



# Disparities in the Patterns and Correlates of HIV Risk Behaviors among Youth in Substance Abuse Treatment Programs

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# HIV/AIDS among Youth

- CDC estimates show that youth under age 25 accounted for about 10-15% of the estimated HIV/AIDS cases between 2001 and 2005
- The majority of HIV/AIDS diagnoses are among adults between the ages 25 to 40 years
- Given that median time between HIV infection and full-blown AIDS is about 10 years, the majority of adults with HIV/AIDS were likely infected during



# HIV/AIDS Epidemic among Blacks

- According to CDC, Blacks accounted for 49% of the estimated new HIV/AIDS diagnoses in 2005 and 42% of HIV/AIDS cases since 1997
- Blacks accounted for 61% of young people under age 25 whose diagnosis of HIV/AIDS was made during 2001–2004
- High risk sexual contacts and injection drug use are the primary modes of



# Substance Abuse and HIV/AIDS Risk

- Youth with AOD problems are at high risk for poor health outcomes in general and HIV infection in particular
- This is often because of earlier age of intercourse, lower rates of condom use, and higher psychopathology among this group
- AOD use may be as much a part of the context of HIV infection as it is a risk factor for infection



## Study Aims

- To examine differences in the *patterns* of HIV risk behaviors between a high-risk group black and white adolescents in AOD treatment
- To examine differences in *correlates* of HIV risk behaviors between a high-risk group black and white adolescents in AOD treatment



# Data Source and Analytical Sample

- This study uses data collected from 12 to 17 year old (N = 5,109; mean age = 15.8; 73% male) Black (27%) and White (73%) youth who entered federally funded substance abuse treatment programs
- Subset of data collected at intake assessment using the Global Appraisal of Individual Needs (GAIN; Dennis et al., 2002) were analyzed
- 89.6% of Blacks and 89.3% of Whites ( $\chi^2 [1] = .13, p > .10$ ) were sexually active within the



# Variables of Interest

- **Outcome variables:**

- ***Past 12 month sexual risk:***

- Sex while high on AOD
- Anal sex
- Traded/purchased sex
- Sex with  $\geq 2$  partners
- Sex without any barrier
- Sex involving a lot of pain
- AOD use to enhance sex

- **Independent Variables:**

- Substance use/abuse
- Co-occurring mental disorders
- Criminal behaviors
- Socio- environmental risk

