# Risk of HIV infection, knowledge and use of pre-exposure prophylaxis (PrEP) among transgender and gender non-binary adults

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#### BACKGROUND

- Pre-exposure prophylaxis (PrEP) is part of standard of care to prevent HIV in people at substantial risk for HIV.
- Transgender persons may be at increased risk for HIV and can benefit from PrEP.
- However, there is a dearth of data to inform strategies for PrEP scale-up among transgender individuals.

#### **OBJECTIVES**

- To assess knowledge of PrEP, prevalence of HIV risk factors, and PrEP use among transgender and gender nonbinary adults.
- · To identify barriers to PrEP use.

#### **METHODS**

## Study Design

A self-administered survey in English or Spanish.

## Study Setting

Kaiser Permanente Southern California, a large integrated health care system that servers more than 4.7 million prepaid health plan members.

#### **Source Population**

Transgender and gender nonbinary adults identified through a transgender patient registry with no history of HIV, metastatic cancer, end stage renal disease or in palliative care (n=4,398).

## **Survey Recruitment**

Survey invitations were sent to potential participants via secure emails; persons without a registered email address received a paper survey with a return envelop and prepaid postage.

## **Enrollment Period**

Surveys were distributed and completed from September 2020 through December 2020.

## **Study Population**

Self-reported transgender and gender nonbinary adults (≥ 18 years) who completed the survey.

## **Survey Questionnaire**

- · The survey collected self-reported data on:
  - Demographics
  - Sexual orientation and gender identify
  - Self-reported HIV risk
  - Knowledge about PrEP
  - History and current use of PrEP
  - Perceived barriers to PrEP use

#### **RESULTS**

· A total of 396 transgender and gender non-binary adults completed the survey.

Characteristics of survey respondents	Total (N=396)		
Mean age (SD), years	33.7 (13.2)		
Age, years, n (%)			
18-32	231 (58.3)		
33-45	88 (22.2)		
46-58	47 (11.9)		
≥ 59	30 (7.6)		
Race/ethnicity, n (%)			
Non-Hispanic White	212 (53.5)		
Hispanic	55 (13.9)		
Non-Hispanic Asian	25 (6.3)		
Non-Hispanic Black	10 (2.5)		
Others/Multiple	94 (23.7)		

- There were 167 transmen, 151 transwomen, and 78 gender nonbinary persons who completed the survey.
- About 87.3% had some college or higher education and almost all participants had a drug benefit through the health plan (98%).
- Approximately 60% reported not being in a committed relationship.

#### PrEP Knowledge

- Most participants (74.8%) knew about PrEP for HIV prevention.
- About 77.5% participants endorsed the statement that people using PrEP should use condoms while having sex.
- Only 52% agreed that PrEP use does not prevent other sexually transmitted infections (STIs), and many (39%) were not sure if PrEP helps prevent other STIs.

#### **HIV Risk**

• There were 170 participants (42.9%) with one or more self-reported factors associated with HIV risk.

HIV Risk factors in the prior 6 months	Transgender men (N = 167) n (%)	Transgender women (N = 151) n (%)	Gender nonbinary (N = 78) n (%)
At least one HIV risk factor	70 (41.9)	59 (39.1)	41 (52.6)
Any STI diagnosis	4 (2.4)	2 (1.3)	1 (1.3)
Had sex with HIV+ person	0 (0)	3 (2.0)	1 (1.3)
Had anal intercourse without using a condom	13 (7.8)	24 (15.9)	10 (12.8)
Injection drug use	2 (1.2)	0 (0)	0 (0)
Used any non-injectable drugs	59 (35.3)	36 (23.8)	37 (47.4)
Think that you might be at risk for HIV infection	8 (4.8)	18 (11.9)	8 (10.3)

## Self-reported PrEP Use

- PrEP use was very low among the survey respondents:
  - ➤ 13 participants (3.2%) reported taking PrEP at the time of survey.
  - > 17 participants (4.3%) reported using PrEP for at least one month in the prior 6 months.

## Perceived Barriers to PrEP Use

- Common self-reported barriers to PrEP use:
  - > Cost: 61.6%
  - ➤ Possible side effects: 43.7%
  - ➤ Not sure who to talk with to get PrEP: 40.7%
  - ➤ Unsure if PrEP is needed: 37.9%
  - > Not enough information if PrEP works: 37.6%, and
  - ➤ Having to take PrEP everyday: 36.9%

## **DISCUSSION**

- The prevalence of HIV risk factors was high in transgender and gender nonbinary adults; however, PrEP use was very low among those with self-reported HIV risk.
- Most transgender and gender nonbinary adults had heard about PrEP, but the majority were not sure if PrEP can prevent other STIs.
- Cost of PrEP use was the most common perceived barrier to PrEP use even in this insured population, followed by possible side effects of PrEP, lack of knowledge
  about eligibility for PrEP or how to access PrEP care.

## CONCLUSIONS

- Tailored PrEP education, screening and referral for PrEP use for transgender and gender nonbinary adults in primary care are warranted.
- Patient-centered programs targeting barriers to PrEP use among at-risk transgender and gender nonbinary adults are urgently needed.
- Financial support for copay of routine PrEP care services might improve PrEP access and PrEP persistence in this population.

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