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Immediate PrEP Initiation at New York City Sexual Health Clinics

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BACKGROUND

- Immediate PrEP initiation (iPrEP) at walk-in settings, such as sexual health clinics(SHC), can reduce barriers to PrEP uptake among patients within ongoing risk for HIV acquisition.
- Following a non-reactive rapid HIV test, PrEP candidates are clinically assessed the same day for PrEP initiation at NYC SHC through
  - ❑ Medical evaluation
  - ❑ HIV NAAT testing
  - ❑ Hepatitis B virus (HBV) serology
  - ❑ Metabolic panel with calculated glomerular filtration rate (GFR)
- **iPrEP:** A 30-day supply of Tenofovir/Emtricitabine(TDF/FTC)
  - ❑ Is provided to candidates prior to return of laboratory results if medical evaluation yields no contraindications to iPrEP
  - ❑ Is instructed to be stopped if laboratory testing reveals GFR< 60ml/min or positive HIV NAAT
  - ❑ Can continue PrEP if laboratory testing reveals reactive HBV surface antigen
- **dPrEP**: Initiation of PrEP is delayed
  - ❑ If medical evaluation yields findings of symptoms/signs of acute HIV (AHI), history of kidney disease, or a history of HBV infection
  - ❑ Until laboratory testing reveals no medical contraindications to PrEP initiation
- iPrEP and dPrEP patients are referred to external PrEP providers for ongoing PrEP care

OBJECTIVE

- Determine the prevalence of medical contraindications to PrEP initiation among iPrEP and dPrEP patients at NYC SHC.

METHODS

- **Data source:** NYC SHC electronic medical records
- **Observation period:** January 2017- June 2018
- **Study population:**
  - ❑ Cis-gender men or women
  - ❑ Age> 18 years
  - ❑ Clinically evaluated for PrEP initiation
    - ❖ Non-reactive HIV rapid test (3rd or 4th generation) at time of evaluation
    - ❖ Metabolic panel ordered at time of evaluation
    - ❖ HIV NAAT ordered at time of evaluation
  - ❑ Excluded patients who had previously a metabolic panel or hepatitis serology ordered at NYC SHC at time of PrEP evaluation.
- **Outcomes :**
  - ❑ Medical contraindications to PrEP initiation by PrEP initiation method (iPrEP vs. dPrEP)
    - ❖ **Absolute**
      - ➢ Positive HIV NAAT
      - ➢ GFR< 60 ml/min
    - ❖ **Relative**
      - ➢ Reactive HBV Surface Antigen (HBsAg)
  - ❑ Return for PrEP initiation within 60 days among dPrEP patients without absolute or relative contraindications
- **Analysis:**
  - ❑ Chi-square or Fisher's exact tests were used to compare categorical variables among iPrEP and dPrEP patients
  - ❑ A *p* value of 0.05 or less was considered statistically significant.

RESULTS

Figure 1: PrEP Initiation Among Candidates at NYC SHC by PrEP model (iPrEP vs. dPrEP) and Medical Contraindications: January 2017- June 2018.

