HIV incidence among MSM given PEP starter packs in NYC sexual health clinics, 2014-2016

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Background

- PEP, when taken properly can prevent HIV if taken within 72 hours of exposure
- Due to the urgency of PEP, immediate access increases a person's likelihood of taking it
- Providing an immediate, short course of PEP may allow PEP delivery in resource limited settings; however, patients may not complete the full course

Objective

We examined factors associated with medication completion and HIV incidence among patients receiving PEP starter packs at NYC Sexual Health Clinics

Methods

Population:
Men who have sex with men (MSM) who received a PEP starter pack at NYC sexual health clinics between April 2014 and December 2015. Patients engaged in at least one of the following behaviors < 36 hours prior to PEP delivery:

- Anal/vaginal sex with a partner living with HIV
- Condomless receptive anal sex with a person of unknown HIV status
- Shared needles with a person living with HIV

Patients received 3 days of PEP medication on site with active linkage to an outside provider for additional medication.

Data Collection:

- Demographic, risk, and completion data was documented in the electronic medical record
- Medical record data matched with HIV surveillance registry data to obtain HIV incidence

Data Analysis:
We used bivariate regression to identify patient demographic and risk-related correlates of completion. We also measured HIV incidence among patients with completion information.

Results

- A total 421 MSM patients received PEP starter packs
- There were 15 new HIV diagnoses in this cohort
- Median time to HIV diagnosis (for PEP patients with known completion information) was 246 days

Fig 1. PEP completion among patients receiving starter packs

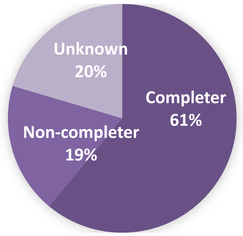


Table 1. Demographic and risk characteristics of MSM receiving PEP starter packs

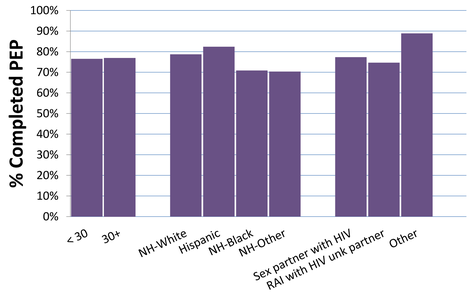
	N	%
Total	**421**	**100**
Age Group		
< 29 years	244	58%
30 + years	177	42%
Race/ethnicity		
White	118	28%
Latino	134	32%
Black	103	24%
Other	66	16%
Risk Category		
Anal/Vaginal Sex with PLH	199	47%
Condomless RAI with unknown HIV	196	47%
Sexual Assault	1	<1%
Needle sharing with PLH	3	<1%
Other	22	5%

Table 2. HIV Incidence Among PEP Patients with Known Completion Information

	N	%	Person-Years	Number of HIV +	HIV Incidence	95% CI
Overall	335	100	612.86	13	2.12	1.18-3.54
Age						
≤ 29	196	59	358.18	9	2.51	1.22-4.61
30+	139	41	254.67	4	1.57	0.50-3.79
Race						
White	94	28	174.17	1	0.57	0.03-2.83
Latino	108	32	195.56	4	2.04	0.65-4.93
Black	79	24	142.18	5	3.52	1.30-7.80
Other	54	16	100.95	3	2.97	0.75-8.08
Completion						
Completer	257	77	467.39	8	1.71	0.80-3.25
Non-Completer	78	23	145.47	5	3.44	1.26-7.62

Key Results: HIV incidence was higher among Black men, those younger than 30 and those who did not complete the full PEP regimen, though none of these increases were statistically significant

Fig 2. Factors Associated with completion of PEP



Key results: Completion was not significantly associated with age, race, or risk category

Limitations

- Some completion data collected by self-report and therefore accuracy and completeness may be affected
- We do not have completion information for ~20% of the cohort
- Because of the relatively small sample, we may have been unable to detect significant differences in HIV incidence among groups

Conclusions

- Most patients who received starter packs completed full course of PEP
- High rates of completion support distribution of PEP starter packs in venues that serve patients at highest need
- Because of continued HIV risk behavior, linkage to PrEP or other prevention is a key intervention following PEP