Correlates of Testing Positive for HSV-2 Among Patients Attending a Publicly Funded STD Clinic

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Background

- Prevalence of genital herpes ~22%
- Genital herpes associated with
  - psychosocial morbidity
  - risk of neonatal herpes
- Genital herpes may synergistically promote transmission of HIV

Background

- Type-specific HSV serologic assays allow point-of-care diagnoses
- Debate surrounding testing
- Disclosure, education, counseling important for HSV prevention

Objective

- To better guide HSV-2 testing and educational efforts, we set out to identify correlates of positive HSV-2 results among STD clinic patients

Methods: Sample

- Convenience sample
- Eligibility criteria:
  - no previous HSV-2 diagnosis
  - speak English
  - sexually active past 3 months
- Of 366 eligible patients, 357 chose to enroll: 97.5% participation

Methods: Data Collection

- Cross-sectional
- Self-administered questionnaire
  - sexual behavior measures
  - 5 item version of Herpes Related Quality of Life scale (Cronbach $\alpha = .83$)
- HSV-2 Rapid Test: Sure-Vue® HSV-2 by Fisher HealthCare (Houston, TX)
  - 96% sensitive; 98% specific

Methods: Data Analysis

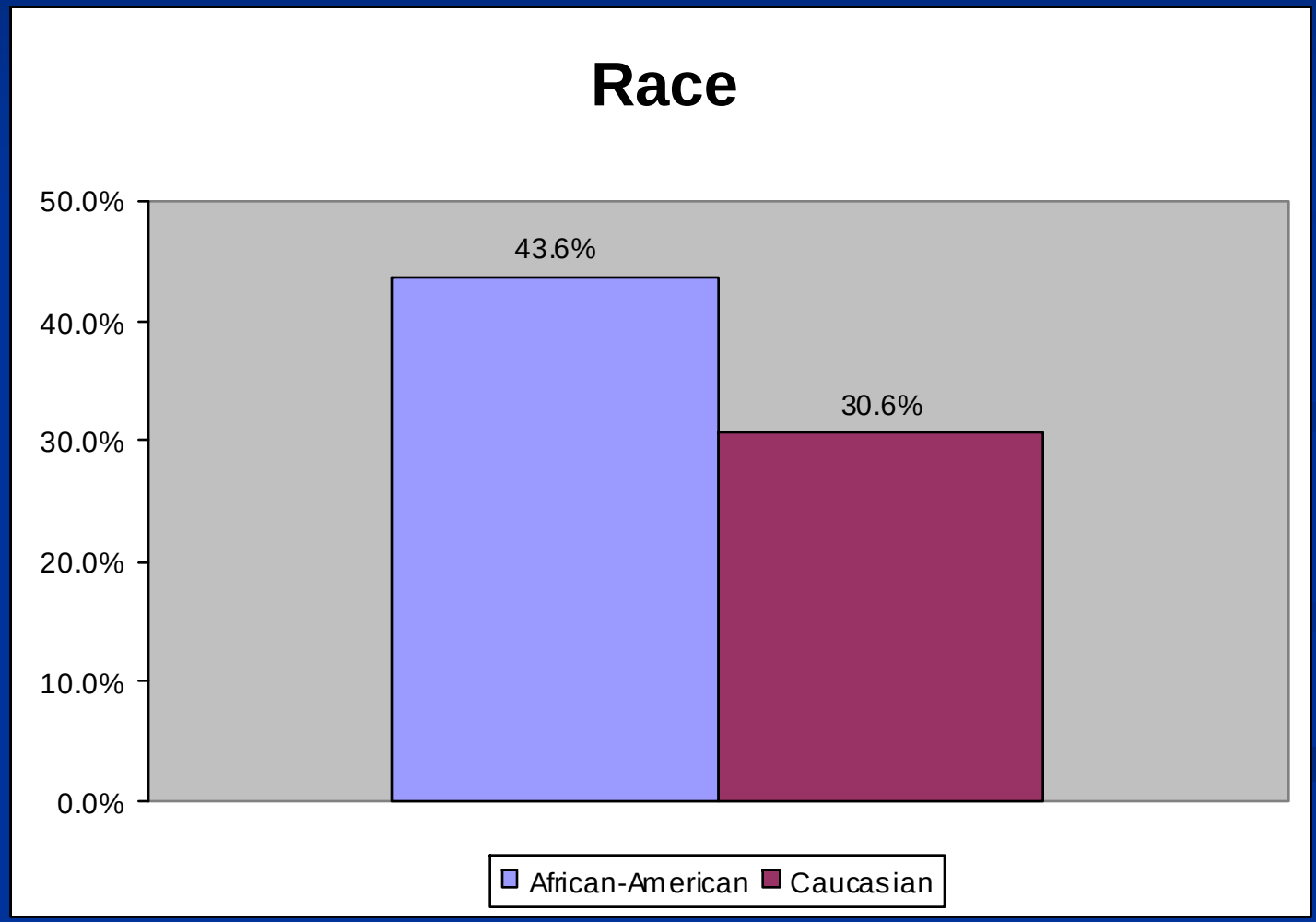
- Assessed variables for normality; median split for non-normal variables
- SPSS 14.0, χ^2, logistic regression
- Significance at $\alpha = .05$

