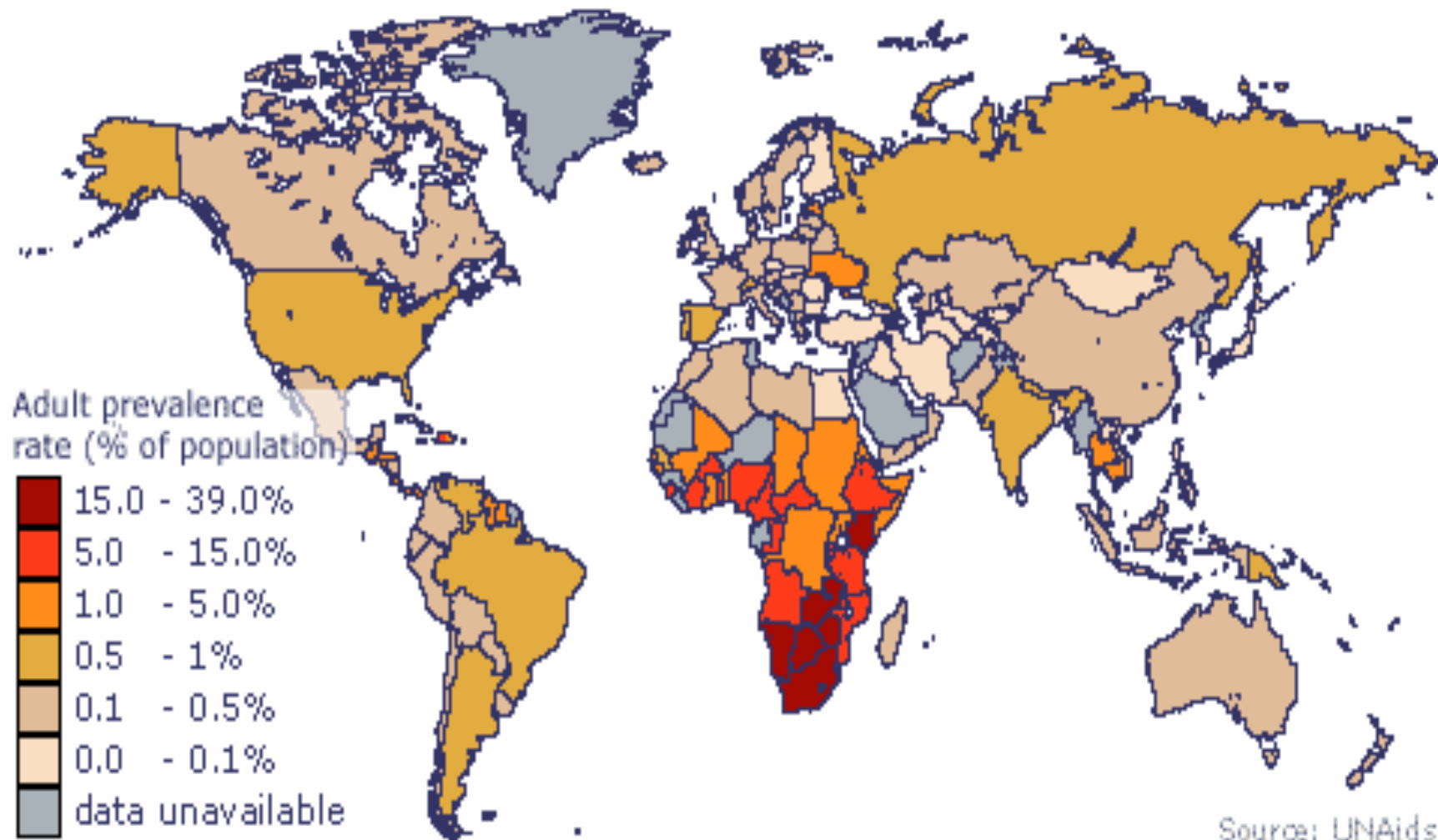


Epidemiological Overview of Black MSM Populations in Black Diaspora

Greg Millett
July 17, 2010

HIV Around the Globe



Lifetime Risk of HIV Diagnosis in 33 States, 2004-2005

JAIDS JOURNAL OF ACQUIRED IMMUNE DEFICIENCY SYNDROMES

Estimating the Lifetime Risk of a Diagnosis of the HIV Infection in 33 States, 2004–2005

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Purpose: We estimated lifetime risk and age-conditional risk of being diagnosed with HIV in 33 states with name-based HIV reporting.

