

# Correlates of Uptake of HIV Prevention Interventions Among Black MSM in DC, 2013-2014

A Mixed-Methods Investigation of Structural Barriers to Biomedical and Behavioral HIV Prevention Interventions

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## BACKGROUND

- Current modalities for the provision of HIV prevention interventions are failing to control the HIV epidemic among Black men who have sex with men (MSM).
- Black MSM are newly diagnosed with HIV at a rate six times that of White MSM, yet this disparity is not adequately explained by racial differences in individual-level risk behaviors.
- The disproportionately high HIV incidence among Black MSM is better attributed to gaps in outcomes of the HIV prevention and care continuums, often in settings where there is a high HIV prevalence among the sexual partner pool of Black MSM.
- Previous studies have found that Black MSM are less likely than White MSM to have access to health care, receive a prescription for pre-exposure prophylaxis (PrEP), and – among those living with HIV – receive an HIV diagnosis and achieve and maintain viral suppression.
- Many sexually active Black MSM do not regularly test for HIV.
- Most HIV prevention interventions require interaction with health care infrastructure, yet it is often difficult for Black MSM to access culturally appropriate health care services that address psychosocial needs affecting uptake of HIV prevention interventions.

## OBJECTIVE

- To identify correlates of uptake of HIV prevention interventions and explore structural barriers to accessing HIV prevention interventions among Black MSM.

## METHODS

- Self-reported, cross-sectional quantitative and qualitative data collected from two non-clinic-based samples of Black MSM in Washington, DC from 2013-2014 as part of an NIH-funded study.

### 1. Face-to-Face Sample of Black MSM with Barriers to Health Care:

- Recruitment:** Men with barriers to health care were recruited using seed recruitment and incentivized chain peer referral. Seeds were identified via online recruitment (e.g., Adam4Adam), venue-based recruitment, and word of mouth.

- Inclusion Criteria:** ≥18 years old, Black male reporting a sexual experience with a male in the last year, lives in the DC area, and reports at least one barrier to health care in the last six months (i.e., did not access HIV testing, prevention, or care services; did not see primary care physician, or did not have one; was incarcerated; or was unable to get medical care at a time that he needed it).

- Data Collection:** Data on health care experiences were collected using a quantitative computer-assisted self-interview (CASI) and an in-depth semi-structured qualitative interview at a research clinic.

- Data Analysis:** Compared proportions having received HIV prevention interventions by health care setting using Fisher's exact test. Transcribed 30 randomly selected qualitative interviews and identified relevant themes using a theoretical coding scheme.

### 2. Internet-Based Sample of Black MSM:

- Recruitment:** Men were recruited irrespective of health care characteristics using Facebook and the distribution of recruitment materials to community-based organizations.

- Inclusion Criteria:** ≥18 years old, Black male who identifies as gay or bisexual or who had sex with a man in the last year, and lives in the DC area.

- Data Collection:** Online CASI collected data on the use of HIV prevention interventions, including history of PrEP use.

- Data Analysis:** Correlates of lifetime PrEP uptake were assessed using multivariable logistic regression.

## RESULTS

**Table 1. Characteristics of two non-clinic-based samples of Black MSM in Washington, DC, 2013-2014 (N=168).**

Variable	Face-to-Face Sample with Barriers to Health Care (n=75)	Internet-Based Sample (n=93)
	%	%
Age (years)		
18-24	58.7	12.9
25-29	25.3	30.1
30-39	9.3	33.3
≥40	6.7	23.7
Used a condom the last time he had anal sex with a man	52.0	53.9
Has health insurance	74.7	95.7
HIV-positive	11.3	25.8
Was offered an HIV test the last time he saw a health care provider for any reason <sup>a</sup>	50.0	58.0
Health care settings accessed in the last 6-12 months <sup>b</sup>		
Community-based clinic	60.0	61.3
Primary care doctor	21.3	49.5
Acute care setting	36.0	41.9
Mental health care setting	5.3	8.6
HIV prevention interventions accessed in the last 6-12 months <sup>c</sup>		
HIV testing	76.1	88.4
HIV counseling	23.9	22.6
PrEP	7.5	30.4
PEP	0	7.3

<sup>a</sup>Only among those who reported to be HIV-negative.  
<sup>b</sup>Participants could provide more than one value for a response. Due to differences in the two CASIs, the time period specified was the last 6 months for those in the face-to-face sample and the last 12 months for those in the internet-based sample.