Results: Sample Characteristics

- 39% tested positive for HSV-2
- Mean age 31.7 years (standard deviation 11.5), median 27 years, range 18-83 years
- 54% male, 46% female
- 69% African-American, 35% Caucasian
- 25% currently experiencing symptoms
- 91% sex with steady partner, 48% sex with non-steady partner

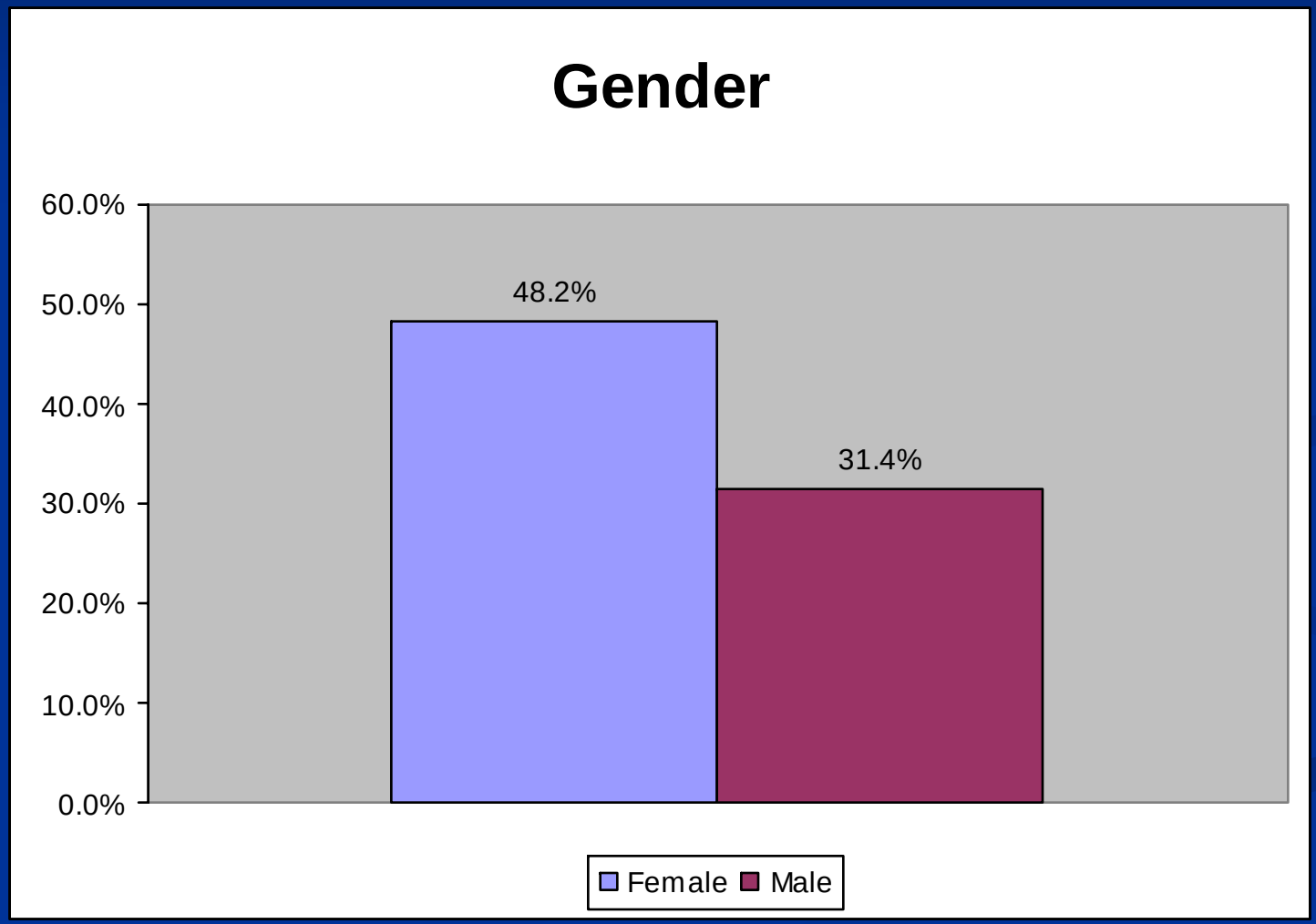
Results: Bivariate Associations

Prevalence Ration (PR)=1.43, Confidence Interval (CI)=1.05-1.94, *P*=.02



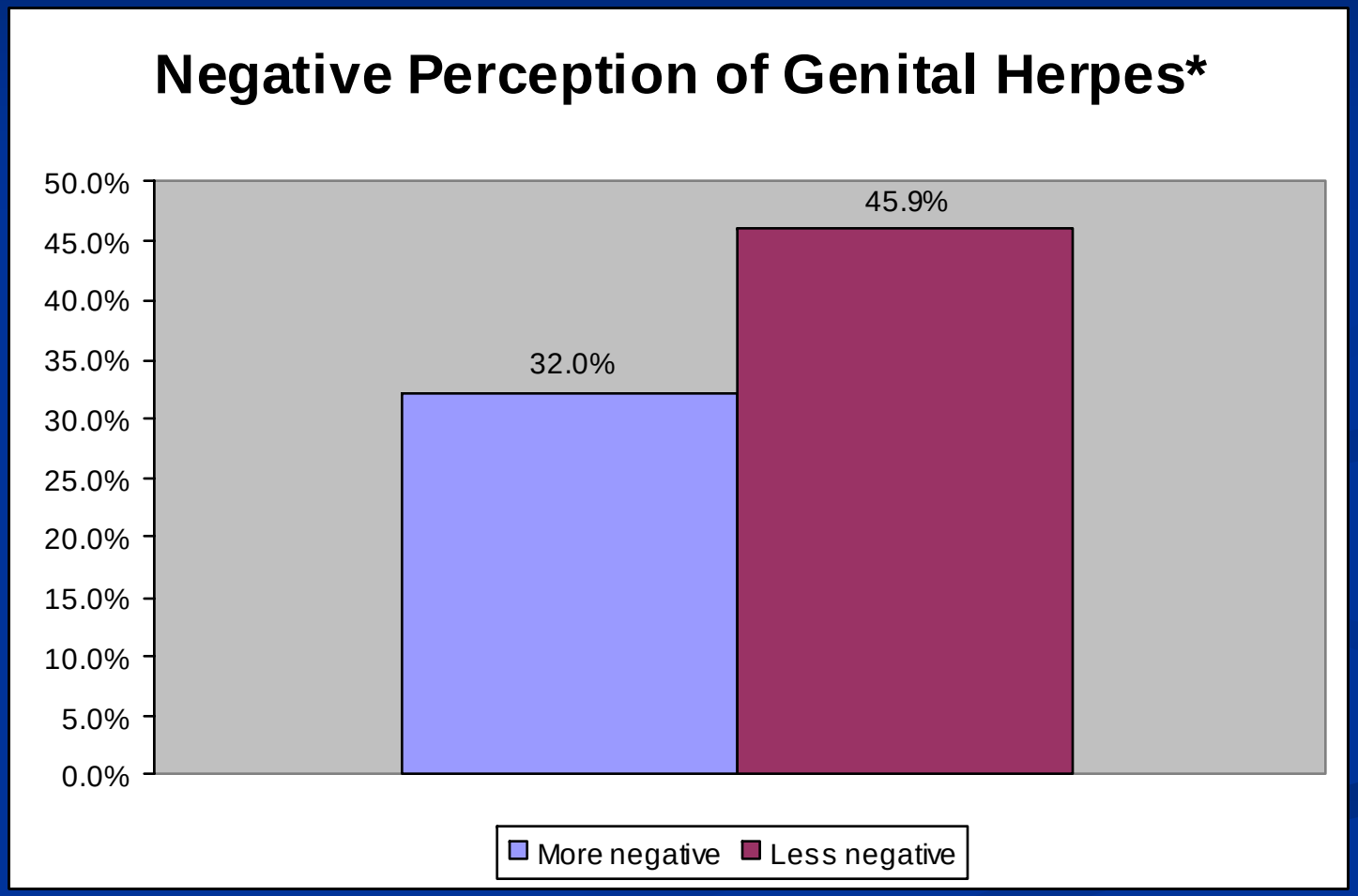
Results: Bivariate Associations

PR=1.53, CI=1.18-1.99, *P*=.001



Results: Bivariate Associations