Methods: We used vital statistics data on general and HIV-specific mortality, census data, and HIV surveillance data to calculate cross-sectional, period-specific (2004–2005), and age-specific probabilities of an HIV diagnosis. The probabilities were applied to a hypothetical cohort of 10 million live births, and estimates were derived for the lifetime risk, from birth, of being diagnosed with HIV.

Results: The estimated lifetime risk of being diagnosed with HIV was 1.87% for males (95% confidence limit: 1.86 to 1.89) or 1 in 53 males and 0.71% for females (95% confidence limit: 0.70–0.72) or 1 in 141 females. Blacks and Hispanics experienced higher estimated lifetime risk of HIV than whites: 6.23% or 1 in 16 for blacks, 2.88% or 1 in 35 for Hispanics, 0.96% or 1 in 104 for white males; 3.29% or 1 in 30 for blacks, 0.88% or 1 in 114 for Hispanics, and 0.17% or 1 in 588 for white females. The highest risk of HIV diagnosis was observed among people in their 30s.

Conclusions: These estimates may help to communicate the risk of HIV infection to affected communities, increase public awareness, and promote early detection and prevention efforts for HIV.

Key Words: HIV, lifetime risk

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An estimated 1 million people are living with HIV in the United States, and about a quarter of them do not know that they are infected.¹ The burden of disease is unevenly distributed among the US subpopulations; blacks and

Hispanics comprise about 13% and 14% of the US population, but about 47% and 17% of persons living with HIV/AIDS are blacks and Hispanics, respectively.² The majority of persons living with HIV/AIDS are men (72%). Lack of knowledge about the risk for HIV infection may contribute to increased risk behaviors for HIV transmission, lack of HIV testing and corresponding awareness of HIV status, and late diagnosis and treatment of HIV. Thirty-nine percent of persons diagnosed with HIV are diagnosed with AIDS within 12 months of HIV diagnosis, and the proportion of blacks and Hispanics diagnosed with AIDS within 12 months of HIV infection is larger than for whites.²

Although previous reports describe the burden of disease in terms of prevalence among population subgroups, estimating lifetime risk may be an additional useful method for assessing the burden of a disease in a population. Moreover, it offers a powerful tool for clinicians, researchers, and policy makers to highlight and communicate more effectively the risk of a disease to nontechnical audiences. Lifetime risk, which is often expressed in terms of the number of people who would need to be followed throughout their lives to observe 1 occurrence of the disease, is more easily understood by the general public. Age-conditional risk estimates allow identification of age categories where the burden of the disease is greatest. Lifetime risk estimates are commonly reported in the popular press and scientific literature for cancer and other diseases. However, there has been little use of the method to estimate the burden of HIV infection. This study estimates lifetime risk and age-conditional risk of being diagnosed with HIV for age, sex, and racial/ethnic subgroups in the 33 states that have had name-based HIV reporting since 2001.

METHODS

Cross-sectional, age-specific HIV diagnosis, mortality, and population data were used to derive lifetime and age-specific risk estimates of being diagnosed with HIV. Data on HIV diagnoses were obtained from the Centers for Disease Control and Prevention's (CDC's) national HIV/AIDS Reporting System. In 1994, the CDC implemented a uniform system for national, integrated HIV and AIDS surveillance, and 25 states began submitting data to CDC from confidential, name-based HIV reporting systems. Since 2001, data have been available from 33 states (Alabama, Alaska, Arkansas, Arizona, Colorado, Florida, Idaho, Indiana, Iowa, Kansas, Louisiana, Michigan, Minnesota, Missouri, Mississippi, North Carolina, North Dakota, New Jersey, Nebraska, New Mexico,

