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What's New In HIV Prevention?

Acceptability of HIV Pre-Exposure Prophylaxis (PrEP) at varying levels of effectiveness among low SES Black Gay and Bisexual Men in Los Angeles: Implications for PrEP Dissemination

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Presentation outline

- Introduction and study objectives
- Study design
- Primary findings
- Conclusions



Introduction and Study Objectives

- In the U.S., the rate of new HIV infections is highest among Black men who have sex with men (BMSM), particularly young BMSM
- Biomedical interventions are available to help curb the spread of HIV among high-risk populations.
- Pre-Exposure Prophylaxis (PrEP) is a biomedical intervention involving the daily use of HIV antiretroviral (ARV) medications by HIV-uninfected individuals as a way of preventing the acquisition of HIV.
- Objectives of this study were to assess awareness, perceptions of and intention to adopt Pre-Exposure Prophylaxis (PrEP) among Black men who have sex with men (BMSM), and to identify potential barriers and facilitators in disseminating PrEP to this highly-impacted population.

Study Design

- Face-to-face interviews conducted with 224 at-risk BMSM
- Survey domains:
 - Socio-demographics
 - Sexual behaviors in past 6 months and most recent encounter
 - Alcohol and drug use
 - Perceived HIV risk
 - Belief in AIDS conspiracy theories
 - Awareness of and use of PrEP and Post Exposure Prophylaxis (PEP)
 - Attitudes and beliefs about PrEP (based on earlier formative research)
 - PrEP adoption intention

Study Design (cont'd)

- **Recruitment efforts**

- Community partners
 - In The Meantime
 - Friends Community Center
 - Los Angeles Gay and Lesbian Center (LAGLC)
 - Reach LA (House and Ballroom community)
- Internet and Social Media (i.e. Facebook, Craigslist)
- Presentations at community agencies
- Distribution of study flyers and study palm cards
- Referrals by study participants and community agencies
- Targeted referral of house kids by house parents

Socio-demographic Characteristics

Characteristic	Overall N=224 (%)
Age	
18-29	114 (50.9)
30+	110 (49.1)
Sexual orientation	
Gay/homosexual/queer/same gender loving	125 (55.8)
Bisexual	90 (40.2)
Other	9 (4.0)
Education	
High school or less	104 (46.6)
Some college	95 (42.4)
Bachelor's degree or higher	25 (11.1)
Employment	
Employed FT (17.4%) or PT (26.8%)	99 (44.2)
Unemployed/unable to work	125 (55.8)
Annual income	
\$0 - \$19,999	149 (66.5)
\$20,000+	53 (23.7)

PrEP and PEP knowledge and use

Knowledge and use	Number (percent)
Knowledge of PrEP prior to interview	74 (33%)
• 18- 29 years old	40 (35%)
• 30+ years old	34 (31%)
Knowledge of PEP prior to interview	81 (36%)
• 18-29 years old	39 (34%)
• 30+ years old	42 (38%)
Used PrEP	0
Used PEP	7 (3%)

Prep Adoption Intention

Participants were given the following information about the PrEP medication Truvada.

- Can be up to 90% effective in preventing HIV infection
- Must be taken everyday
- Does not protect against other Sexually Transmitted Infections (STI)
- Possible side effects noted in the iPrEx clinic trial:
 - 9% of men reported nausea or stomach problems during the first few weeks of taking medication. These went away after taking the medication for a few weeks.
 - 5% of men reported headache associated with taking medication
 - 2% of men reported unintentional weight loss

Prep Adoption Intention

Participants rated their likelihood of using this PrEP mediation using this 7-point scale:

- | | | |
|---|--------------------|-------------------------------------|
| 1 | Extremely unlikely | Low PrEP Adoption Intention |
| 2 | Very unlikely | |
| 3 | Somewhat unlikely | |
| 4 | Not sure | |
| 5 | Somewhat likely | |
| 6 | Very likely | High PrEP Adoption Intention |
| 7 | Extremely likely | |

Adoption intention for PrEP at different levels of effectiveness

PrEP effectiveness level	Total High PrEP Adoption Intention Number (%)	18-29 years old	30+ years old
PrEP 90% effective	134 (60%)	71 (62%)	63 (57%)
PrEP 44% effective*	16 (7%)	2 (2%)	14 (13%)
PrEP 50% effective	35 (16%)	13 (11%)	22 (20%)
PrEP 73% effective*	67 (30%)	27 (24%)	40 (36%)
PrEP 92% effective	173 (77%)	85 (75%)	88 (81%)
* P <.03			



PrEP acceptability by sexual risk behaviors past 6 months & most recent

Sexual behavior	Overall N =224 (%)	High PrEP Adoption Intention N (%)
Number of male partners		
≤ 2 male partners	107 (50.7%)	68 (63.6%)
≥ 3 male partners	104 (49.3%)	62 (59.6%)
Receptive anal sex		
Yes	118 (52.9%)	73 (61.9%)
No	105 (47.1%)	61 (58.1%)
Condom use during receptive anal sex		
Consistent	63 (51.6%)	39 (61.9%)
Inconsistent	59 (48.4%)	37 (62.7%)
Condom used last receptive anal sex		
Yes	76 (62.8%)	51 (67.1%)
No	45 (37.2%)	24 (53.3%)

PrEP acceptability by sexual risk behaviors past 6 months & most recent

Sexual behavior	Overall N (%)	High PrEP Adoption Intention N (%)
Insertive anal sex		
Yes	188 (84.3%)	114 (60.6%)
No	35 (15.7%)	20 (57.1%)
Condom use during insertive anal sex		
Consistent	89 (47.3%)	58 (65.2%)
Inconsistent	99 (52.7%)	56 (56.6%)
Condom used last insertive anal sex		
Yes	116 (61.7%)	76 (65.6%)
No	72 (38.3%)	38 (52.8%)



