Preference for Long-Acting Pre-Exposure Prophylaxis (PrEP) by Adherence and Persistence on Daily Oral PrEP among Cisgender Women and Black and Hispanic Men in the United States

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Disclosures

• This study was funded by ViiV Healthcare
• SS, CB, LR, and VV are employees of ViiV Healthcare and own stock in GSK
Introduction

• There are disparities across the PrEP continuum in the United States, particularly among cisgender women and Black and Hispanic men

• Daily oral (DO) PrEP users are still inconsistent users, highlighting the need for alternative prevention options such as long-acting (LA) PrEP

Cisgender women

• Cisgender women make up almost 20% of incident HIV infections in the United States

• PrEP uptake and coverage among cisgender women continues to be low, with women making up approximately 7%-12% of all PrEP users in the US in 2022

• Cisgender women also have fewer options for oral PrEP

Black and Hispanic men

• Black (42%) and Hispanic (27%) men account, respectively, for the first and second most new HIV diagnoses among all racial/ethnic groups in men

• In 2021, there were only 3 Black and 6 Hispanic/Latinx PrEP users for each new HIV diagnosis within those racial/ethnic groups, compared to 26 white PrEP users for each new HIV diagnosis among white people

Introduction

• Long-acting (LA) PrEP can provide an opportunity to close gaps in PrEP uptake, adherence, and persistence

• Two surveys were conducted to assess awareness, interest, and usage of PrEP as well as HIV prevention preferences among sexually active cisgender women and Black and Hispanic cisgender men in the US

• Part of a program designed to characterize unmet needs and preferences among people who can benefit from PrEP*

MSM, men who have sex with men.

*Program includes:
• Men who have sex with men (MSM)
• Transgender women and men
• Cisgender women
• Black and Hispanic men
Methodology

- Participants were recruited through a social media campaign using Facebook, Instagram, Tinder, and Grindr*
- Surveys included detailed questions covering demographics, healthcare access and experiences, PrEP knowledge and use, substance use, and sexual behavior and health
- This analysis presents data from DO PrEP users of both surveys who participated between November 2021 and March 2022
- Descriptive analyses were conducted using SAS v9.4

*Grindr was used for the men’s surveys only.

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Key Eligibility Requirements For All Surveys

- 18 years of age or older
- Current resident of the United States (including US territories)
- Reports penetrative (anal and/or vaginal) sex in the past 6 month
- Reports HIV-negative or unknown HIV status

Additional Eligibility Requirements

Survey 1

- Cisgender women
  - Assigned female at birth and identifies as female

Survey 2

- Black and Hispanic cisgender men
  - Assigned male at birth and identifies as male
- Self report as Black and/or Hispanic

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Epidemiology & Real World Evidence

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Objective: To Assess LA PrEP Preference in DO PrEP Users

• This analysis includes participants from both surveys who were current DO PrEP users.

• Participants answered questions about preference between LA PrEP and DO PrEP as well as reasons for interest in LA PrEP among those who indicated they were likely to use LA PrEP.

• Participant responses were assessed according to their adherence and persistence on DO PrEP.

Survey Question: If both long acting injectable (LA PrEP) and oral pills (DO PrEP) were available, which would you choose?

Survey Question: How likely would you be to use the injectable (shot) form of PrEP, if it was available, to reduce the risk of getting HIV?
- Very unlikely
- Somewhat unlikely
- Somewhat likely
- Very likely

Survey Question: Given what you know about the injectable (shot) form of PrEP, what are the main reasons you would be interested in using it?

Adherence
DO PrEP adherence in past 30 days:
- <16 days (poor/fair)
- 16-29 days (good)
- 30 days (excellent)

Persistence
Months in a row taking DO PrEP:
- ≤6 months
- >6 months
Geographic Representation of the Program

West
AK, AZ, CA, CO, HI, ID, MT, NV, NM, OR, UT, WA, WY

Midwest
IL, IN, IA, KS, MI, MN, MO, NE, ND, OH, SD, WI

Northeast
CT, ME, MA, NH, NJ, PA, RI, VT

South
AL, AR, DE, DC, FL, GA, KY, LA, MD, MS, NC, OK, SC, TN, TX, VA, WV
Geographic Representation of the Surveys

Cisgender Women

Overall Surveys
N=1,834

- West (AK, AZ, CA, CO, HI, ID, MT, NV, NM, OR, UT, WA, WY): 20.9% (n=384)
- Northeast (CT, ME, MA, NH, NJ, PA, RI, VT): 6.8% (n=124)
- South (AL, AR, DE, DC, FL, GA, KY, LA, MD, MS, NC, OK, SC, TN, TX, VA, WV): 65% (n=1,193)