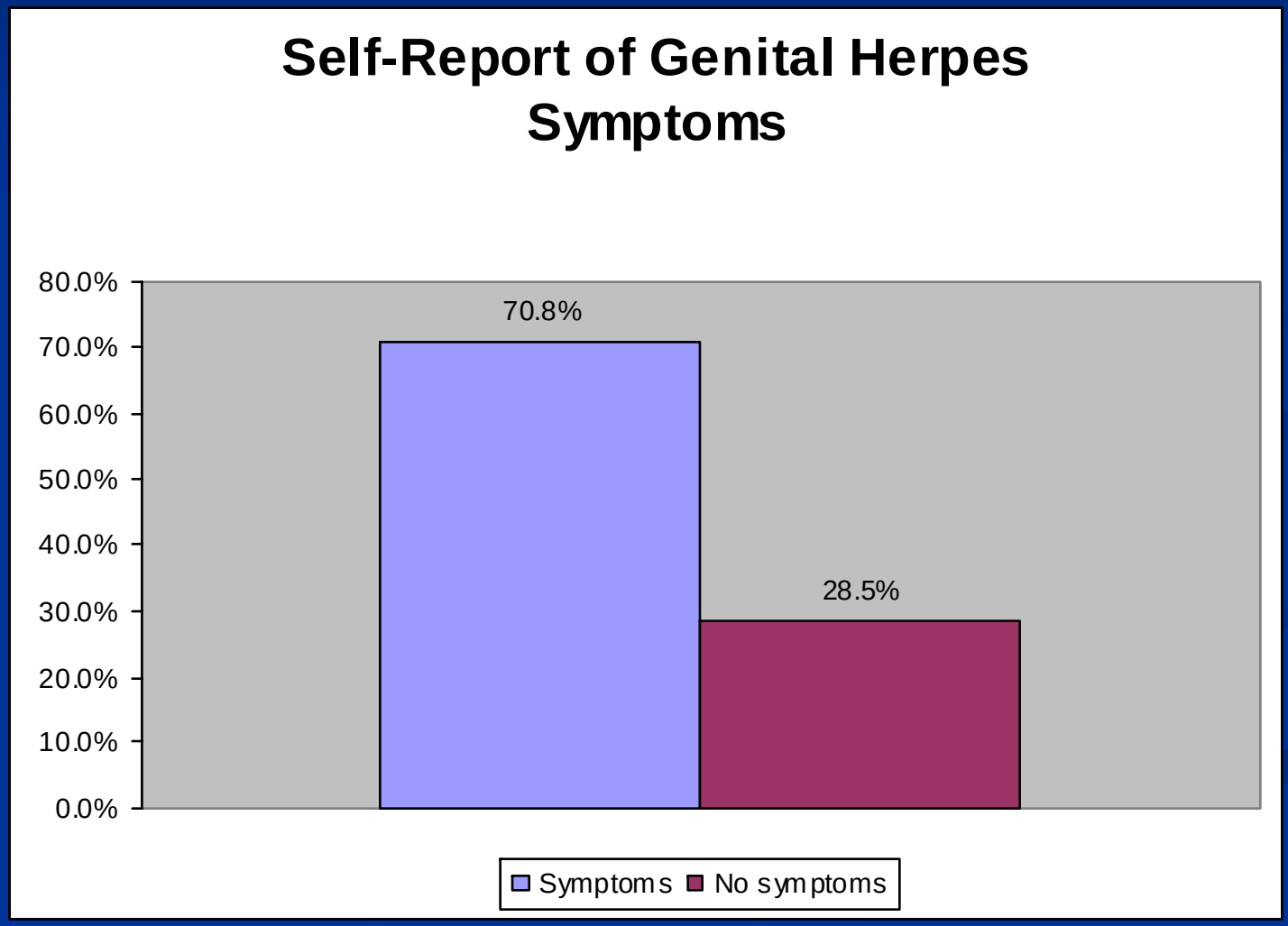
PR=1. 44, CI=1.10-1.88, *P*=.007



*As measured by 5 item Herpes-Related Quality of Life scale

Results: Bivariate Associations

PR=2.49, CI=1.97-3.14, *P*=.0001



Results: Bivariate Associations

- Variables did not reach significance:
  - Sexual frequency
  - Number of partners
  - Condom use
  - Sex avoidance due to STD concern

Results: Multivariate Associations

- Self-report of symptoms excluded from model
- African-American
  (AOR=1.64, CI=1.01-2.68, *P*=.05)
- Female
  (AOR=1.80, CI=1.14-2.85, *P*=.01)
- Less negative perception of genital herpes (Herpes-Related Quality of Life scale)
  (AOR=1.93, CI=1.22-3.05, *P*=.005)

AOR = Adjusted Odds Ratio

Discussion

- African-Americans and women are two groups at risk for HSV-2
- Persons with lower negative perception of genital herpes are at risk for HSV-2
  - May be less fearful of contracting herpes
  - May engage in less protective sexual behaviors

Limitations

- Cross-sectional study, convenience sample
- Self-report of sensitive behaviors
- Truncated (5 item) version of Herpes-Related Quality of Life Scale used
- Possible sample bias: participants volunteered with knowledge that HSV testing offered
- Did not assess HSV-1

Implications for Public Health

- African-Americans and women also disproportionately affected by HIV
- HSV-2 may be co-factor in acquisition / transmission of HIV
- Call for prevention and testing efforts
- Investigation of how perceptions of STD infections impact protective sexual practices

Conclusion

- Among STD clinic attendees, African-Americans and women are at increased risk for HSV-2 infection as are those who have less negative perception of genital herpes
- These findings may guide selective HSV-2 screening and may help focus educational campaigns

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