



**HPTN**

HIV Prevention  
Trials Network

# **Associations between gender, race, and HIV risk among injection drug users**

## **A secondary analysis of HPTN 037**

**Mandy J. Hill, DrPH, MPH**

**University of Texas Health Science Center at Houston,**

**McGovern Medical School**

**Houston, TX, USA**

**June 14, 2016**

## CURRENT TRENDS IN HIV RISK

- HIV transmission rates have gone down among people who inject drugs (PWID)
- Research suggests HIV transmission among female injection drug users, as compared to men, is more influenced by high risk sex behaviors and less influenced by high risk drug using behaviors (Strathdee, et al., 2001)
- Hepatitis C (HCV) rates have increased among young PWID (suggesting we still should be vigilant about HIV transmission among injectors)

## CURRENT TRENDS IN HIV RISK

CDC Data on HIV transmission among:

- Heterosexuals
- Black/African American women

- *This emphasizes that HIV prevention should be a priority among this population*

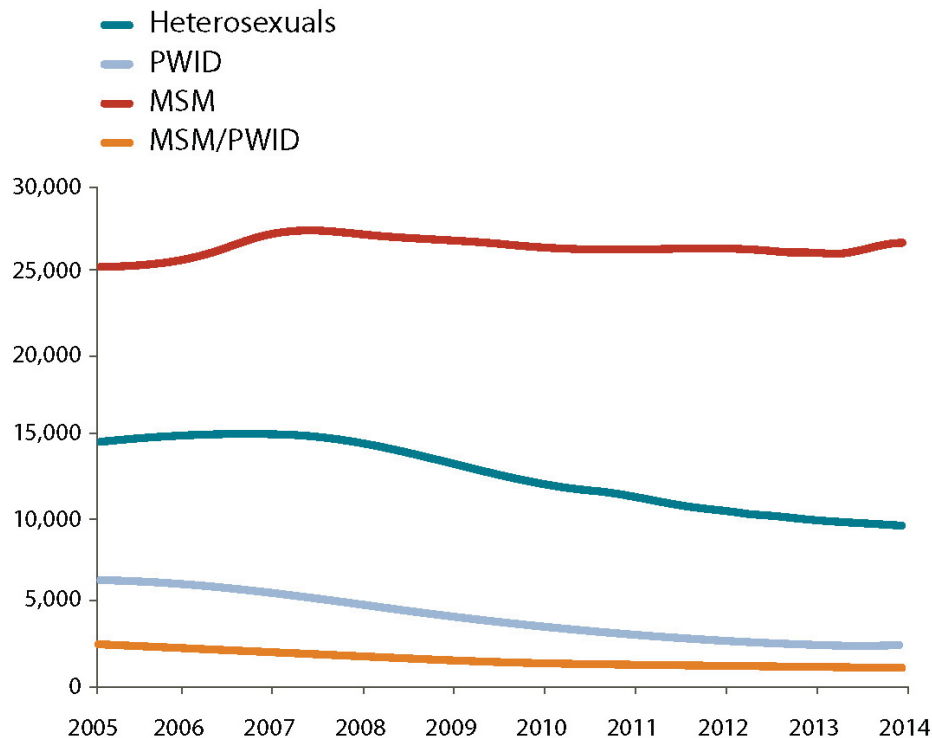


Figure 1: HIV Diagnoses by Transmission Category, 2005-2014

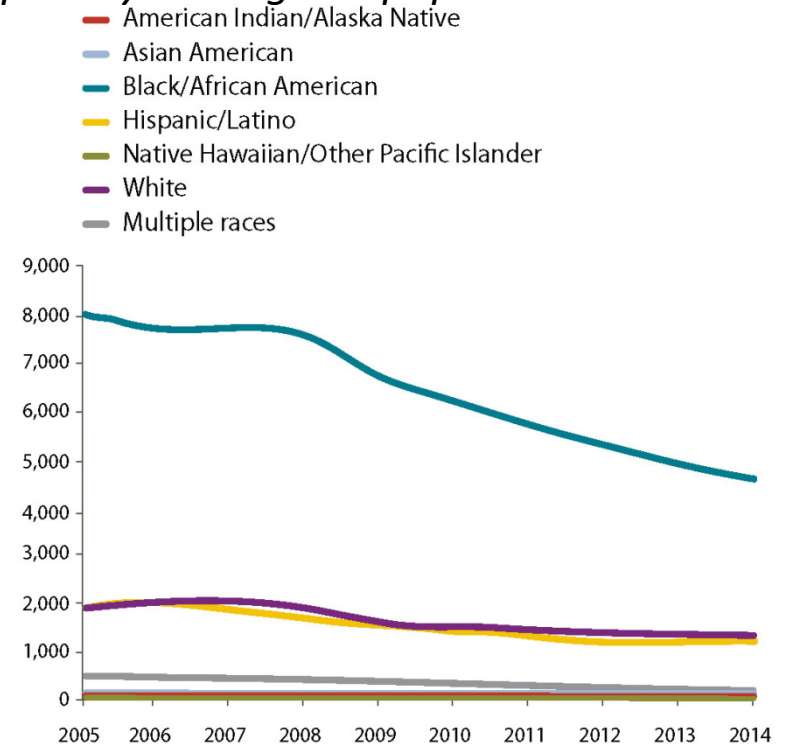


Figure 2: HIV Diagnoses by among Women by Race/Ethnicity, 2005-2014

## GENDER AND RACE

### Gender

- Women are more likely than men to willingly engage in condomless sexual activity with sexual partners who they perceive as ‘high-risk’ (Wingood and DiClemente, 1998).
- Few researchers have evaluated the impact of gender roles on ‘high-risk’ sexual acts.
- Women have historically adopted sexual scripts that minimize their power and decision making abilities regarding safer sex.

### Race

- Study findings show different relationships with risk, relative to race.
  - High risk injection drug use was higher among White Males.
  - High risk sex was higher among African American women.

