Provider Knowledge, Use, and Barriers to the Uptake of PEP and PrEP

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BACKGROUND

- In 2005, the Centers for Disease Control and Prevention (CDC) recommended the use of non-occupational post exposure prophylaxis (nPEP) for HIV prevention among individuals at high-risk .
- nPEP as a prevention strategy has not been widely implemented in the District of Columbia (DC).
- In 2011, CDC issued guidance on the use of pre-exposure prophylaxis (PrEP) as another HIV prevention method for men who have sex with men and heterosexuals at high-risk for HIV.
- As part of the CDC's Enhanced Comprehensive HIV Prevention Planning (ECHPP) Initiative, the DC Department of Health (DOH) will conduct a demonstration project to increase utilization of nPEP.
- The DC DOH is also preparing for an open-label PrEP demonstration project among Medicaid recipients.

OBJECTIVES

- In preparation for this project, we sought to determine knowledge, use, and barriers to nPEP and PrEP uptake among healthcare providers in DC.

METHODS

- A survey of all licensed infectious disease (ID) and American Academy of HIV Medicine Certified HIV providers in DC was conducted between March and August 2012.
  - Providers were asked to complete a confidential online survey using REDCap.
  - Non-responders were sent a paper survey to complete.
  - Participants received a $20 Amazon gift card for survey completion.
- Provider knowledge, attitudes, use, and perceived barriers to nPEP and PrEP were assessed and descriptive statistics were calculated.
- Bivariate analyses were performed to identify potential differences in knowledge and use by provider type.

RESULTS

- Fifty eight out of 123 providers responded to the survey (response rate 47%).
- There were no significant differences by provider type with regard to demographics and practice characteristics.

Table 1. Characteristics of Respondents (N=58)

Characteristics	N (%)
Age group: ≥50 yrs old	28 (48.3)
White non-Hispanic	39 (67.2)
Male	29 (50.0)
Type of provider	
Infectious disease physician	25 (43.1)
Internist/Family Practice physician	11 (19.0)
Pediatrician	5 (8.6)
Physician Assistant/Nurse Practitioner	9 (15.5)
Other*	8 (13.8)
>20 years in practice	24 (41.4)
Patients seen in 1 month at practice: >200	26 (44.8)
HIV patients seen in 3 months: >20	49 (84.5)
HIV patients seen by respondent in 3 months:>20	44 (75.9)
* Other includes ID fellows, pharmacists, other physicians and dentists.	

- ID physicians were significantly more likely to be 40 or older than non ID providers (76.9% vs. 65.7%, p=0.009) and very or somewhat familiar with the iPrEx study results than non-ID providers (100% vs. .83.9%, p=0.033).

Table 2. Provider Knowledge and Practices using nPEP and PrEP

	nPEP		PrEP	
	N	%	N	%
Aware of CDC nPEP/PrEP guidelines				
Yes	47	81.0	34	58.6
No	1	1.7	14	24.1
Don't know/Unsure	9	15.5	6	10.3
Missing	1	0.0	4	6.9
Protocols in place for nPEP/PrEP at practice				
Yes	18	31.0	7	12.1
No	31	53.4	41	70.7
Unsure	7	12.1	7	12.1
Missing	2	3.4	3	5.2
How often encountered patients requesting nPEP/PrEP in the past 6 months				
Often (at least once per week)	4	6.9	3	5.2
Occasionally (a few times a month)	13	22.4	4	6.9
Rarely (less than once a month)	18	31.0	19	32.8
Never	22	37.9	29	50.0
Missing	1	1.7	3	5.2
Ever prescribed nPEP/PrEP				
Yes	34	58.6	13	22.4
No	23	39.7	42	72.4
Missing	1	1.7	3	5.2
Obtain HIV serology before prescribing nPEP/PrEP	(n=34)		(n=13)	
Yes	32	94.1	13	100.0
No	2	5.9	0	0.0
Obtain HIV serology after prescribing nPEP/PrEP	(n=34)		(n=13)	
Yes	32	94.1	12	92.3
No	2	5.9	1	7.7
When obtained serology after prescribing nPEP/PrEP (select all that apply)				
1 month after	25	73.5	5	38.5
3 months after	26	76.5	8	61.5
6 months after	20	58.8	4	30.8
Other	2	5.9	1	7.7