PrEP Acceptability by Perceptions

Positive Perception Items	High PrEP Adoption Intention N (%)
<p>I would be one of the first people to use PrEP, if it were available</p> <p>Disagree/strongly disagree</p> <p><u>Agree/strongly agree</u></p>	<p>34 (35.8)</p> <p><u>98 (78.4)</u></p>
<p>If I was taking PrEP, I wouldn't worry about becoming infected with HIV when having sex with someone who is HIV-positive</p> <p>Disagree/strongly disagree</p> <p><u>Agree/strongly agree</u></p>	<p>96 (55.2)</p> <p><u>37 (78.7)</u></p>
<p>Taking a daily HIV medicine would be a good way to protect myself from getting HIV</p> <p>Disagree/strongly disagree</p> <p><u>Agree/strongly agree</u></p>	<p>1 (0.8)</p> <p><u>131 (99.2)</u></p>
<p>If I was taking PrEP, I would feel more comfortable about having sex with someone who is HIV-positive</p> <p>Disagree/strongly disagree</p> <p><u>Agree/strongly agree</u></p>	<p>81 (55.5)</p> <p><u>51 (69.9)</u></p>

PrEP Acceptability by Perceptions

Negative Perception Items	High PrEP Adoption Intention N (%)
<p>I would be very uncomfortable taking HIV medicines when I don't have HIV</p> <p>Disagree/strongly disagree <u>Agree/strongly agree</u></p>	<p>104 (71.7) <u>26 (36.1)</u></p>
<p>I would wait until other people were taking PrEP before I use it myself</p> <p>Disagree/strongly disagree <u>Agree/strongly agree</u></p>	<p>95 (69.3) <u>37 (43.5)</u></p>
<p>I would be very uncomfortable asking my doctor for PrEP pills to protect myself from getting HIV</p> <p>Disagree/strongly disagree <u>Agree/strongly agree</u></p>	<p>124 (62.9) <u>10 (37.0)</u></p>



PrEP Acceptability by Perceptions

Negative Perception Items	High PrEP Adoption Intention N (%)
Not knowing if there are long-term side effects of taking a daily HIV medicine makes me very uncomfortable Disagree/strongly disagree <u>Agree/strongly agree</u>	59 (73.8) <u>74 (52.1)</u>
I would be concerned that people will think I have HIV if I am taking a HIV medicine Disagree/strongly disagree <u>Agree/strongly agree</u>	93 (65.0) <u>39 (49.4)</u>

Logistic Regression Model: Correlates of High PrEP Adoption Intention

Variables	Adjusted Odds Ratio (95% CI)
I would be very uncomfortable taking HIV medicines when I don't have HIV Disagree/strongly disagree Agree/strongly agree	REF 0.38 (0.16-0.91)
Not knowing if there are long-term side effects of taking a daily HIV medicine makes me very uncomfortable Disagree/strongly disagree Agree/strongly agree	REF 0.35 (0.14-0.88)

Logistic Regression Model: Correlates of High PrEP Adoption Intention (cont'd)

Variables	Adjusted Odds Ratio (95% CI)
Taking a daily HIV medicine would be a good way to protect myself from getting HIV. Disagree/strongly disagree Agree/strongly agree	REF 2.26 (1.6-3.17)
I would be one of the first people to use PrEP, if it were available. Disagree/strongly disagree Agree/strongly agree	REF 4.13 (1.74-9.81)
Age 18-29 30+	2.29 (1.06-4.93) REF

Conclusions

- The study population consisted of primarily lower SES Black MSM, a particularly vulnerable population.
- BMSM may adopt a highly effective PrEP regimen ($\geq 90\%$)
- Younger BMSM (18-29 years of age) are more likely to adopt a highly effective PrEP regimen relative to older BMSM (30+ years of age).

The little blue pill to prevent HIV infection



Conclusions (cont'd)

- Participants, particularly younger BMSM, were less likely to indicate an interest in adopting PrEP regimens with mid- to low- levels of effectiveness (i.e. 44%, 50%, 73%).
- A challenge remains for medical providers and community educators to accurately present and interpret the PrEP efficacy data from clinical trials to at-risk populations, and to emphasize that the efficacy of PrEP varies by individual adherence.

The little blue pill to prevent HIV infection



Conclusions (cont'd)

- The findings revealed no relationship between sexual risk behavior and PrEP adoption intention. Instead, high adoption intention was reported by both high- and low-risk individuals.
- Some BMSM may choose to adopt PrEP as an added layer of protection, while others may adopt PrEP in order to engage in condom-less sex and still feel protected.
- The reasons for adopting PrEP will vary among BMSM; however, PrEP should continue to be available to high-risk BMSM regardless of sexual behaviors while on PrEP as this may be their only prevention option.

Conclusions (cont'd)

- The perceptions BMSM have regarding using PrEP may impact its scalability with the population.
- Negative perceptions may reflect an apprehension BMSM may have about taking a prescription medication for an illness they do not have as well as concerns about long-term side effects of using PrEP.
- Developing culturally-tailored messages about the individual- and community-level benefits of PrEP may help change negative perceptions and facilitate adoption among BMSM.

Conclusions (cont'd)

- BMSM reported limited knowledge and use of PrEP and PEP.
- The limited awareness and use of PrEP was expected given that PrEP is a new intervention.
- The limited awareness of PEP was unexpected given that PEP has been available at no-cost in LA since 2009.
- The limited knowledge of PrEP and PEP suggests that greater efforts are needed to raise community awareness and disseminate information specifically to BMSM about biomedical interventions and their availability in the community.

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THANK YOU!

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