## HPTN 037 study

- ❖ Phase III, multi-site, two-arm, randomized controlled study
  - Study purpose: To determine the efficacy of a peer educator intervention for HIV prevention among HIV risk networks of injection drug users (IDU).
  - Targeted outcome: Reduction of HIV risk behaviors
  - Randomization: Each IDU network was assigned as a group to intervention or control.
  - Study period: December 2002 and November 2006
  - Study duration: 48 months, follow-up 18-30 months
  - Samples of IDU index and network members were recruited from community settings
    - Thailand (n = 427)
    - Philadelphia (n=696)

# Objectives & Methods

---

- Objective: To identify associations between gender, race, and HIV risk behaviors among people who inject drugs (PWID)
- Analysis limited to Philadelphia site only
- Definition of ‘high risk sex’ behaviors
  - Had vaginal or anal sex in last 30 days AND (any condomless sex with non-primary partner OR Accepted money/drugs for sex OR multiple male partners OR multiple female partners)
- Definition of ‘high risk drug use’ behaviors
  - Reported needle sharing OR Injected front/backloaded syringe OR Used a needle/syringe after a known HIV positive person OR Injected drugs with others in public

# Results

**Table 1: Demographics by Gender and Race**

Variables	Gender		Race			Total
	Female	Male	White	African Americans	Other	
	(n= 217)	(n=479)	(n=318)	(n=331)	(n=47)	(n=696)
<b>Mean Age (SD)</b>	38.97 ( 8.68 )	41.25 ( 10.3 )	36.51 ( 10.02 )	45.1 ( 7.85 )	35.68 ( 7.27 )	40.54 ( 9.87 )
<b>Married and living together</b>	27 (12.4%)	43 (9%)	28 (8.8%)	39 (11.8%)	3 (6.4%)	70 (8.6%)
<b>Employed full time</b>	12 (5.5%)	48 (10%)	28 (8.8%)	30 (9.1%)	2 (4.3%)	60 (10.1%)
<b>Graduated High School or greater</b>	131 (60.3%)	330 (68.9%)	209 (65.7%)	225 (68%)	27 (57.4%)	461 (66.2%)