- **Control Variables:**

- Age, gender, education
- Region of residence



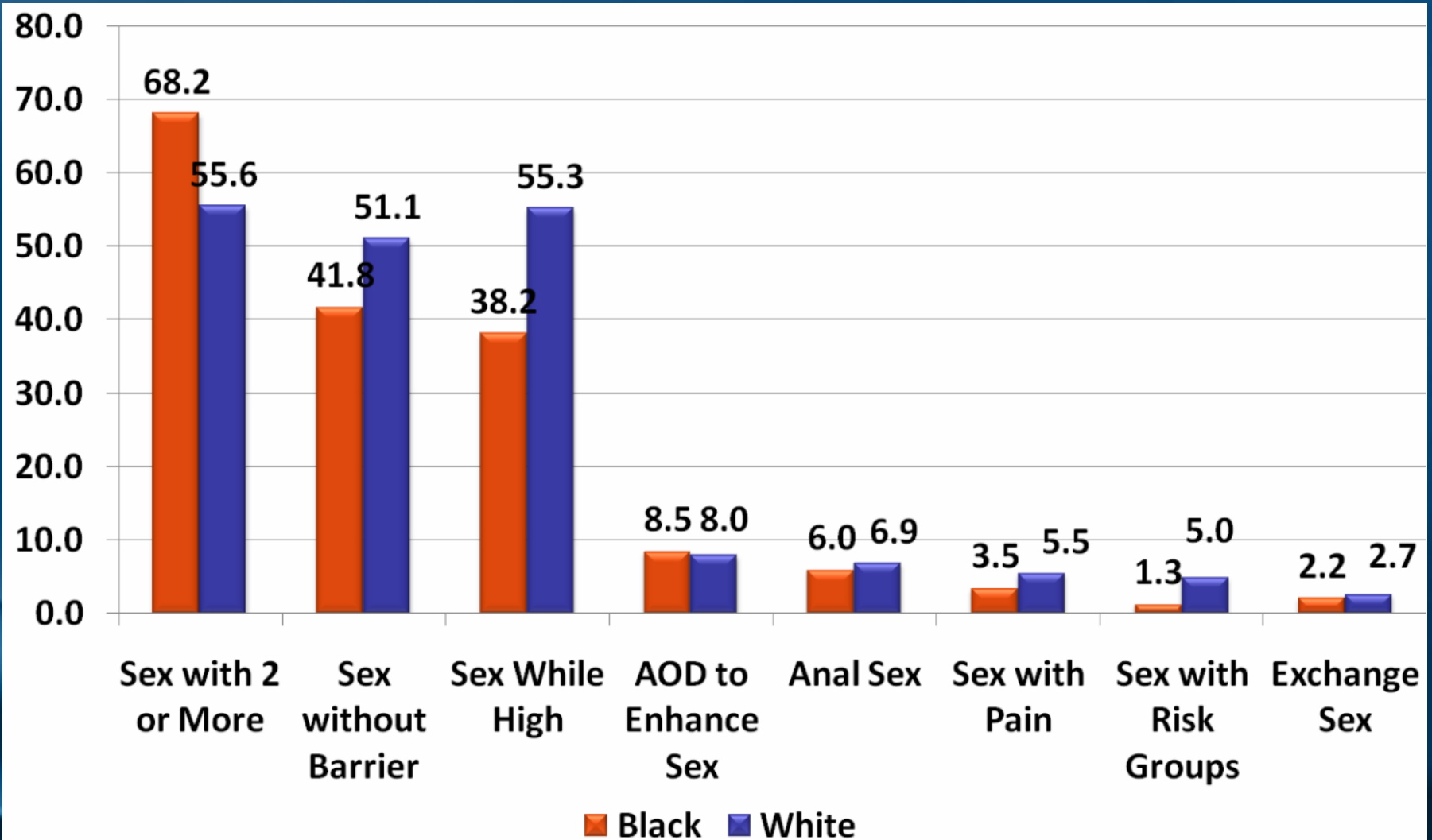
# Analysis

- **Descriptive and bivariate comparisons**
  - To test for racial differences in demographic, socio-environmental risk, substance use and abuse, co-occurring mental disorders, and criminal behaviors
- **Logistic Regressions**
  - To determine unadjusted and adjusted odds of Blacks engaging in each HIV risk behavior compared to Whites
- **OLS Regressions**
  - To determine differences in predictors of involvement in total count of risk behaviors among Black and





# Figure 1. Rates of Past Year Sexual Risk Behaviors among Black and White Youth





# Table 1. Odds of Black Youth's Involvement in Sexual Risk Behaviors Compared to White Youth

|                             | Unadjusted  |             | Adjusted    |             |
|-----------------------------|-------------|-------------|-------------|-------------|
|                             | OR          | <i>p</i>    | OR          | <i>p</i>    |
| Sex while high with AOD     | <b>0.53</b> | <b>.000</b> | 0.87        | .097        |
| Anal sex                    | 0.87        | .330        | 1.09        | .661        |
| Traded/exchanged sex        | 0.95        | .804        | <b>3.42</b> | <b>.000</b> |
| Sex with 2 or more          | <b>1.71</b> | <b>.000</b> | <b>2.00</b> | <b>.000</b> |
| Sex without barrier         | <b>0.69</b> | <b>.000</b> | 1.03        | .849        |
| Sex involving a lot of pain | <b>0.58</b> | <b>.002</b> | 1.27        | .273        |
| AOD used to enhance sex     | 1.13        | .332        | <b>2.12</b> | <b>.000</b> |
| Sex with high risk group    | <b>0.28</b> | <b>.000</b> | 0.75        | .251        |



## Table 2. Correlates of Sexual Risk Behaviors among Black and White Youth

|                                    | Black   |          |             | White   |          |             |
|------------------------------------|---------|----------|-------------|---------|----------|-------------|
|                                    | $\beta$ | <i>t</i> | <i>p</i>    | $\beta$ | <i>t</i> | <i>p</i>    |
| Family Hx Substance Abuse          | 0.03    | 1.39     | .164        | 0.04    | 2.27     | <b>.023</b> |
| Single Parent Custody              | 0.03    | 1.31     | .192        | 0.03    | 1.81     | <b>.070</b> |
| Ever Homeless/Runaway              | -0.01   | -0.44    | .663        | 0.03    | 1.95     | <b>.051</b> |
| Ever Victimized                    | 0.08    | 3.19     | <b>.001</b> | 0.04    | 2.50     | <b>.013</b> |
| Ever Involved with Juv. Justice    | 0.05    | 1.87     | <b>.062</b> | 0.01    | 0.81     | .419        |
| Substance Problem Scale            | 0.10    | 3.22     | <b>.001</b> | 0.13    | 6.29     | <b>.000</b> |
| Substance Frequency Scale          | 0.18    | 6.47     | <b>.000</b> | 0.07    | 4.27     | <b>.000</b> |
| Years of Substance Use             | 0.09    | 3.19     | <b>.001</b> | 0.07    | 4.13     | <b>.000</b> |
| Internalized Mental Distress Scale | 0.13    | 3.87     | <b>.000</b> | 0.14    | 6.53     | <b>.000</b> |
| Behavioral Complexity Scale        | 0.05    | 1.37     | .169        | 0.05    | 2.44     | <b>.015</b> |
| Interpersonal Crime Scale          | -0.01   | -0.23    | .817        | 0.06    | 3.07     | <b>.002</b> |
| Drug-related Crime Scale           | 0.15    | 4.30     | <b>.000</b> | 0.09    | 4.24     | <b>.000</b> |



## Summary of Findings

- Most common risk behaviors were having sex with  $\geq 2$  partners, having sex without a condom/barrier, and having sex while high on AOD
- Racial differences in HIV risk behaviors appear to be attenuated by differences in substance abuse and co-occurring psychosocial problems and risk factors
- Before controlling for these factors, Black youth were less likely than White youth to



## Summary of Findings, Cont'd

- **After controlling for these factors, Black youth were *more likely* than White youth to have:**
  - Had sex with 2 or more partners
  - Traded or purchased sex with drugs, gifts, or money
  - Used AOD to enhance sexual experience
- **Correlates of sexual risk behaviors were remarkably similar by race, but disparities in the strength their association with risk behaviors are apparent**
  - History of victimization
  - Longer and more frequently use & more problems with AOD
  - Higher levels of internal distress



# Implications

- **Large proportions of both Black and White youth with AOD problems are at risk for HIV and other sexually transmitted infections**
- **However, Black youth are at higher levels of risk than Whites, despite the similarities in the factors associated with involvement in risk behaviors**
- **Interventions that would address the increased vulnerability of young Blacks with AOD problems are needed**



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