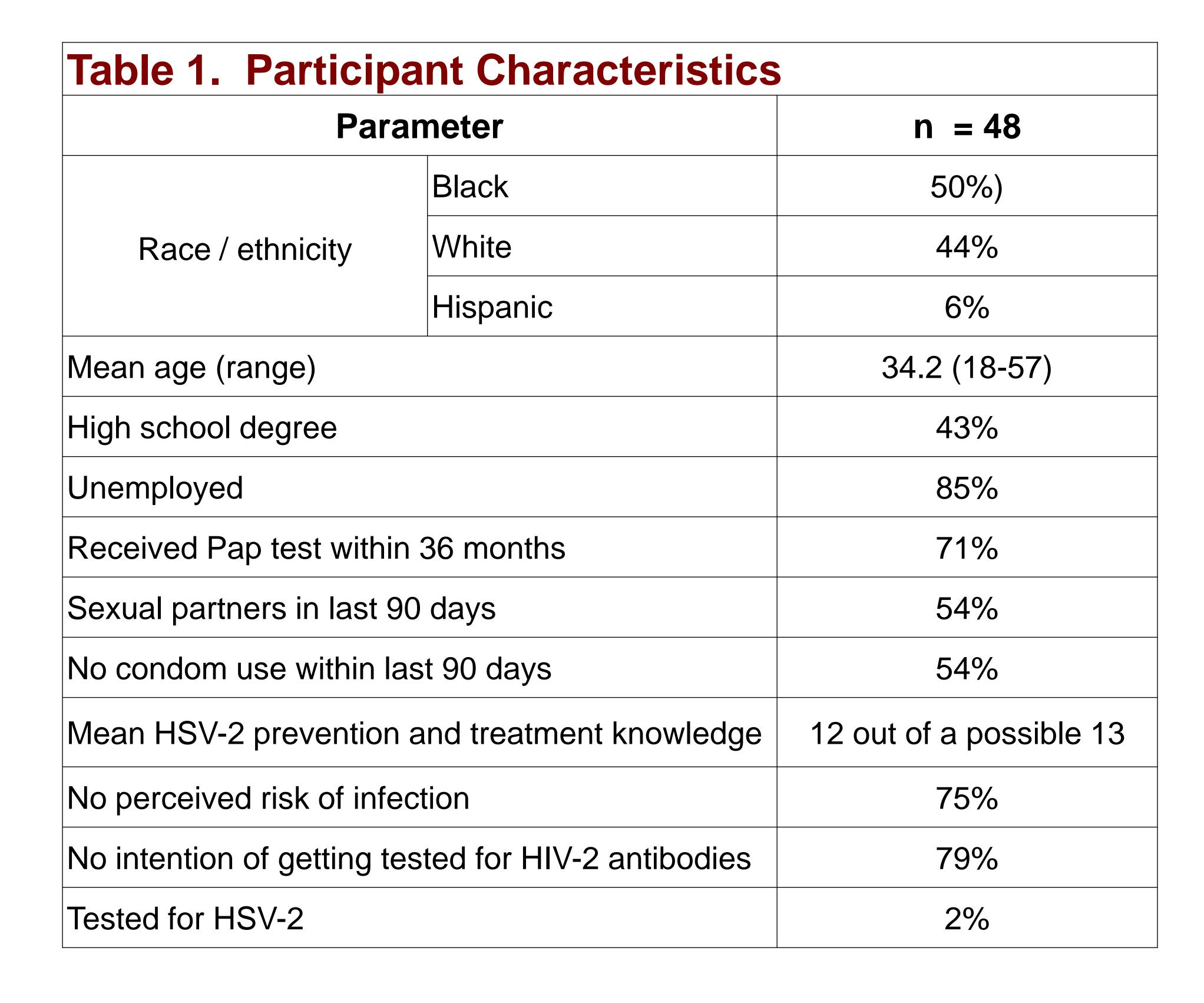
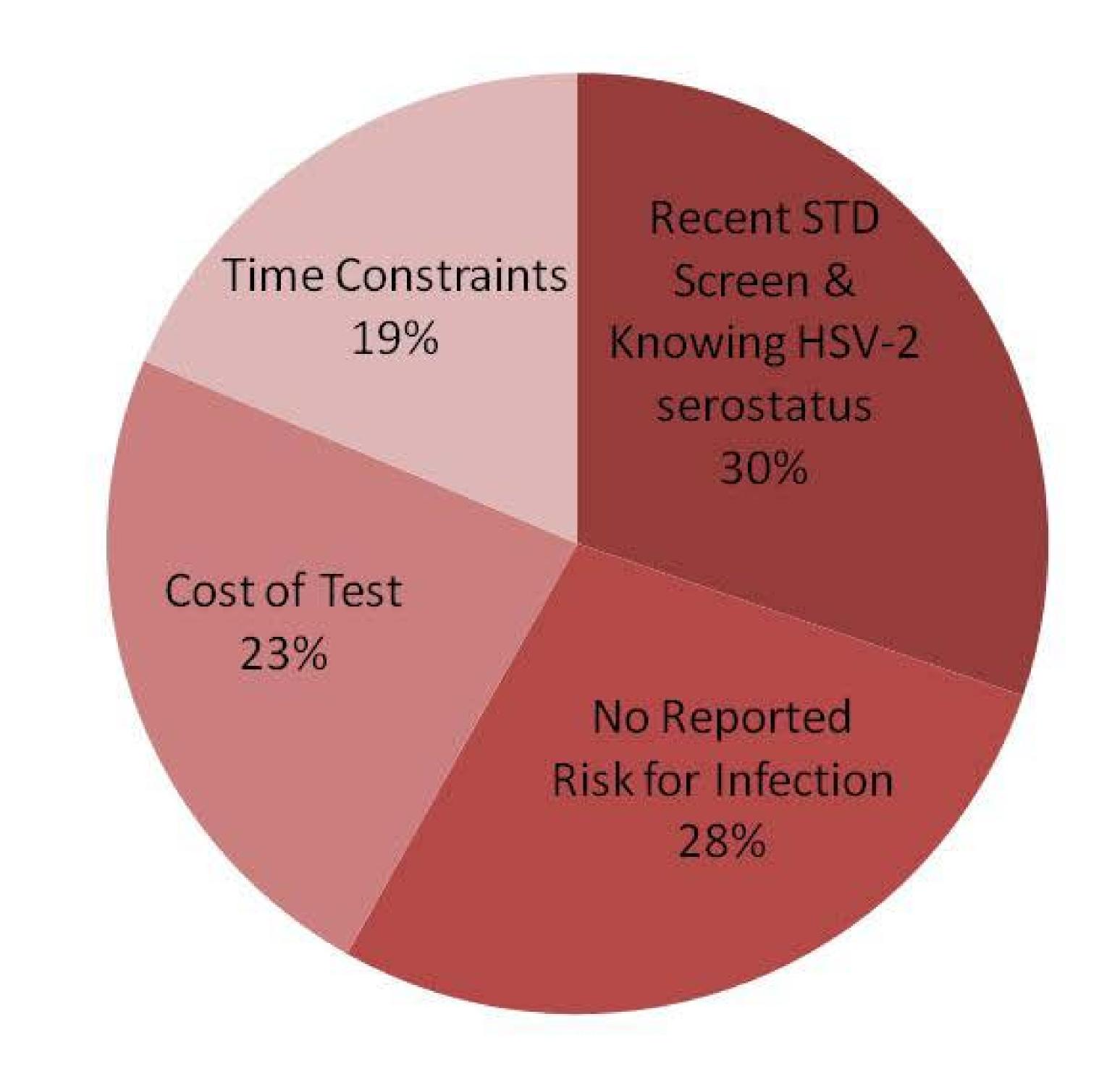


