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**Journal Title:** Journal of Acquired Immune Deficiency Syndromes

**Volume:** Volume 63, Number 0 1

**Publisher:** Lippincott, Williams & Wilkins | 2013-06, Pages S95-S101

**Type of Work:** Article | Post-print: After Peer Review

**Publisher DOI:** 10.1097/QAI.0b013e3182920126

**Permanent URL:** <http://pid.emory.edu/ark:/25593/gj6g4>

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Final published version:

<http://journals.lww.com/jaids/pages/articleviewer.aspx?year=2013&issue=06011&article>

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*Accessed April 22, 2025 4:19 PM EDT*



Published in final edited form as:

*J Acquir Immune Defic Syndr.* 2013 June ; 63(0 1): S95–S101. doi:10.1097/QAI.0b013e3182920126.

## Racial Differences and Correlates of Potential Adoption of Pre-exposure Prophylaxis (PrEP): Results of a National Survey

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### Abstract

**Objective**—To examine the association between sociodemographic factors, sexual behaviors, and social factors on potential uptake of PrEP among African-American and White adult women in the United States.

**Methods**—Participants were recruited through a nationally representative random-digit dial telephone household survey. Participants comprised a nationally representative random sample of unmarried African-American (N=1068) and White women (N=441) aged 20–44. Interviews were conducted using computer-assisted telephone interviewing technology. Bivariate and multivariate analyses examined the relationship between sociodemographics, sexual behaviors, and social influences on women's potential uptake of PrEP.

**Results**—In multivariate analyses, women with lower educational status, greater lifetime sexual partners, provider recommendations supportive of PrEP, and peer norms supportive of PrEP use were more likely to report potential PrEP uptake. Racial analyses revealed that compared to White women, African-American women were significantly more likely to report potential use of PrEP (aOR=1.76; p = 0.001), more likely to report use PrEP if recommended by a healthcare provider (aOR=1.65; p = 0.001), less likely to report that they would be embarrassed to ask a healthcare provider for PrEP (aOR=0.59; p = 0.05) and more likely to report use of PrEP if their female friends also used PrEP (aOR=2.2; p = 0.001). The potential cost for PrEP was identified as a barrier to adoption by both African-American and White women.

**Conclusions**—Findings suggest that women at increased risk for HIV, including those with less education and greater number of sexual partners, may be more likely to use PrEP, although cost may serve as a barrier.

### Keywords

Racial differences; PrEP; HIV/AIDS; women

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**Conflicts of Interest:** None reported.

## INTRODUCTION

In 2009, an estimated 11,200 women were diagnosed with HIV, representing 23% of persons diagnosed with HIV infection in the United States.<sup>1</sup> Of all new HIV infections in women, 57% occurred in African-American women compared to 21% in White women; the rate of new HIV infections among African-American women was 15 times the rate of new infections in White women.<sup>1</sup> Evidence-based behavioral interventions designed to promote HIV-preventive practices, particularly consistent and correct condom use, have demonstrated efficacy.<sup>2</sup> Yet these interventions, while necessary, may not be sufficient in and of themselves to control the spread of HIV. Most behavioral interventions focus on condom use, which requires male cooperation. A female-controlled method that could be used covertly<sup>3</sup> and provide long-lasting protection<sup>4</sup> would be a tremendous benefit in reducing women's vulnerability to HIV.<sup>5</sup> One HIV prevention approach that could be used in combination with behavioral interventions that emphasize condom use is pre-exposure prophylaxis (PrEP).