DO PrEP users
N=209

- West (AK, AZ, CA, CO, HI, ID, MT, NV, NM, OR, UT, WA, WY): 18.7% (n=39)
- Northeast (CT, ME, MA, NH, NJ, PA, RI, VT): 6.2% (n=13)
- South (AL, AR, DE, DC, FL, GA, KY, LA, MD, MS, NC, OK, SC, TN, TX, VA, WV): 69.4% (n=145)
Geographic Representation of the Surveys

**Cisgender Women**

- **Overall Surveys**
  - N=1,834
  - West (AK, AZ, CA, CO, HI, ID, MT, NV, NM, OR, UT, WA, WY): 20.9% (n=384)
  - Midwest (IL, IN, IA, KS, MI, MN, MO, NE, ND, OH, SD, WI): 7.3% (n=133)
  - Northeast (CT, ME, MA, NH, NJ, PA, RI, VT): 6.8% (n=124)
  - South (AL, AR, DE, DC, FL, GA, KY, LA, MD, MS, NC, OK, SC, TN, TX, VA, WV): 65% (n=1,193)

- **DO PrEP users**
  - N=209
  - West (AK, AZ, CA, CO, HI, ID, MT, NV, NM, OR, UT, WA, WY): 18.7% (n=39)
  - Midwest (IL, IN, IA, KS, MI, MN, MO, NE, ND, OH, SD, WI): 6.2% (n=13)
  - Northeast (CT, ME, MA, NH, NJ, PA, RI, VT): 5.7% (n=12)
  - South (AL, AR, DE, DC, FL, GA, KY, LA, MD, MS, NC, OK, SC, TN, TX, VA, WV): 69.4% (n=145)

**Black and Hispanic Men**

- **Overall Surveys**
  - N=1,728
  - West (AK, AZ, CA, CO, HI, ID, MT, NV, NM, OR, UT, WA, WY): 65% (n=1,193)
  - Midwest (IL, IN, IA, KS, MI, MN, MO, NE, ND, OH, SD, WI): 5.8% (n=919)
  - Northeast (CT, ME, MA, NH, NJ, PA, RI, VT): 10.1% (n=174)
  - South (AL, AR, DE, DC, FL, GA, KY, LA, MD, MS, NC, OK, SC, TN, TX, VA, WV): 30.8% (n=532)

- **DO PrEP users**
  - N=279
  - West (AK, AZ, CA, CO, HI, ID, MT, NV, NM, OR, UT, WA, WY): 53.2% (n=174)
  - Midwest (IL, IN, IA, KS, MI, MN, MO, NE, ND, OH, SD, WI): 11.1% (n=31)
  - Northeast (CT, ME, MA, NH, NJ, PA, RI, VT): 6.5% (n=18)
  - South (AL, AR, DE, DC, FL, GA, KY, LA, MD, MS, NC, OK, SC, TN, TX, VA, WV): 46.2% (n=129)
# Overall Participant Demographics

<table>
<thead>
<tr>
<th>Baseline characteristics, n (%)</th>
<th>Cisgender women N=1,834</th>
<th>Black &amp; Hispanic cisgender men N=1,728</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age, years</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-29</td>
<td>1,108 (60.4)</td>
<td>953 (55.2)</td>
</tr>
<tr>
<td>≥30</td>
<td>726 (39.6)</td>
<td>775 (44.8)</td>
</tr>
<tr>
<td><strong>Race</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>939 (51.2)</td>
<td>1389 (80.4)</td>
</tr>
<tr>
<td>White</td>
<td>645 (35.2)</td>
<td>170 (9.8)</td>
</tr>
<tr>
<td>Other Race not listed</td>
<td>250 (13.6)</td>
<td>169 (9.8)</td>
</tr>
<tr>
<td><strong>Relationship status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single/Dating</td>
<td>834 (45.5)</td>
<td>790 (45.7)</td>
</tr>
<tr>
<td>Domestic partnership/civil union/married</td>
<td>876 (47.8)</td>
<td>864 (50.0)</td>
</tr>
<tr>
<td>Widowed/Separated/Divorced</td>
<td>117 (6.4)</td>
<td>66 (3.8)</td>
</tr>
<tr>
<td><strong>Sexual Identity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lesbian or Gay</td>
<td>113 (6.2)</td>
<td>496 (28.7)</td>
</tr>
<tr>
<td>Heterosexual or Straight</td>
<td>1,542 (84.1)</td>
<td>1,060 (61.3)</td>
</tr>
<tr>
<td>Bisexual or Pansexual</td>
<td>128 (7.0)</td>
<td>120 (6.9)</td>
</tr>
<tr>
<td>Other sexual identity not listed</td>
<td>48 (2.6)</td>
<td>52 (3.0)</td>
</tr>
<tr>
<td><strong>Daily-oral PrEP users</strong></td>
<td>209 (11.4)</td>
<td>279 (16.1)</td>
</tr>
</tbody>
</table>
DO PrEP Users Participant Demographics