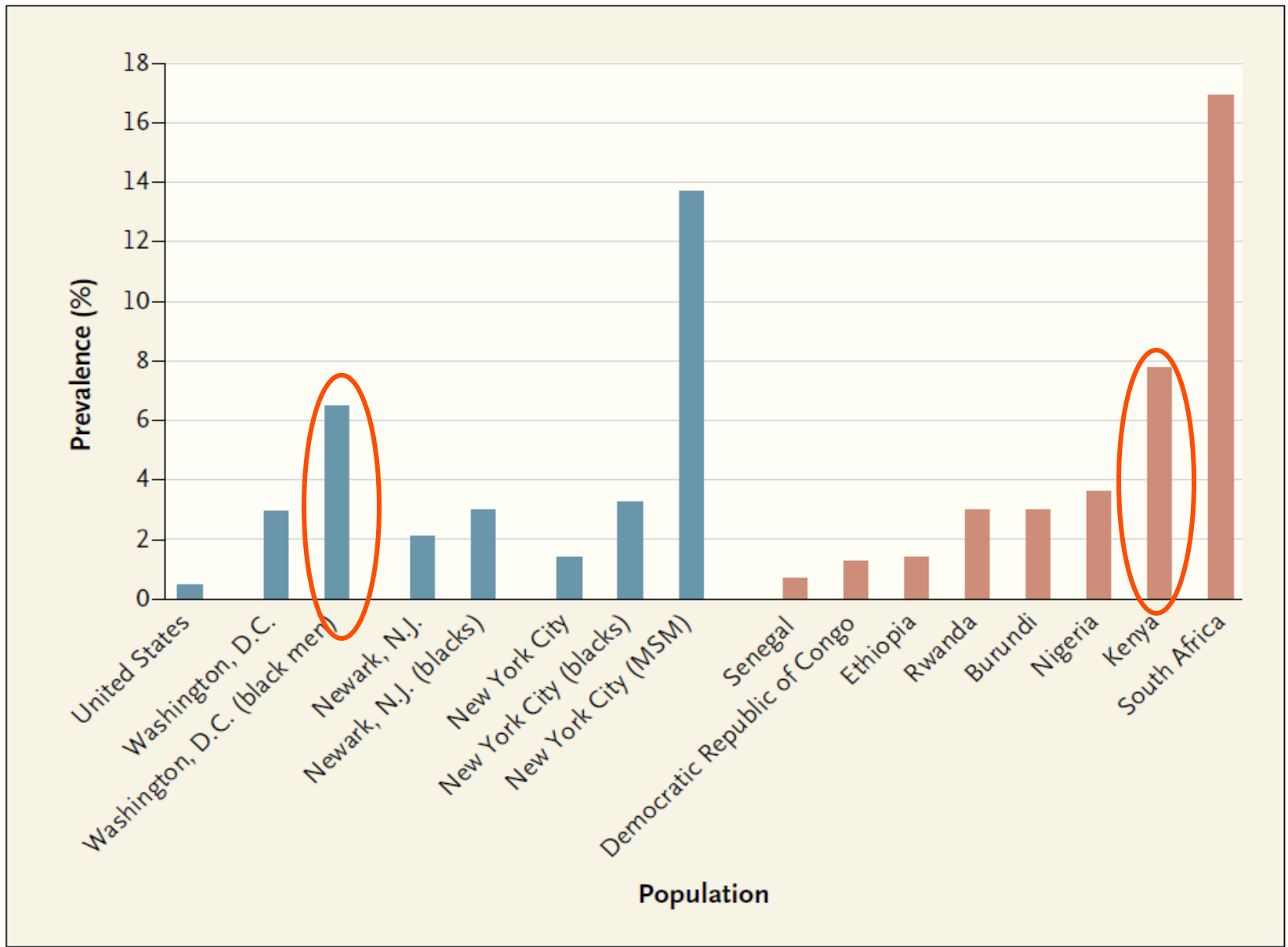
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The findings and conclusions in this report are those of the authors and do not necessarily represent the views of the Centers for Disease Control and Prevention.
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- Blacks
 - 1 in 16 for men
 - 1 in 30 for women
- Hispanics
 - 1 in 35 for men
 - 1 in 114 for women
- Whites
 - 1 in 104 for men
 - 1 in 588 for women

Hall et al. *JAIDS*. 2008; 49: 294-297.



HIV Prevalence in Adults from Selected Countries in Sub-Saharan Africa and Subpopulations in the United States.