PrEP involves using antiretroviral drugs traditionally used to treat HIV infection, such as tenofovir and emtricitabine, as a biomedical HIV prevention strategy. Several trials have examined the efficacy of topical and oral PrEP to prevent HIV infection, with promising results. Noteworthy is the CAPRISA-004 study which demonstrated the efficacy of topical tenofovir gel in reducing the risk of HIV acquisition among at-risk heterosexual women in South Africa.<sup>6</sup> Use of tenofovir gel successfully reduced HIV acquisition by 39% overall, and by 54% in women with high levels of adherence.<sup>6</sup> Proof of concept has also been demonstrated for oral PrEP regimens in three trials. The iPrEx study demonstrated the efficacy of a combination of two oral antiretroviral drugs, tenofovir disoproxil fumarate and emtricitabine (Truvada) in reducing the risk of HIV acquisition by 44% among MSM and transgender women across six countries.<sup>7</sup> PartnersPrep demonstrated the efficacy of TDF (68%) and TDF-FTC (62%) in preventing HIV acquisition among women in serodiscordant couples in Kenya and Uganda.<sup>8</sup> Additionally, TDF2 demonstrated the efficacy of pre-exposure prophylaxis with TDF-FTC in preventing heterosexual men and women from acquiring HIV in Botswana (62.6% efficacy overall, 75.5% efficacy among women).<sup>9</sup> Unfortunately, other studies (i.e. FEMPrEP) have been unable to demonstrate the efficacy of PrEP for HIV prevention.<sup>10–12</sup>

On July 16, 2012, the U.S. Food and Drug Administration FDA approved the use of PrEP, specifically Truvada, as the first drug approved to reduce the risk of HIV infection among men and women who are at high risk for HIV infection.<sup>13</sup> While this is an important step toward preventing HIV among high-risk populations, adoption of PrEP as an HIV prevention strategy will undoubtedly be influenced by sociodemographic factors (e.g. race, education, and income), behavioral factors (e.g. condom use and number of sexual partners) and social factors (e.g. peer norms, stigma, cost of medication). Little research has explored potential determinants of PrEP uptake among women in the general population. The present study examines the association between sociodemographic factors, sexual behaviors, and social factors on potential uptake of PrEP among African-American and White adult women in the United States.

## PATIENTS AND METHODS

We conducted a nationally representative random-digit dial telephone household survey of 1,509 women between October 2006 and May 2007. Potential participants who self-reported being female, African-American or white, ages 20–45, and unmarried or not currently in any relationship equivalent to marriage were eligible for inclusion.

Sampling employed a dual-frame design, incorporating two selection stages without stratification in each frame. The larger frame was designed to provide coverage of the eligible population (both white and African-American) on a national basis, defined as all counties with an eligible household incidence of 10 percent or greater; this frame included 1,096 of 3,140 counties. The second frame targeted areas containing a high density of African-American women and was restricted to counties with a household incidence of African-American women of 7% or greater. Within each residential household contacted, a female adult in the target age range was selected via simple random sampling, and screened for remaining eligibility criteria. Those agreeing to participate were compensated \$50 for completing the assessment. A total of 1,509 interviews were completed; 1,068 African American and 441 White women.

All interviews were conducted using computer-assisted telephone interviewing technology and were, on average, 50 minutes. The response rate was 73%.<sup>14</sup> An analysis weight was computed to reflect the dual-frame design, unequal selection probabilities, and calibration to Census-based estimates of the population of eligible women. The institutional review boards at Emory University and Macro International approved all study procedures.

## Measures

Potential PrEP uptake was assessed by asking women, “If there was a pill that you could take once a day, everyday, to PREVENT getting HIV, and if this pill caused mild side effects, such as nausea, headaches, and rashes in a small number of people, would you take the pill?”<sup>15</sup>

Sociodemographic factors assessed included race, age, education, employment and income.

Sexual behaviors assessed included number of unprotected sex acts and percent condom use in the past 90 days, number of male sex partners in past year and lifetime, history of exchanging sex for money/drugs, history of concurrency,<sup>16</sup> and having sex with a risky male partner (i.e. partners that ever injected illegal drugs; were incarcerated for more than 24 hours; ever had sex with a man; ever had an STD).