<table>
<thead>
<tr>
<th>Baseline characteristics, n (%)</th>
<th>Cisgender women N=209</th>
<th>Black &amp; Hispanic cisgender men N=279</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age, years</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-29</td>
<td>118 (56.5)</td>
<td>139 (49.8)</td>
</tr>
<tr>
<td>≥30</td>
<td>91 (43.5)</td>
<td>140 (50.2)</td>
</tr>
<tr>
<td><strong>Insurance</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>208 (99.5)</td>
<td>279 (100)</td>
</tr>
<tr>
<td><strong>PrEP taken</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Truvada (FTC/TDF)</td>
<td>146 (69.9)</td>
<td>206 (73.8)</td>
</tr>
<tr>
<td>Descovy (FTC/TAF)(^a)</td>
<td>62 (29.7)</td>
<td>73 (26.2)</td>
</tr>
<tr>
<td><strong>Time using PrEP, months</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>≤6</td>
<td>102 (48.8)</td>
<td>104 (37.3)</td>
</tr>
<tr>
<td>&gt;6</td>
<td>107 (51.2)</td>
<td>175 (62.7)</td>
</tr>
<tr>
<td><strong>Adherence (days taking PrEP pill in past month)(^b)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;16 (poor/fair)</td>
<td>68 (32.5)</td>
<td>90 (32.3)</td>
</tr>
<tr>
<td>16-29 (good)</td>
<td>92 (44.0)</td>
<td>137 (49.1)</td>
</tr>
<tr>
<td>30 (excellent)</td>
<td>45 (21.5)</td>
<td>51 (18.3)</td>
</tr>
</tbody>
</table>

\(^a\) TAF is not approved for individuals having vaginal sex. \(^b\) One participant in the Black & Hispanic cisgender men survey responded that they preferred not to answer.

FTC, emtricitabine; TAF, tenofovir alafenamide; TDF, tenofovir disoproxil fumarate.

LA PrEP was strongly preferred over DO PrEP

Particularly among those with

Poor/fair monthly adherence

Excellent monthly adherence

75%  81%

Adherence
(days in past month took PrEP pill)

- Cisgender Women

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LA PrEP was strongly preferred over DO PrEP particularly among those with excellent monthly adherence.

- Cisgender Women:
  - Poor/fair monthly adherence: 75%
  - Good monthly adherence: 83%
  - Excellent monthly adherence: 81%

- Black & Hispanic Cisgender Men:
  - Poor/fair monthly adherence: 78%
  - Good monthly adherence: 45%
  - Excellent monthly adherence: 31%
Participants Preferring LA PrEP over DO PrEP Among Current DO PrEP Users by Persistence

LA PrEP was strongly preferred over DO PrEP by those who had been taking DO PrEP for ≤6 months.

78% of cisgender women preferred LA PrEP over DO PrEP among those who had been on DO PrEP for ≤6 months compared to 49% for those taking DO PrEP for >6 months.

Cisgender Women

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Participants Preferring LA PrEP over DO PrEP Among Current DO PrEP Users by Persistence

LA PrEP was strongly preferred over DO PrEP by those who had been taking DO PrEP for ≤6 months.

78% of cisgender women who had been taking DO PrEP for ≤6 months preferred LA PrEP, compared to 68% of black and Hispanic cisgender men.

49% of cisgender women who had been taking DO PrEP for >6 months preferred LA PrEP, compared to 50% of black and Hispanic cisgender men.