# Results

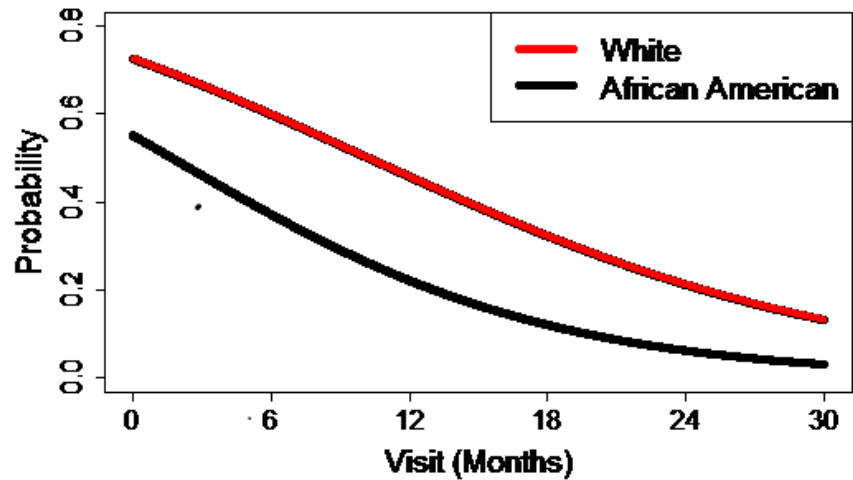
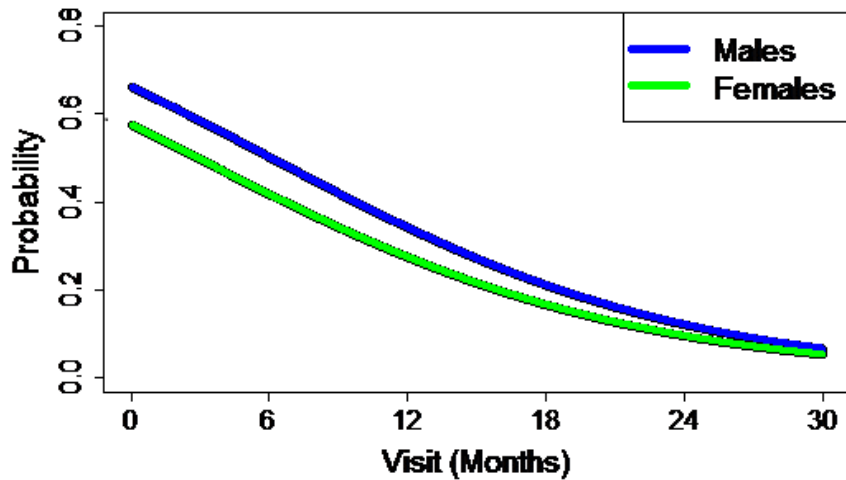
**Table 2: HIV Risk Behaviors by Gender and Race**

<b>Risk Groups</b>	<b>Females</b>	<b>Males</b>	<b>P-Value</b>
	n = 202	n = 447	
<b>High IDU Risk</b>	127 (62.9%)	349 (78.1%)	<.001
<b>High Sex Risk</b>	102 (50.5%)	179 (40%)	0.01
	<b>Whites</b>	<b>African Americans</b>	<b>P-Value</b>
	n = 318	n = 331	
<b>High IDU Risk</b>	263 (82.7%)	213 (64.4%)	<.001
<b>High Sex Risk</b>	126 (39.6%)	155 (46.8%)	0.07
	<b>White-Females</b>	<b>African American Females</b>	<b>P-Value</b>
	n = 111	n = 91	
<b>High IDU Risk</b>	80 (72.1%)	47 (51.6%)	0.003
<b>High Sex Risk</b>	50 (45%)	52 (57.1%)	0.09