Figure 1. Common Reasons for Not Getting Tested



DISCUSSION

- •This likely high prevalence population was not willing to be tested at a cost of \$10 despite having considerable knowledge regarding herpes transmission.
- •Despite reporting high-risk sexual partners, many did not believe they were at risk for HSV-2 (28% see Figure 1).
- •There may be widespread misconceptions about STD screening services received by women in care. While 30% believed they had recently been tested for HSV-2, this is unlikely given that we are the only program in the county currently offering this method of HSV-2 screening.
- •We also identified a discrepancy between knowledge, perceived risk, intentions and behaviors that needs to be addressed.
- •In order to create interventions that affect testing behaviors in this high-risk population further investigation is needed.

FUTURE DIRECTIONS

- We implemented no-cost HSV-2 testing for women at Marion County Community Court. 13/28 (46.4%) women accepting testing were HSV-2 antibody positive.
- Our survey assesses key factors relating to testing intention and uptake including measures: HSV-2 stigma, anxiety, fatalism, and participant evaluation of testing behavior (health affirming or illness detecting).
- Randomization to brief health education messages to allow analysis of client characteristics associated with HSV-2 rapid antibody test uptake and test positivity.

LIMITATIONS

- Only 1 woman was tested due to the cost barrier.
- The pilot data suggests that responses from additional women are needed

ACKNOWLEDGEMENTS

- This study would be impossible without the support of the Marion County Community Court whose partnership is invaluable.
- Supported in part by Faculty Research Support Program,
 Department of Applied Health Science, School of Health,
 Physical Education & Recreation Bloomington, Indiana.