



Relationship Between Risky Sexual Behavior and PrEP Use Within the NYC LGBTQ Community



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INTRODUCTION

- Since FDA approval in 2012, Truvada® and Descovy® (emtricitabine/tenofovir disoproxil fumarate) are oral drugs indicated for the use of human immunodeficiency virus (HIV) pre-exposure prophylaxis (PrEP).
- Assessment of PrEP users' risky sexual behaviors within the NYC LGBTQ community has not been extensively researched.
- When initiating a PrEP regimen for an at-risk patient, comprehensive counseling regarding the types of infections PrEP provides protection against may not be instated.
- Scientific literature has shown that use of PrEP is related to increased risky sexual tendencies among its users and, consequently, increased transmission of STIs.

PURPOSE

- The purpose of our study was to determine if a statistically significant difference exists in risky sexual behavior of New York City LGBTQ individuals who use HIV pre-exposure prophylaxis (PrEP) compared to New York City LGBTQ individuals who do not use PrEP.

METHODS

- Wagner College IRB approval was obtained.
- An *a priori* power analysis revealed that the minimum sample size needed to achieve significance was 93 responses (G-power Version 3.1.9.6 Germany).
- A *p* value < 0.05 was considered significant.
- An electronic survey was distributed via shared linked on social media.
 - Survey consisted of 14 demographic items, 23 risky sexual behavior items, and 22 likert-scale questions regarding PrEP stigma.
- Sample size was N = 100.
- Data were analyzed with IBM SPSS Version 26 (Armonk, NY) with alpha level set a 0.05.

Inclusion Criteria:

- Subjects ≥ 18 years of age that self-identify as a member of the LGBTQ population and live in NYC (Brooklyn, Bronx, Manhattan, Queens, or Staten Island).
- Completed surveys.

Exclusion Criteria:

- Subjects < 18 years of age, who self identify as cisgender and heterosexual and do not live in NYC.
- Incomplete surveys.

RESULTS

Figure 1 and 2. Demographic data of sample.

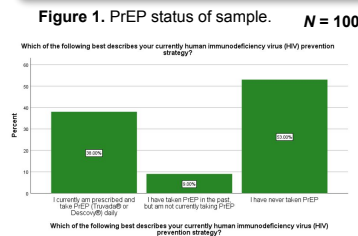


Figure 2. Sexual orientation of sample.

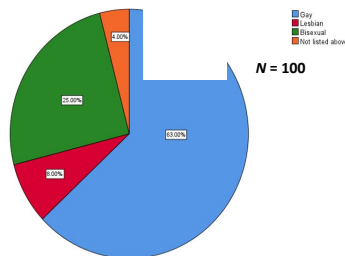


Figure 3. PrEP use vs. sexual partners.

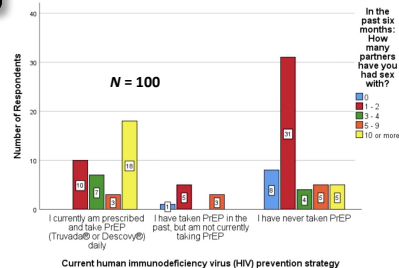


Figure 4. PrEP stigma vs. sexual orientation.

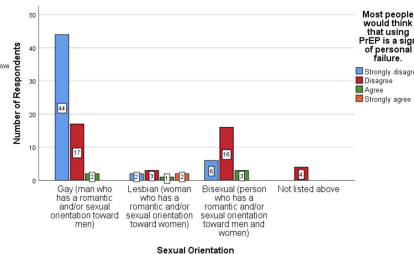


Figure 3 and 4. Output data for the Sexual Risk Survey and PrEP Stigma Scale.

Table 1. Sexual Risk Survey vs. PrEP Use

Variables	N	Spearman rho	p value
Had sex with someone who was also engaging in sex with others during the same time period?	100	-0.575	0.000
Had sex with someone you don't know well or just met.	100	-0.522	0.000
Number of partners you had sex with.	100	-0.475	0.000
Have had anal sex without a condom.	100	-0.477	0.000
Had sex with someone but are not involved in a relationship.	100	-0.443	0.00

Table 1. statistical significance found between PrEP use and sexual risk survey.

Table 2. PrEP Stigma vs. Sexual Orientation

Variables	N	Spearman rho	p value
People would feel uncomfortable with me if they found out that I used PrEP.	100	0.445	0.000
People would avoid me if they found out that I used PrEP.	100	0.449	0.000
Most people think that using PrEP is a sign of personal failure.	100	0.462	0.000
Worry that people would tell others I am using PrEP.	100	0.423	0.000

Table 2. statistical significance found between sexual orientation and PrEP stigma.

CONCLUSIONS

- Our research found statistically significant moderate negative correlations between PrEP use and the Sexual Risk Survey. Negative correlations indicated that those who have never taken PrEP participate in risky sexual behaviors less frequently than those who currently take PrEP.
- Our results demonstrated a statistically significant correlation between PrEP stigma and sexual orientation.
- Additional research, outside of COVID-19 pandemic, is needed to more accurately study risky sexual behaviors in this population.

CLINICAL IMPLICATIONS

Our results highlight that those who do not take PrEP may participate in risky sexual behaviors less frequently than those who do take PrEP, highlighting the potential need for comprehensive sexual health education for PrEP users. Our results indicate negative PrEP stigma exists within the NYC LGBTQ community.