Social factors that may influence PrEP uptake were assessed by a 4-item index. This index included items on: peer norms supportive of PrEP, physician recommendation for PrEP, embarrassment of requesting PrEP from a doctor and, cost of PrEP at a hypothetical amount of \$200 per year. One insurance company has been quoted as saying that they would provide preventive coverage for PrEP for \$250 to \$300 a year.<sup>17</sup>

## Statistical Analysis

Data analysis was conducted in STATA 10 using survey estimation commands to account for the complex sample design. Initial bivariate analyses examined the relationship between a range of sociodemographics, sexual behaviors, and social influences with potential uptake of PrEP. Variables associated with potential PrEP uptake ( $p < .20$ ) in bivariate analyses were considered in multivariable logistic regression models. Variables were entered in blocks beginning with sociodemographic characteristics, then lifetime sexual behavior, then social influences; those which remained significant were retained. Additional bivariate analyses calculated the prevalence and crude odds ratios (OR) of potential PrEP uptake and social influences on potential PrEP uptake by race. ORs for each measure were then adjusted for socio-economic status by including age, education, employment and income.

## RESULTS

Approximately 96% of participants (sample weighted) answered questions on PrEP and are included in analyses. Most of those excluded responded “Don’t Know” when asked about potential PrEP uptake, while the remainder did not provide a response.

### Bivariate Analyses of Potential PrEP Uptake

Bivariate analyses showed that women at higher risk of HIV, as indicated by sexual behavior and socio-economic status, were more likely to report potential use of PrEP (Table 1). In general, women of lower socio-economic status were more likely to report potential PrEP uptake – e.g., women completing high school or having less education had 2.04 times higher odds than women having at least a college education ( $p = 0.001$ ); unemployed women had 1.8 times higher odds than women holding full-time jobs ( $p = 0.01$ ). In contrast, women with personal incomes of \$50,000 or more had 56% lower odds of potential PrEP use than those with income of \$15,000 or less ( $p = 0.001$ ). The likelihood of potential PrEP uptake was also increased by riskier sexual behaviors. For example, women reporting engaging in sex for money or drugs had 5.78 times greater odds of potential PrEP uptake ( $p = 0.001$ ). Finally, these analyses identified the potential impact of social factors on PrEP use. Supportive social environment greatly increased the likelihood of potential PrEP uptake – the odds were 16.2 times higher for women who believed that many of their girlfriends would take the pill ( $p = 0.001$ ), whereas healthcare provider recommendation of the pill would increase the odds by 22 times ( $p = 0.001$ ). On the contrary, women were less likely to use PrEP if they were embarrassed to ask healthcare providers for such a pill (OR=0.58; 95% CI=0.35, 0.97;  $p = 0.05$ ) or if the potential cost of the pill was prohibitive at \$200/year (OR=0.66; 95% CI=0.47, 0.93;  $p = 0.05$ ).

### Logistic Regression Models of Potential PrEP Uptake

Multivariate logistic regression models are reported in Table 2. In Model 1, which focused on socio-demographic characteristics and sexual behavior, women who engaged in riskier sexual behaviors (i.e. those with more lifetime sexual partners, women who ever had an HIV test, and women who ever exchanged sex for money/drugs) were more likely to report potential PrEP use, while women of higher socio-economic status (i.e. White women, those over 30 and women with any college education) were less likely to report that they would use PrEP.

Similarly, when potential social influences on PrEP acceptability were added to the model (Model 2 in Table 2), African-American women maintained a higher likelihood of using PrEP (aOR = 1.4; 95% CI = .94, 2.11;  $P = 0.10$ ). Women reporting more lifetime sexual partners (aOR = 1.8; 95% CI = 1.12, 2.73;  $P = .05$ ), women who perceived that many of their peers would use PrEP (aOR = 8.25; 95% CI = 4.80, 14.2;  $P = .001$ ), less educated women (aOR = 1.79; 95% CI = 1.15, 2.85;  $P = .01$ ), and those who reported they would be more likely to use PrEP if recommended by a health care provider (aOR = 13.2; 95% CI = 7.54, 23.1;  $P = .001$ ) were all significantly more likely to report willingness to use PrEP. Women were less likely to use PrEP if the cost was \$200/year (aOR = .60; 95% CI = .38, .95;  $P = .05$ ).