**Table 2. Proportions of Black MSM who received HIV prevention interventions in the last six months by health care setting (n=67).<sup>a</sup>**

HIV prevention intervention	Community-based clinics (n=39)	Primary care providers (n=15)	Acute care settings (n=23)
	%	%	%
Any <sup>b</sup>	89.7	53.3	43.5**
HIV testing	84.6	53.3	43.5
HIV counseling	38.5	0	0**
PrEP <sup>c</sup>	5.1	0	4.3
PEP	0	0	0

<sup>a</sup>p<0.05; \*\*p<0.01; \*\*\*p<0.001. P-values were obtained using Fisher's exact test among participants who reported having accessed exactly one type of health care setting in the last six months, so that comparison groups were independent and mutually exclusive.  
<sup>b</sup>Includes HIV-negative participants in the face-to-face subsample of men who experienced barriers to health care.  
<sup>c</sup>Any HIV prevention intervention was defined as HIV testing, HIV counseling, PrEP, or PEP.  
<sup>d</sup>Two participants who reported taking PrEP were not included in this analysis because they reported obtaining PrEP from a research study and student health center, which were not included in the categories created to represent types of health care setting.

Most of the time, it was usually through HIV centers and when I was getting tested and talking to counselors that I got all my HIV information. Rarely, even when I had insurance, was it done through my medical provider. Like, all the HIV information I've ever learned was 99% [at an organization supporting sexual minority youth] and HIV counselors when they were doing testing. – Age 25, HIV-negative

I feel like they [Black MSM] don't go to [primary] care physicians, they go to... places like [organizations supporting the health of Black and sexual minority youth]. They all have testing programs where you can get tested by somebody who is more familiar with the gay lifestyle. Nine out of ten you're probably going to get tested by a gay man, so it's a lot easier to have that type of conversations like... if you're sexually active and you kind of don't feel that stigma, because this person has been in your shoes. – Age 23, HIV-negative

Sexual health is the number one thing right now that is important to me. [Interviewer: And, have you ever brought that up in a doctor's visit?] ... No. But maybe because you never get to the question and I never really brought that up. I probably brought that up at STD clinics, but not at my doctor visit, no... Because probably they say that I wanted to do some blood work. And that's it. Go see your lab or anything. But, that's what you get though... I think they wasn't aware. Or they probably thought it wasn't a concern for them to ask that question first of all. – Age 28, HIV-negative

When you are Black and you are gay, now that I actually think about it, it is kind of weird when you have to answer the questions that the doctors ask you, like sex with another man, things like that. When they ask you your HIV status and stuff like that; I don't know. It's kind of, it's nothing sad, but it's kind of like a fear that they are judging you because you are Black and gay. That there is higher chance that you have HIV. – Age 23, HIV-negative

## RESULTS (continued)

**Table 3. Correlates of PrEP uptake among Black MSM (n=69).<sup>a</sup>**

Variable	OR (95% CI)	aOR (95% CI) <sup>b</sup>
<30 years old	4.46 (1.59, 12.54)**	5.51 (1.25, 24.32)**
Had 5 or more sexual partners in the last year	2.98 (0.91, 9.74)	4.01 (0.83, 19.32)
Used a condom the last time he had sex with a man	0.69 (0.26, 1.84)	
Has private insurance	0.25 (0.08, 0.76)*	0.12 (0.02, 0.69)*
Trusts advice about health issues from his social network <sup>c</sup>	2.16 (0.78, 6.01)	5.65 (1.14, 27.98)**
Trusts his health care provider he usually sees is competent <sup>d</sup>	1.33 (0.30, 5.85)	
Trusts his health care provider <sup>e</sup>	1.57 (0.43, 5.71)	
Believes it is easy to get his needs met during health care visits <sup>f</sup>	1.20 (0.36, 4.06)	
Believes his health care provider thinks less of him for being Black <sup>g</sup>	2.71 (0.69, 10.71)	
Believes his health care provider thinks less of him for having sex with men <sup>h</sup>	1.68 (0.44, 6.47)	
Was offered an HIV test the last time he saw his health care provider	1.82 (0.67, 4.96)	6.92 (1.25, 38.16)**
Was unable to get health care he needed in the last year	1.60 (0.21, 12.09)	
Went to a community-based clinic in the last year	4.67 (1.56, 13.93)**	
Went to a primary care doctor in the last year	0.93 (0.35, 2.44)	
Went to an acute care setting in the last year	2.15 (0.80, 5.80)	

