

Background

African American (AA) cisgender women (cis-women) are disproportionately affected by HIV, with an 18-fold higher risk of acquiring HIV infection compared to White women. In Chicago, PrEP uptake and success through the cascade among AA cis-women is extremely low. We designed a mixed-methods study that examined PrEP knowledge, attitudes, preferences and experiences among a sample of PrEP-naïve and PrEP-initiated women in order to identify interventions needs and implementation strategies that can increase PrEP uptake among AA cis-women in Chicago.

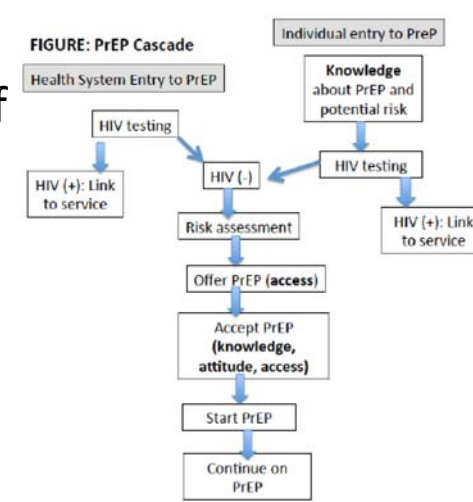


Figure 1

Methods

Survey: We conducted a cross-sectional study with N = 370 adult, non-pregnant, HIV-negative cis-women recruited from the University of Chicago Emergency Department and Chicago Department Public Health Sexually Transmitted Infection clinic. Women completed a close-ended self administered tablet-based survey consisting of previously validated questions item on knowledge, attitudes and preferences around PrEP for initial access and follow-up.

Qualitative study. We conducted focus groups (FG) with N = 16 PrEP-naïve women and key informant interviews (KII) with N = 7 women who had initiated PrEP. The FG protocol was informed by social-ecological theory and explored the multi-level factors that shape women's PrEP knowledge, attitudes, and preferences, e.g., individual, dyadic (partner, peer), community, institutional/system, and policy levels. The KII used a semi-structured interview guide to understand women's pathways to PrEP use, facilitators of and barriers to PrEP uptake and adherence, and recommendations to increase PrEP access and uptake for AA cis-women. Deidentified transcripts for FG and KII were produced and uploaded into a qualitative data analysis program.

Analyses:

Quantitative: Data were analyzed in SAS 9.3 to calculate descriptive statistics for sociodemographic factors, HIV risk, PrEP knowledge and attitudes, as well as preferences for starting PrEP. Multivariate analysis was conducted to identify factors associated with knowing about PrEP and interest in starting PrEP. **Qualitative:** Data were analyzed in Dedoose software using a codebook developed via an iterative process by the research team. **FGD** are being analyzed by using constant comparison analysis. **KII** are being analyzed using grounded theory to identify themes and factors which facilitated success and explore recommendations how to better reach their peers eligible for PrEP and ensure access, uptake and adherence.

Domain	Areas
Demographics	Age, ethnicity, education
HIV risk	Sexual partners and practices, STIs, IDU
HIV knowledge	Transmission, treatment
Self-perceived HIV risk	Risk, worry
PrEP Knowledge and experience	Knowledge, recommended, use
PrEP attitudes interest and willingness,	Stigma, interest in using, willingness to use
Preferred sources of PrEP information	Usual source of health information, trusted sources for PrEP
Preferences for PrEP access	Source of medication, follow-up access
Potential barriers to PrEP	Cost, confidentiality, external stigma
Health care utilization	Regular sources of care, HIV testing

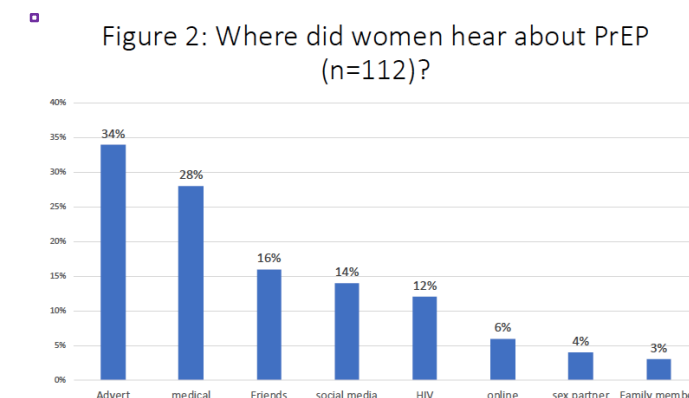
Results
We surveyed 370 women, 83% self-identified as black and three-quarters had a regular source of healthcare (71%). Most had vaginal or anal sex (83%) in the last 6 months, with high rates of inconsistent condom use (93%). One third had sex with >1 partners.

PrEP eligibility: 139 (37.6%) of women met the USPHS Summary guidance criteria for PrEP (*Calabrese S et al, in press*).