### Racial Differences in Potential PrEP Uptake and PrEP-related Social Influences

Significant differences were identified in potential uptake of PrEP and perceived social influences by race (Table 3). Unadjusted bivariate analyses showed that compared to White women, African-American women were significantly more likely to report potential PrEP use (69.1% vs. 54.2%;  $p = 0.001$ ). Moreover, compared to White women, African American women would be more likely to report potential PrEP use if they perceived that their

significant others would also use PrEP, especially their female peers (82.4% vs. 68.6%;  $p = 0.001$ ) and their male peers (68.6% vs. 61.5%;  $p = 0.05$ ). Further, African American women would be more likely to use PrEP if it was recommended by a healthcare provider (81.0% vs. 69.8%;  $p = 0.001$ ).

These relationships remained significant after adjusting for age, education, employment, and income. Thus, compared to White women, African-American women were 1.76 times as likely to report potential use of PrEP ( $p = 0.001$ ). Further, compared to White women, African American women were 2.2. times as likely to report potential PrEP use if they perceived that their female friends would also use PrEP ( $p = 0.001$ ), and 1.65 times as likely to report potential PrEP use if it was recommended by healthcare provider ( $p = 0.001$ ). Analyses also showed that African-American women had 41% lower adjusted odds of being embarrassed to ask a doctor for PrEP (aOR=0.59; 95% CI=0.36, 0.98;  $p = 0.05$ ). Importantly, there were no racial differences in potential impact of PrEP on sexual behavior, meaning African American women were no more likely than White women to report risk compensation: that is, no intent to decrease condom use or increased number of sexual partners as a consequence of potential PrEP uptake.

## DISCUSSION

This is among the first studies examining potential PrEP uptake as an HIV prevention strategy among a national sample of African-American and White women not enrolled in a PrEP efficacy trial. Results from this population-based study indicate that racial differences exist in the potential uptake of PrEP. Noteworthy, in multivariable analyses, compared to White women, African-American women are more likely to report potential adoption of PrEP. Social factors play a key role in African American women's potential adoption of PrEP. Specifically, African-American women's potential adoption of PrEP is more influenced by the opinions of important referents, particularly; other females decision to adopt this same preventive practice. Moreover, African American women are more likely to express an interest in potential PrEP uptake if it was recommended by a physician. Further, African American women potential interest in adopting PrEP is associated with the perception of requesting PrEP from a physician as less stigmatizing. These findings have important implications for public health efforts designed to enhance PrEP adoption among African American women and are encouraging with respect to African American women's trust in their health care providers to recommend PrEP if necessary.

Moreover, the study provides evidence that does not corroborate racial differences in sexual risk compensation as a function of PrEP use. These findings are encouraging with respect to incorporating PrEP as a biomedical strategy to reduce HIV infection among African-American women.

Additional multivariable analyses revealed that women with more lifetime sexual partners and less educational attainment are more likely to report potential PrEP uptake. Women with greater numbers of lifetime sexual partners may be aware of their heightened HIV risk, and believe that PrEP provides a more realistic and effective option for preventing HIV acquisition relative to other strategies such as condoms. Additionally, previous research has indicated that African-American women with higher educational attainment may be at lower risk for STDs and HIV.<sup>18</sup> Thus, women with higher educational attainment may perceive themselves to be at lower risk for HIV and, consequently, less interested in adopting PrEP as an HIV prevention strategy. These findings are congruent with the recent FDA licensure of PrEP for individuals, including men and women, at high risk for HIV infection.<sup>13</sup> Following the FDA's approval of Truvada for use as HIV prevention in high risk populations, the CDC issued guidelines for the use of PrEP for the prevention of HIV infection in heterosexual



adults.<sup>19</sup> This will serve as a useful tool, given the key role that health care providers will have as gatekeepers in access to PrEP, particularly among women.