<sup>a</sup>p<0.05; \*\*p<0.01; \*\*\*p<0.001.  
<sup>b</sup>Includes HIV-negative participants in the internet-based sample of men, 27 of whom reported ever having taken PrEP.  
<sup>c</sup>Variables with p<0.25 were considered for inclusion in the multivariable model and were removed in manual stepwise regression modeling until all variables had p<0.10.  
<sup>d</sup>Endorsement of these health care beliefs was defined as a response ≥51 on a visual analogue scale from 0 to 100.

## Figure 1. Participant quotes representative of barriers to uptake of HIV prevention interventions in primary care settings.

Anytime if I had an HIV test, I always had to let them [primary care provider] know... It wasn't part of the appointment... Where I was going, it was a lot of young females and it just seemed like when you go in there, it was a lot of people that judge you for who you are. So, it makes you feel uncomfortable, so certain questions that you want to ask is like, any person would be a little bit intimidated by that, that you feel like you don't have any privacy. – Age 27, HIV-negative

It would be nice for them to mention it [sexual health], but I have no problems bringing it up myself... I felt the doctor was uncomfortable. I felt I made him uncomfortable with the situation. He seemed shocked. I don't know if he's not used to dealing with gay men, or someone just being open with it [and] telling him, but he seemed a little taken back when I presented it to him... It could have affected someone [a patient]. It could have made them feel like 'well damn, when I do try to tell someone, this is the reaction I get.' – Age 38, HIV-negative

He [primary care provider] never even asked me... I mean, I asked for it [HIV testing], and he said, 'Oh okay,' and he just circled something on a piece of paper. And I guess they just did the test. But he never discussed any risk factors or why I wanted the test. He just acknowledged my request... In that moment, I wasn't necessarily comfortable discussing my sexuality with the doctor. – Age 27, HIV-negative

## RESULTS (continued)

### Among Black MSM in the face-to-face sample:

- A higher proportion of HIV-negative men who sought care at community-based clinics received HIV prevention interventions at these visits (90%) compared to those who accessed primary (53%) or acute care (44%) settings (p=0.005).

### Among Black MSM in the internet-based sample:

- Independent correlates of lifetime PrEP uptake among HIV-negative men included:
  - Being less than 30 years of age (aOR=5.51; 95% CI: 1.25, 24.32)
  - Not having private insurance (aOR=0.12; 95% CI: 0.02, 0.69)
  - Trusting advice about health issues from his social network (aOR=5.65; 95% CI: 1.14, 27.98)
  - Having been offered an HIV test the last time he saw his health care provider for any reason (aOR=6.92; 95% CI: 1.25, 38.16).
- Having accessed a community-based clinic in the last year was associated with lifetime PrEP uptake in bivariable analysis (OR=4.67; 95% CI: 1.56, 13.93), but not in multivariable analysis.

### In qualitative interviews:

- Black MSM reported experiencing structural barriers to accessing HIV prevention interventions in primary care settings:
  - Experiences of stigma due to one's sexual identity and/or perceived HIV risk
  - Difficulty disclosing one's risk behavior and discussing sexual health without fear of judgment
  - Low cultural competency of providers for facilitating routine access to biomedical and behavioral HIV prevention interventions.
- Men expressed preferences for receiving HIV prevention interventions at community-based clinics that are known to have culturally competent providers.

## CONCLUSIONS

- In a non-clinic-based sample of Black MSM, reported uptake of HIV prevention interventions was highest in community-based clinics that were culturally sensitive to the unique health needs of Black MSM.
- Having access to health insurance and to health care does not necessarily facilitate uptake of HIV prevention interventions for Black MSM.
- It is critical that all health care encounters regardless of the setting support the use of HIV prevention interventions by removing structural barriers for those at highest risk of HIV.

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