(El Sadr, 2010)

Black MSM at greater risk for HIV across world

- Disproportionate HIV infection among Black MSM vs other MSM
 - In US
 - In Europe
 - In Canada—compared to other ethnic minority MSM (Remis & Liu, 2007)
- Undiagnosed HIV among Black MSM vs. other MSM
 - In US (2/3 of Black MSM; 90% of young Black MSM)
 - In Europe (London: Greater among Black Caribbean MSM)
- Disproportionate HIV infection among Black MSM vs general population
 - In US (<2% HIV+ general population; as high as 50% Black MSM HIV+)
 - In Africa (Senegal: 2% HIV+ general population; 22% among MSM)

Challenges in the Caribbean

- “There is a paucity of epidemiologic data on HIV among MSM in the Caribbean”
 - Trinidad and Tobago, a 2006 study found 20.4% of Black MSM infected;
 - Jamaica 2008 study found HIV prevalence of 31.8% among Black MSM.

(van Griensven et al., 2009)

HIV Prevalence by Age among Black MSM in U.S. and Africa

United States

Age	HIV Prevalence
15-22	15%
23-29	32%
Median age 32	46%

(MMWR, 6/1/01)

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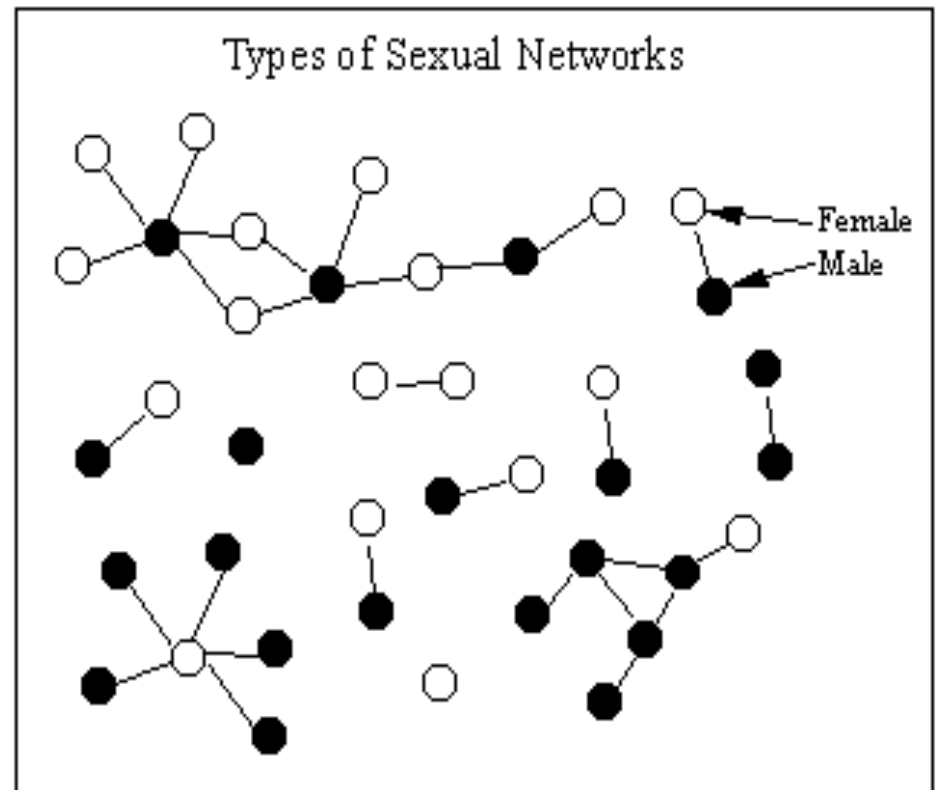
Malawi, Namibia, Botswana