Finally, it is important to note that the potential cost for PrEP was identified as a barrier for all respondents. If efficacious and affordable, PrEP could reduce socioeconomic disparities in HIV among women. However, if at-risk women cannot afford PrEP, or if the cost of PrEP becomes a barrier to medication adherence, then the potential exists for worsening racial disparities in HIV rates. At the estimated cost of over \$10,000 per year,<sup>20</sup> it is unclear low-income women would be able to afford PrEP. It is also unclear whether PrEP would be cost-effective for women, compared with alternative prevention strategies.<sup>21</sup>

### Limitations

This study has several limitations. First, this study was conducted prior to the FDA licensure of PrEP. Therefore, participant acceptability is hypothetical. Now that PrEP has been approved for use, similar studies should be conducted to assess acceptance among adult women at risk for HIV infection. Second, this is a cross-sectional study. Thus, the temporal relationships between predictors and potential use of PrEP cannot be established. Third, the Centers for Disease Control and Prevention (CDC) advises that the efficacy of Truvada for HIV prevention is highly dependent on daily medication adherence.<sup>19</sup> While potential adoption of PrEP may be important for HIV prevention, future research should examine adherence which may be equally important.

### CONCLUSIONS

Findings from this nationally representative sample are informative and encouraging with respect to potential PrEP uptake among African-American women, women with lower educational attainment, and women with increased lifetime sexual partners. Now that Truvada has been licensed for HIV prevention use by the FDA, future studies should be conducted to assess factors influencing actual PrEP uptake and adherence among women at increased risk for HIV. Future studies should also investigate financial mechanisms for increasing women's access to PrEP for HIV prevention.

### Acknowledgments

**Financial Support:** This project was funded by the National Institute of Child Health and Human Development grant R01 HD041716-01A1. Additional support was offered by the Emory Center for AIDS Research (P30 AI050409), Award Number T32AI074492 from the National Institute of Allergy and Infectious Diseases and the Women's Interagency HIV Study (WIHS-V) (U01AI103408).

The authors thank Bill Sribney for providing statistical support and performing data weighting, and Elizabeth Nesoff for support with preparing the article.

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Table 1

Race as determinant of potential PrEP uptake, social influences, and impact on sexual behavior among female participants in a national random-digit dial telephone survey in the US

	African-American		White		Crude Analyses		Adjusted for SES <sup>/</sup>	
	% Yes	95% CI	% Yes	95% CI	OR	(95% CI)	aOR	95% CI
<b>Potential uptake of PrEP</b>								
Would you take the pill?	69.1	(64.8, 74.2)	54.2	(48.8, 59.4)	1.89	(1.42, 2.53)	1.76	(1.29, 2.40)
<b>Potential social influences on PrEP uptake</b>								
Do you think many of your girlfriends would take the pill?	82.4	(78.9, 85.4)	68.6	(63.4, 73.4)	2.14	(1.55, 2.96)	2.20	(1.55, 3.11)
Do you think many men would take the pill?	68.6	(64.3, 72.6)	61.5	(56.2, 66.6)	1.36	(1.02, 1.83)	1.32	(0.96, 1.82)
Would you be more likely to take the pill if a health care provider recommended the pill?	81.0	(77.3, 84.2)	69.8	(64.8, 74.3)	1.84	(1.34, 2.53)	1.65	(1.17, 2.33)
Would you be embarrassed to ask your doctor to give you such a pill?	7.3	(5.2, 10.2)	10.8	(8.9, 14.2)	0.66	(0.41, 1.06)	0.59	(0.36, 0.98)
Pretend the cost of taking the pill for one year was \$200. Would this cost prevent you from taking the pill?	31.8	(27.7, 36.2)	30.2	(25.5, 35.3)	1.08	(0.80, 1.47)	0.80	(0.56, 1.13)
Do you think could remember to take the pill every day for 2 months?	84.1	(80.4, 87.2)	79.4	(74.7, 83.4)	1.37	(0.95, 1.98)	1.09	(0.74, 1.62)
<b>Potential impact of PrEP on sexual behavior</b>								
If you took the pill do you think you would be less likely to use condoms during sex?	25.8	(22.1, 29.9)	25.5	(21.5, 30.1)	1.01	(0.75, 1.37)	1.04	(0.75, 1.46)
If you took the pill do you think you would have sex with more partners?	3.4	(2.2, 5.3)	5.7	(3.8, 8.4)	0.58	(0.31, 1.09)	0.55	(0.27, 1.12)