LA PrEP was somewhat likely or very likely to be used, if it was available, to reduce the risk of getting HIV in:

- Cisgender Women (N=209):
  - Very likely: 81%
  - Somewhat likely: 26%
  - Somewhat unlikely: 5%
  - Very unlikely: 2%

- Black & Hispanic Cisgender Men (N=279):
  - Very likely: 92%
  - Somewhat likely: 17%
  - Somewhat unlikely: 2%
  - Very unlikely: 0%

- It is effective at preventing other sexually transmitted infections
- It is convenient for my lifestyle
- It is easy to use
- It is effective at preventing HIV

Cisgender Women

- 30 days (excellent; N=44)
  - It is effective at preventing other sexually transmitted infections: 77%
  - It is convenient for my lifestyle: 57%
  - It is easy to use: 41%
- 16-29 days (good; N=83)
  - It is effective at preventing other sexually transmitted infections: 47%
  - It is convenient for my lifestyle: 52%
  - It is easy to use: 46%
- <16 days (poor/fair; N=61)
  - It is effective at preventing other sexually transmitted infections: 62%
  - It is convenient for my lifestyle: 54%
  - It is easy to use: 53%

**Cisgender Women**
- **30 days (excellent; N=44)**
  - It is effective at preventing HIV: 57%
  - It is convenient for my lifestyle: 57%
  - It is effective at preventing other sexually transmitted infections: 77%
  - It is easy to use: 41%
- **16-29 days (good; N=83)**
  - It is effective at preventing HIV: 52%
  - It is convenient for my lifestyle: 47%
  - It is effective at preventing other sexually transmitted infections: 47%
  - It is easy to use: 46%
- **<16 days (poor/fair; N=61)**
  - It is effective at preventing HIV: 53%
  - It is convenient for my lifestyle: 53%
  - It is effective at preventing other sexually transmitted infections: 62%
  - It is easy to use: 54%

**Black & Hispanic Cisgender Men**
- **30 days (excellent; N=51)**
  - It is effective at preventing HIV: 57%
  - It is convenient for my lifestyle: 57%
  - It is effective at preventing other sexually transmitted infections: 86%
  - It is easy to use: 88%
- **16-29 days (good; N=135)**
  - It is effective at preventing HIV: 51%
  - It is convenient for my lifestyle: 50%
  - It is effective at preventing other sexually transmitted infections: 45%
  - It is easy to use: 46%
- **<16 days (poor/fair; N=87)**
  - It is effective at preventing HIV: 59%
  - It is convenient for my lifestyle: 58%
  - It is effective at preventing other sexually transmitted infections: 36%
  - It is easy to use: 69%

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Reasons for Interest in LA PrEP Among DO PrEP Users by Persistence

Cisgender Women

- It is easy to use
- It is effective at preventing other sexually transmitted infections
- It is convenient for my lifestyle
- It is effective at preventing HIV

<table>
<thead>
<tr>
<th></th>
<th>≤6 months (N=97)</th>
<th>&gt;6 months (N=95)</th>
</tr>
</thead>
<tbody>
<tr>
<td>It is easy to use</td>
<td>50%</td>
<td>51%</td>
</tr>
<tr>
<td>It is effective at preventing other sexually transmitted infections</td>
<td>67%</td>
<td>63%</td>
</tr>
<tr>
<td>It is convenient for my lifestyle</td>
<td>45%</td>
<td>51%</td>
</tr>
<tr>
<td>It is effective at preventing HIV</td>
<td>53%</td>
<td>62%</td>
</tr>
</tbody>
</table>

It is effective at preventing HIV

- Cisgender Women

It is convenient for my lifestyle

- Cisgender Women

It is easy to use

- Cisgender Women

It is effective at preventing other sexually transmitted infections

- Cisgender Women

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Reasons for Interest in LA PrEP Among DO PrEP Users by Persistence

**Cisgender Women**

- It is effective at preventing other sexually transmitted infections
- It is convenient for my lifestyle
- It is easy to use

**Black & Hispanic Cisgender Men**

- It is effective at preventing other sexually transmitted infections
- It is convenient for my lifestyle
- It is easy to use

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Conclusions

These two distinct surveys are part of a program to characterize the population that can benefit from PrEP in the United States.

**Unmet need**

- **Preference**: A significant proportion of both women and Black and Hispanic men who are currently on DO PrEP are interested in LA PrEP

**Differentiation from other PrEP options**

- **Effectiveness** at preventing HIV was a highly cited reason for interest in LA PrEP in both groups
- **Ease of use** was more commonly cited among those with poor/fair DO PrEP adherence compared with those with good/excellent adherence

**Opportunity**

- **Recent PrEP initiators** and those with adherence challenges expressed a particular interest in LA PrEP
- **Education**: Misconceptions that LA PrEP prevents other STIs persist, particularly among women

Long-acting PrEP offers the potential to address adherence and persistence challenges among women and Black and Hispanic men struggling to adhere to daily oral regimens

STI, sexually transmitted infection.

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Acknowledgements

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Leigh Ragone, ViiV Healthcare
Vani Vannappagari, ViiV Healthcare

Partners:

Most importantly, the women and men who participated in the survey