Age	HIV Prevalence
18-23	8.3%
24-29	20%
>30	35.7%

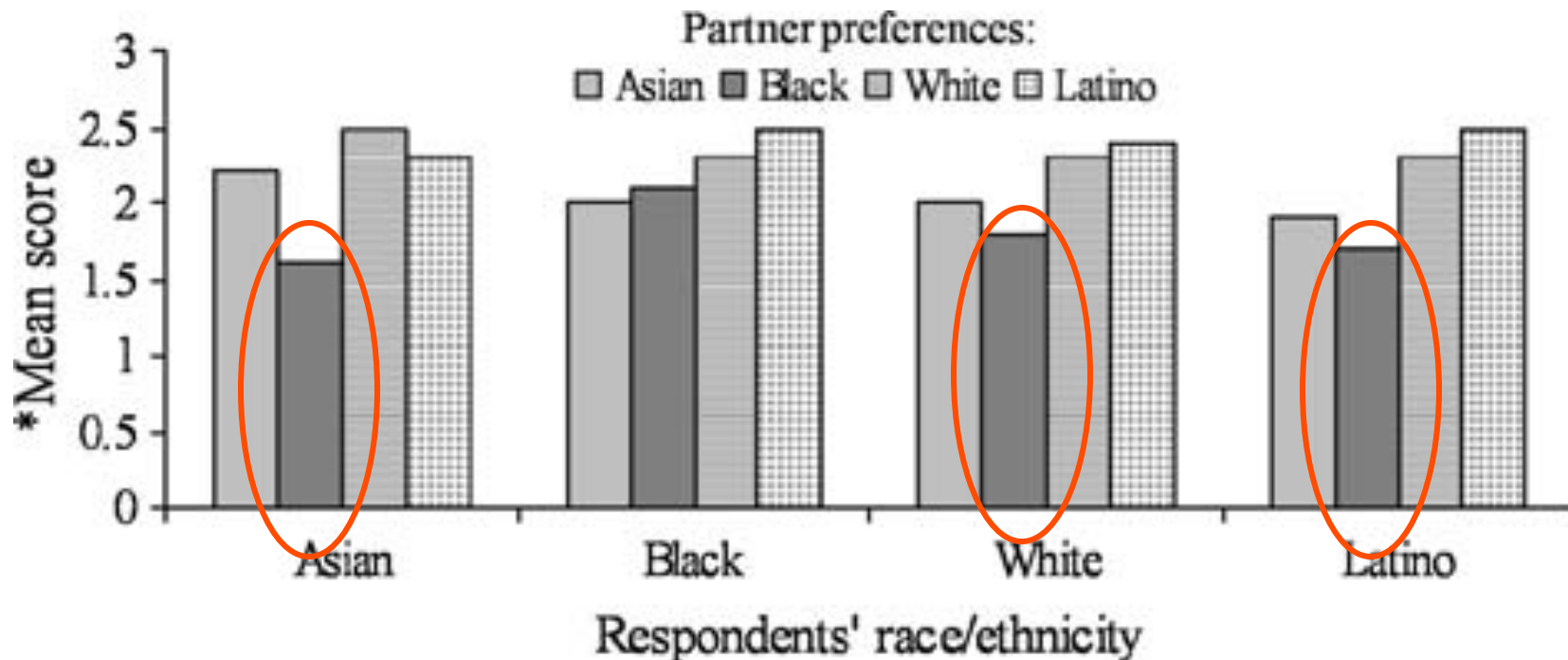
(Baral, 2009)

The Influence of Sexual Networks

- Sexual mixing and HIV infection risk (Service, 1995)
- Sex with older male partners (Bingham, 2003; Berry, 2007;)
- Intra-racial sexual mixing
 - Preferences (Bingham, 2003; CDC, 2003; Berry, 2007)
 - Discrimination