\* p 0.05,

\*\*\* p 0.001

<sup>/</sup> Adjusted for age, education, employment and income

Table 2

Socio-demographic characteristics, sexual and substance use history, and social influences as predictors of potential PrEP uptake among female participants in a national random-digit dial telephone survey in the US.

	Would you take the pill?		Crude Association		Multivariable Model 1 <sup>†</sup>		Multivariable Model 2 <sup>‡</sup>	
	% Yes	(95% CI)	OR	(95% CI)	aOR	(95% CI)	aOR	(95% CI)
<b>Sociodemographic Characteristics</b>								
<b>Race</b>								
White	54.2	(48.8, 59.4)	ref		ref		ref	
African American	69.1	(64.8, 74.2)	1.89	(1.42, 2.53) ***	1.71	(1.26, 2.33) ***	1.41	(0.94, 2.11) †
<b>Age</b>								
20-29	61.8	(55.7, 67.5)	ref		ref		ref	
30-39	55.7	(49.2, 62.0)	0.78	(0.54, 1.12)	0.68	(0.47, 0.99) *		
40-45	59.6	(51.5, 66.2)	0.89	(0.60, 1.34)	0.64	(0.42, 0.97) *		
<b>Education</b>								
Some college or more	54.7	(50.1, 59.2)	ref		ref		ref	
High school or less	71.2	(64.8, 76.8)	2.04	(1.45, 2.94) ***	1.79	(1.23, 2.56) **	1.79	(1.15, 2.85) **
<b>Employment</b>								
Full-time	54.7	(49.4, 59.9)	ref					
Part-time/Seasonal	58.9	(50.1, 67.1)	1.186	(0.78, 1.79)				
Not working	68.6	(61.4, 75.0)	1.81	(1.23, 2.64) **				
<b>Personal Income</b>								
Less than \$15,000	68.1	(61.7, 73.8)	ref					
\$15,000 to \$24,999	57.8	(48.4, 66.8)	0.64	(0.40, 1.03)				
\$25,000 to \$49,999	53.3	(45.7, 60.7)	0.53	(0.35, 0.81) **				
\$50,000 or more	48.2	(38.6, 57.9)	0.44	(0.27, 0.71) ***				
<b>Sexual Behavior</b>								
<b>Number unprotected vaginal sex acts in past 90 days</b>								
0	55.6	(50.6, 60.5)	ref					
1 to 10	67.1	(58.4, 74.7)	1.63	(1.07, 2.48) *				
11 or more	65.2	(56.8, 72.8)	1.50	(0.99, 2.25)				