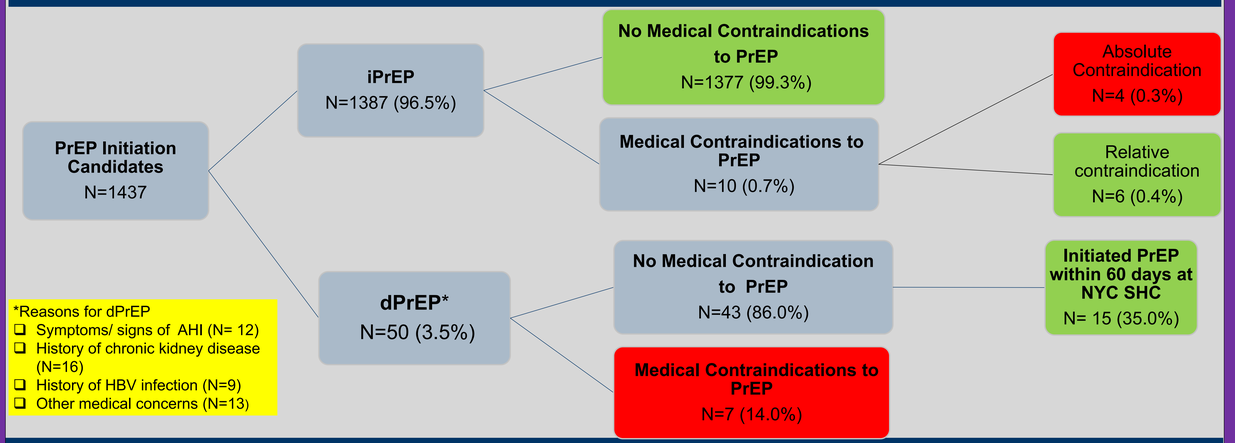

Table 1: Characteristics and Medical Contraindications to PrEP Initiation Among PrEP Candidates at NYC SHC: January 2017- June 2018

Variable	Total Candidates for PrEP Initiation N(%)	iPrEP N (%)	dPrEP N (%)	*P value*
Total	**1437**	**1387 (100)**	**50 (100)**	
Age ≥ 40 years	147 (10.2)	135 (9.7)	12 (24.0)	**0.001**
Foreign born	456 (31.7)	440 (31.7)	16 (32.0)	0.96
Inconsistent anal/vaginal condom use	1059 (73.7)	1019 (73.5)	40 (80.0)	0.30
Gender/Sexual behavior				**<.001**
Men who have sex with men	1361 (94.7)	1319 (95.1)	42 (84.0)	
Men who have sex with women only	18 (1.3)	17 (12.3)	1(2.0)	
Women	58 (4.0)	51 (3.7)	7 (14.0)	
Race/Ethnicity				0.62
Hispanic/ Latino	429 (29.9)	410 (29.6)	19 (38.0)	
Non-Hispanic black	333 (23.2)	323 (23.3)	10 (20.0)	
Non-Hispanic white	475 (33.1)	461 (33.2)	14 (28.0)	
Non-Hispanic other	200 (13.8)	193 (13.9)	7 (14.0)	
Any Medical contraindication to PrEP initiation	17 (1.2)	10 (0.7)	7 (14.0)	**<.001**
Positive HIV NAAT	3 (0.2)	2 (0.1)	1 (2.0)	0.10
GFR<60ml/min	6 (0.4)	2 (0.1)	4 (8.0)	**<.001**
Reactive HBV surface antigen	8 (0.6)	6 (0.5)	2 (4.0)	**0.03**

RESULTS

- Among iPrEP patients, patients ≥40 years were 6 times more likely to have medical contraindications compared to younger patients (3.0% vs.0.5%;p=0.01)
- PrEP was discontinued within 10 days among all four iPrEP patients with identified absolute contraindications
- dPrEP patients were more likely to be women, older than 40 years, and have medical contraindication to PrEP initiation
- Among 43 dPrEP patients who did not have medical contraindications to PrEP initiation
  - ❑ 15 initiated PrEP at NYC SHC within 60 days
  - ❑ 23 did not initiate PrEP at NYC SHC within 60 days
  - ❑ 5 had kidney or liver function tests abnormalities and did not initiate PrEP at NYC SHC
- 58 **women** were evaluated for PrEP initiation
  - ❑ Women were nearly 4 times more likely to have their PrEP delayed when compared to men (12.1%vs.3.1%;p<0.001)
  - ❑ None had medical contraindications to PrEP initiation.

DISCUSSION

- **Limitations**
  - ❑ We may undercounted the number of dPrEP candidates because we used metabolic panel testing to define candidates for PrEP initiation, and clinicians may postpone metabolic panel testing until acute HIV is ruled out by HIV NAAT testing
  - ❑ Among dPREP patients, we can only measure PrEP initiation at NYC SHC
  - ❑ This study excluded by design all patients who received PEP prior to PrEP
- **Conclusion**
  - ❑ In a setting with no access to previous renal function and hepatitis B serology testing, clinical assessment appears adequate to identify patients who could start immediate PrEP prior to return of laboratory testing results required for PrEP initiation
  - ❑ Very few iPrEP patients needed to discontinue PrEP due to medical contraindications
  - ❑ Delaying PrEP initiation at NYC SHC resulted in substantial loss to follow up
- **Implications**
  - ❑ Immediate PrEP initiation is a promising model to increase PrEP uptake at walk-in settings such as sexual health clinics
  - ❑ Dispensing PrEP medications based on medical evaluation prior to availability of lab testing results is a safe model of initiating PrEP