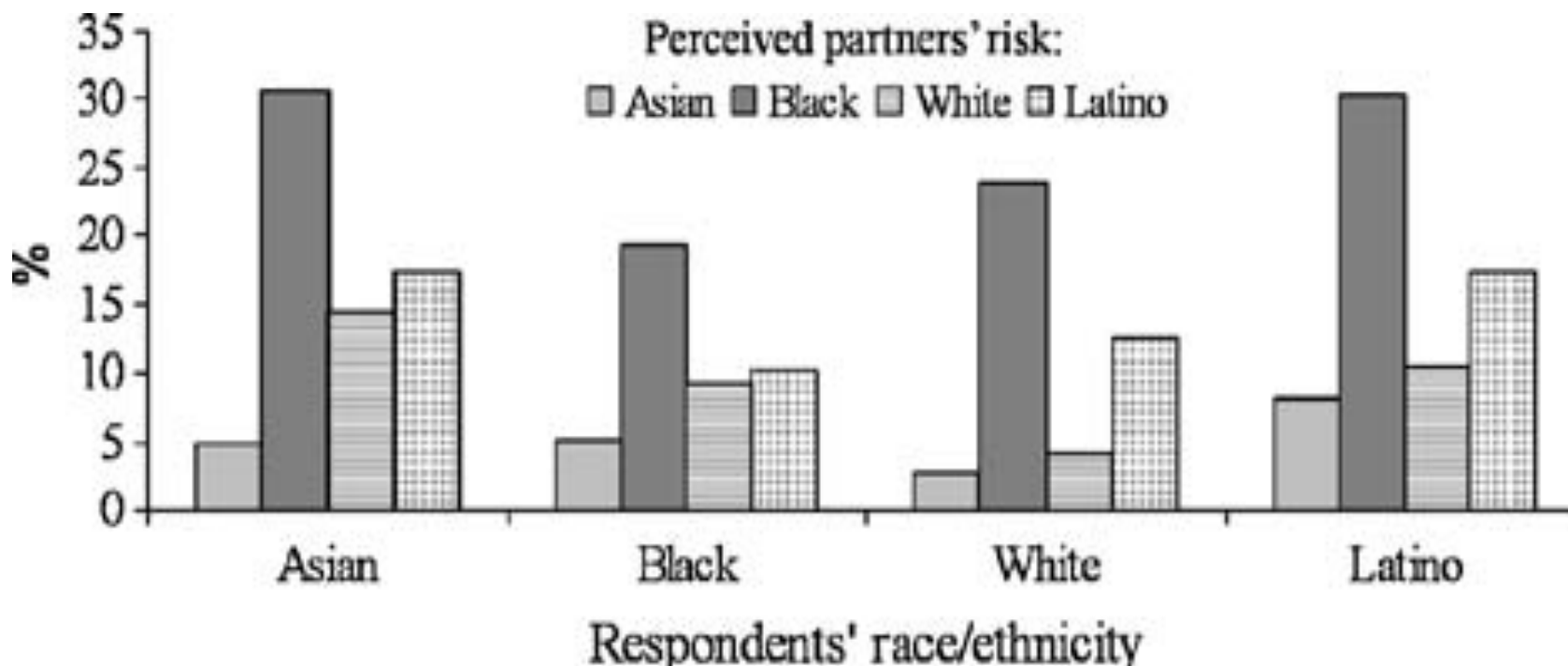
Partner Selection and Race



(Raymond, 2009)

Percent who agreed with “I prefer to have sexual partners who are—(Asian, Black, White, Latino)”



Partner Selection, Race and HIV Risk



(Raymond, 2009)

Percent who agreed with "Having sex with a(n)—(Asian, Black, White, Latino) partner has more risk of HIV infection"

Gay Community Racism and Latino MSM

- Differences among US Latino MSM in reported discrimination from gay community and skin color
- Scale evaluating perceived racism within gay community
 - Darker skin  higher scores on scale
 - Indigenous Indian or African features  higher scores on scale
 - No similar studies in Central or Latin America
 - No studies that evaluate whether HIV prevalence greater among Latino MSM with darker skin compared to lighter skin

(Ibanez, 2009)


Heterogeneity among Black MSM Communities

- (US) Sexual risk and US born vs not (Wheeler, 2008)
- (US) Drug use East vs. West coast (Sullivan, 1998)
- (Africa) Different factors associated with infection among MSM in Botswana, Malawi, Namibia (Blair, 2009)
- (US) Greater drug use and sexual risk among mixed race vs. not mixed (Harawa, 2004)
- (Britain) HIV prevalence by ancestry
 - 27% black Caribbean
 - 12% black African
 - 44% mixed (Dougan, 2005)

Transgender populations

- HIV prevalence in US (30%)
 - Higher among Black transgender women
- Unknown
 - Risk behaviors with male partners
 - Characteristics of male partners
 - Regional variability

Summary

- Black MSM and transgender populations at greater risk for HIV infection compared to general population and MSM/trans of other races
- Infection fueled by context, networks, discrimination
- There are differences in HIV infection among Black MSM populations  factors poorly understood
- Need intervention studies that address context

Summary

- Few studies of Latino MSM in Central and South America describe results by race/ethnicity
- Few studies of transgender of color or their partners
 - Need more studies of transgender populations and appropriate interventions
- Few studies in Caribbean (more in Africa!)
 - Need more studies in Caribbean
- HIV stigma remains impediment to proper data collection among Black MSM and transgender populations