	Would you take the pill?		Crude Association		Multivariable Model 1 <sup>1</sup>		Multivariable Model 2 <sup>2</sup>	
	% Yes	(95% CI)	OR	(95% CI)	aOR	(95% CI)	aOR	(95% CI)
<b>Number unprotected anal sex acts in past 90 days</b>								
0	59.3	(55.4, 63.1)	ref					
1	64.8	(36.9, 85.3)	1.26	(0.40, 4.01)				
2+	56.5	(35.5, 75.4)	0.89	(0.37, 2.14)				
<b>Percent condom use for vaginal sex in past 90 days<sup>3</sup></b>								
0	60.6	(52.8, 67.8)	ref					
some	74.2	(64.7, 81.2)	1.87	(1.08, 3.24) *				
100	61.6	(52.4, 70.1)	1.05	(0.64, 1.71)				
<b>Percent condom use for anal sex in past 90 days<sup>4</sup></b>								
0	63.6	(46.3, 78.0)	ref					
some	89.9	(71.7, 96.9)	5.08	(1.21, 21.4) *				
100	66.1	(44.9, 83.4)	1.12	(0.36, 3.44)				
<b>Lifetime sexual partners<sup>5</sup></b>								
0 to 5	52.1	(46.1, 58.1)	ref					
6 or more	65.1	(60.3, 69.6)	1.72	(1.25, 2.36) ***	1.60	(1.14, 2.25) **	1.75	(1.12, 2.73) **
<b>Past year sexual partners<sup>5</sup></b>								
0	50.2	(40.5, 59.9)	ref					
1	57.9	(52.6, 63.1)	1.37	(0.87, 2.14)				
2 or more	72.0	(65.2, 77.9)	2.55	(1.54, 4.22) ***				
<b>Concurrent partners</b>								
Never	53.4	(48.4, 58.4)	ref					
Ever in life	68.2	(62.6, 73.3)	1.87	(1.36, 2.58) ***				
Not in past year	56.7	(52.6, 60.8)	ref					
Ever in past year	74.8	(65.0, 82.6)	2.27	(1.38, 3.73) ***				
<b>High Risk partner</b>								
Never	54.4	(49.2, 59.5)	ref					
Ever in life	65.9	(60.3, 71.0)	1.62	(1.18, 2.23) **				
No current high risk partner	56.1	(51.6, 60.4)	ref					

	Would you take the pill?		Crude Association		Multivariable Model 1 <sup>1</sup>		Multivariable Model 2 <sup>2</sup>	
	% Yes	(95% CI)	OR	(95% CI)	aOR	(95% CI)	aOR	(95% CI)
Current partner known high risk	70.4	(63.1, 76.8)	1.86	(1.28, 2.71) ***				
<b>Sex for money or drugs</b>								
No	58.0	(54.1, 61.8)	ref		ref			
Yes	88.9	(77.2, 95.0)	5.78	(2.41, 13.9) ***	4.08	(1.59, 10.5) **		
<b>Tested for HIV</b>								
Never	47.7	(39.7, 55.9)	ref		ref			
Ever in life	63.1	(58.8, 67.2)	1.87	(1.29, 2.72) ***	1.53	(1.02, 2.27) *		
Not in past year	53.6	(48.4, 58.6)	ref					
Ever in past year	67.8	(62.3, 72.9)	1.82	(1.32, 2.51) ***				
<b>Substance use</b>								
No Binge drinking	58.8	(54.4, 63.1)	ref					
Any past year binge drinking	60.8	(53.1, 68.1)	1.09	(0.75, 1.57)				
No recent injection drug use	59.0	(55.1, 62.7)	ref					
Any past year injection drug use	90.0	(87.9, 92.3)	6.27	(4.95, 81.4)				
<b>Potential social influences on PrEP uptake</b>								
Do you think many of your girlfriends would take the pill?								
No	16.9	(12.0, 23.2)	ref		ref			
Yes	76.6	(72.5, 80.3)	16.2	(10.2, 25.5) ***			8.25	(4.80, 14.2) ***
Do you think many men would take the pill?								
No	53.4	(46.8, 60.0)	ref					
Yes	64.0	(59.0, 68.7)	1.55	(1.11, 2.17) *				
Would you be more likely to take the pill if a health care provider recommended the pill?								
No	13.1	(9.1, 18.5)	ref		ref			
Yes	76.9	(72.9, 80.4)	22.0	(13.9, 34.9) ***			13.2	(7.54, 23.1) ***
Would you be embarrassed to ask your doctor to give you such a pill?								
No	61.1	(57.1, 65.0)	ref					
Yes	47.7	(35.9, 59.8)	0.58	(0.35, 0.97) *				
Pretend the cost of taking the pill for one year was \$200. Would this cost prevent you from taking the pill?								