RESULTS

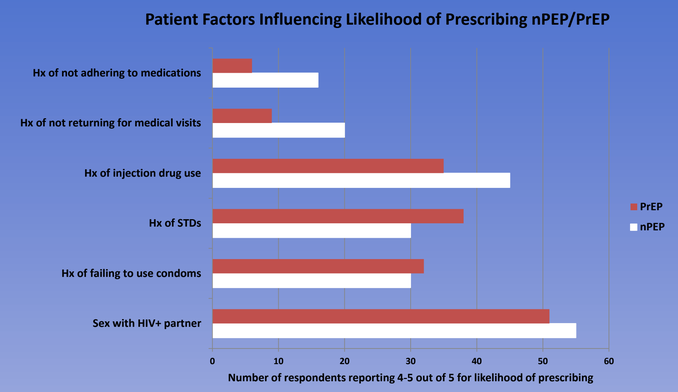
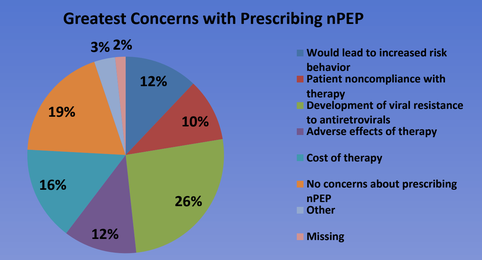
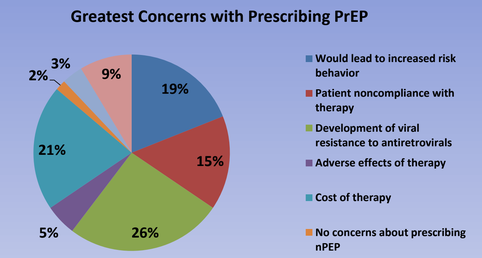


Table 3. Acceptability of Prescribing nPEP and PrEP

Statement	NPEP		PrEP	
	No.	%	No.	%
It is feasible to provide nPEP/PrEP in my practice				
Strongly agree	26	44.8	11	19.0
Agree	22	37.9	23	39.7
Neutral	5	8.6	11	19.0
Disagree	0	0.0	5	8.6
Strongly disagree	4	6.9	3	5.2
Missing	1	1.7	5	8.6
There is adequate time to provide nPEP/PrEP in my practice				
Strongly agree	26	44.8	14	24.1
Agree	21	36.2	24	41.4
Neutral	6	10.3	7	12.1
Disagree	1	1.7	6	10.3
Strongly disagree	1	1.7	2	3.4
Missing	3	5.2	5	8.6
nPEP/PrEP will promote HIV resistance				
Strongly Agree	0	0.0	1	1.7
Agree	6	10.3	16	27.6
Neutral	14	24.1	20	34.5
Disagree	29	50.0	13	22.4
Strongly disagree	8	13.8	3	5.2
Missing	1	1.7	5	8.6
nPEP/PrEP will promote risky behavior				
Strongly Agree	0	0.0	4	6.9
Agree	8	13.8	16	27.6
Neutral	19	32.8	17	29.3
Disagree	22	37.9	12	20.7
Strongly disagree	8	13.8	4	6.9
Missing	1	1.7	5	8.6
I will provide nPEP/PrEP to serodiscordant couples				
Strongly agree	24	41.4	17	29.3
Agree	18	31.0	27	46.6
Neutral	9	15.5	8	13.8
Disagree	5	8.6	0	0.0
Strongly Disagree	0	0.0	1	1.7
Missing	2	3.4	5	8.6

RESULTS





CONCLUSIONS

- Providers in DC are familiar with and currently prescribing nPEP and PrEP to select high-risk populations.
- Similar barriers to providing nPEP and implementation of PrEP were identified including:
  - HIV resistance
  - Cost reimbursement
- To maximize increase and uptake of both prevention approaches, the DC Department of Health should focus on:
  - Increasing patient awareness of nPEP and PrEP through education and social marketing
  - Collaborating with health insurers to ensure coverage for medications and administrative costs associated with delivery of nPEP and PrEP

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