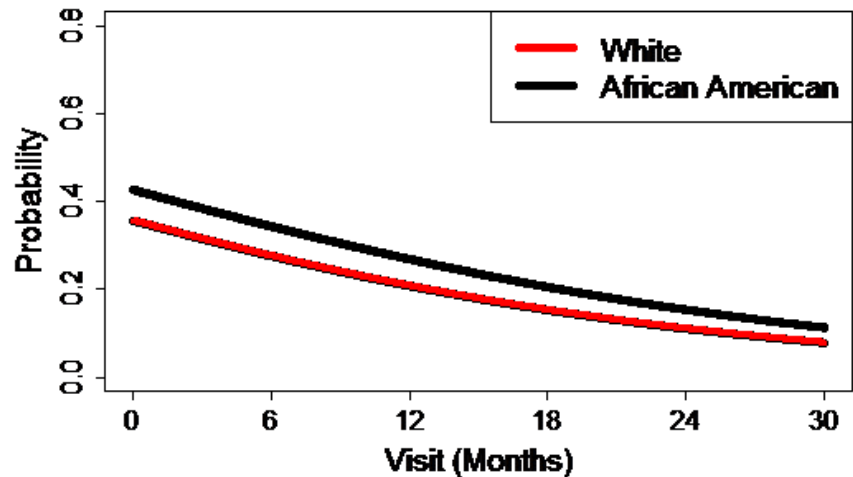
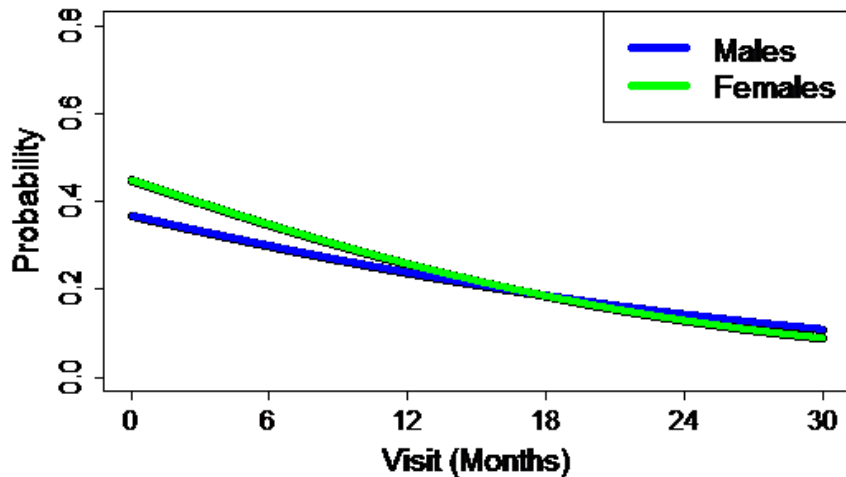


# Results

## High risk IDU by Gender and Race



## High risk sex by Gender and Race



# Conclusions and Future Research

---

## Conclusions

- Female participants reported high rates of high risk sex behaviors.
- Findings support the dual focus of future HIV interventions on reducing HIV risk driven by sex behaviors and injection drug use behaviors.

## Future Research

- Future HIV prevention research efforts should target the population at greatest risk for HIV via high risk sex behaviors, African American women.
- More specifically, future interventions could benefit from addressing *gender power differentials* through theoretically relevant frameworks utilizing the Theory of Gender and Power and the Sexual Script Theory.

# ACKNOWLEDGEMENTS

The HIV Prevention Trials Network is sponsored by the National Institute of Allergy and Infectious Diseases, the National Institute of Mental Health, and the National Institute on Drug Abuse, all components of the U.S. National Institutes of Health.

The HPTN 037 Study Team acknowledges

Protocol Chair: Carl Latkin, PhD Johns Hopkins University Johns Hopkins Bloomberg School of Public Health Baltimore, MD USA

Protocol Co-chairs: David D. Celentano, ScD. Johns Hopkins University Johns Hopkins Bloomberg School of Public Health Baltimore, MD USA

David Metzger, PhD University of Pennsylvania Center for Studies of Addiction Philadelphia, PA USA

SCHARP Statisticians: Dr. Brett Hanscom and Michael Holt