	Would you take the pill?		Crude Association		Multivariable Model 1 <sup>1</sup>		Multivariable Model 2 <sup>2</sup>	
	% Yes	(95% CI)	OR	(95% CI)	aOR	(95% CI)	aOR	(95% CI)
No	62.2	(57.6, 66.5)	ref		ref		ref	
Yes	52.0	(44.8, 59.2)	0.66	(0.47, 0.93) *	0.60	(0.38, 0.95) *	0.60	(0.38, 0.95) *
Do you think could remember to take pill everyday for 2 months?								
No	35.3	(27.0, 44.5)	ref					
Yes	64.8	(60.7, 63.0)	3.38	(2.21, 5.17) ***				

<sup>1</sup> p 0.10,  
 \* p 0.05,  
 \*\* p 0.01,  
 \*\*\* p 0.001

<sup>1</sup> Variable entered in blocks beginning with sociodemographic characteristics followed by lifetime measures of sexual behavior. All sociodemographic variables significantly associated with potential PrEP uptake in the first block were retained after the addition of sexual behavior measures and so these models are presented together.

<sup>2</sup> Variables representing potential social influences on PrEP uptake were added to Model 1. All significant variables were retained.

<sup>3</sup> Among 55.5% of participants who report any vaginal sex with a male partner in the last 90 days

<sup>4</sup> Among 7.2% of participants who reported any anal sex with a male partner in the last 90 days

<sup>5</sup> Includes both male and female sexual partners

Race as determinant of potential PrEP uptake, social influences, and impact on sexual behavior among female participants in a national random-digit dial telephone survey in the US

**Table 3**

	African-American		White		Crude Analyses		Adjusted for SES <sup>/</sup>	
	% Yes	95% CI	% Yes	95% CI	OR	(95% CI)	aOR	95% CI
<b>Potential Uptake of PrEP</b>								
Would you take the pill?	69.1	(64.8, 74.2)	54.2	(48.8, 59.4)	1.89	(1.42, 2.53)	1.76	(1.29, 2.40)
<b>Potential Social Influences on PrEP Uptake</b>								
Do you think many of your girlfriends would take the pill?	82.4	(78.9, 85.4)	68.6	(63.4, 73.4)	2.14	(1.55, 2.96)	2.20	(1.55, 3.11)
Do you think many men would take the pill?	68.6	(64.3, 72.6)	61.5	(56.2, 66.6)	1.36	(1.02, 1.83)	1.32	(0.96, 1.82)
Would you be more likely to take the pill if a health care provider recommended the pill?	81.0	(77.3, 84.2)	69.8	(64.8, 74.3)	1.84	(1.34, 2.53)	1.65	(1.17, 2.33)
Would you be embarrassed to ask your doctor to give you such a pill?	7.3	(5.2, 10.2)	10.8	(8.9, 14.2)	0.66	(0.41, 1.06)	0.59	(0.36, 0.98)
Pretend the cost of taking the pill for one year was \$200. Would this cost prevent you from taking the pill?	31.8	(27.7, 36.2)	30.2	(25.5, 35.3)	1.08	(0.80, 1.47)	0.80	(0.56, 1.13)
<b>Potential Impact of PrEP on Sexual Behavior</b>								
If you took the pill do you think you would be less likely to use condoms during sex?	25.8	(22.1, 29.9)	25.5	(21.5, 30.1)	1.01	(0.75, 1.37)	1.04	(0.75, 1.46)
If you took the pill do you think you would have sex with more partners?	3.4	(2.2, 5.3)	5.7	(3.8, 8.4)	0.58	(0.31, 1.09)	0.55	(0.27, 1.12)

\* p 0.05,

\*\*\* p 0.001

<sup>/</sup> Adjusted for age, education, employment, and income