Knowledge: Only 30% (112) had heard of PrEP before the survey with a range of sources (Figure 2). Only knowing someone on PrEP (OR 15.6 95% CI (3.0-80.3)) was predictive of pre-existing knowledge.

PrEP **attitudes** were relatively positive: PrEP stigma score (3.3) and relatively high belief in effectiveness (3.8 out of 5)

	% (n)
HIV risk in last 6 months	
>1 partner vaginal sex	36% (130)
Inconsistent condom use	94% (267)
Bacterial STI (self-reported)	5% (17)
Sex for money or other goods	2% (6)
Worry about getting HIV (moderate to all the time)	16% (58)
Average Prep Stigma score (0-5) Mean (SD)	3.3 (0.62)
PrEP Effectiveness (1-5) Mean (SD)	3.8 (0.77)



PrEP interest: About a third (29% (105)), considered starting PrEP in the next 6 months with protecting health (77%) and reducing HIV worry (58%) most common reasons.

40.3% of women potentially PrEP eligible considered starting PrEP compared with 21% of women who did not meet that criteria. PrEP-eligible women also had higher levels of worry (53.3% some or more of the time versus 16% of not eligible)

Factors associated with considering PrEP start included being Latina (OR 3.5 95%CI (1.2-10.0), recently having a STI (OR 2.6 95% CI (1.3, 5.0)) more worry about HIV (OR 1.2 95%CI (1.0-1.5)) and increased belief in PrEP effectiveness (OR 2.1 95% CI (1.4, 3.3)).

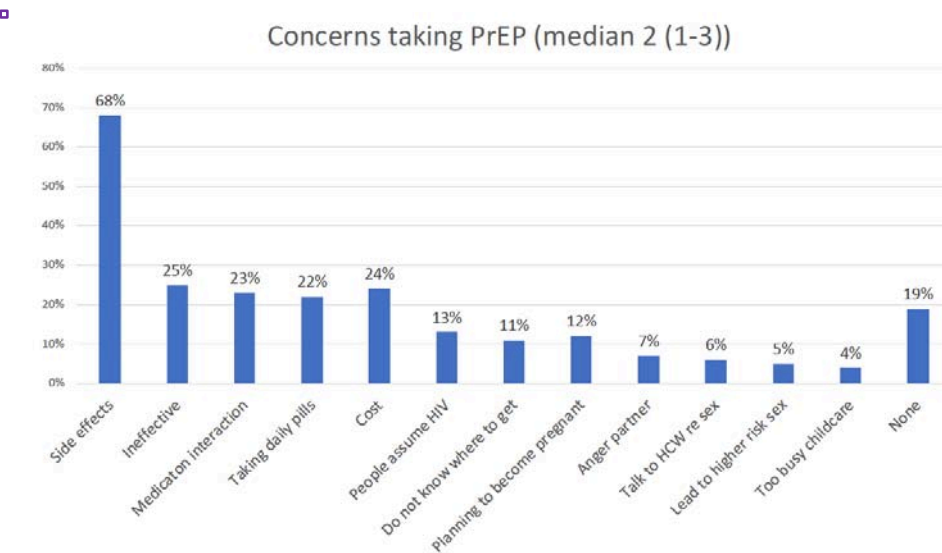


Figure 3

Top Preferred sources of PrEP information	
Regular Primary care provider	49% (182)
Other health care provider	35% (131)
HIV prevention program	36% (133)
Family planning clinic	28% (104)
Internet search	22% (83)
Top Preferred site to regularly get PrEP	
Regular primary care site	57% (210)
STI clinic	12% (45)
Family Planning	5% (19)
Pharmacy	18% (69)
Main support needed to take PrEP	
Financial Support	35% (128)
Adherence support	30% (109)
Disclosure to partner	18% (65)
None	28% (103)

Most women preferred to start and get PrEP in their usual source and relational continuity, confidentiality and cost most important

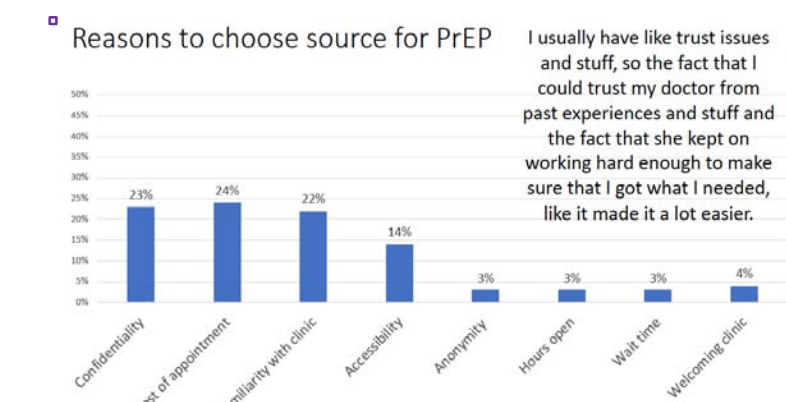
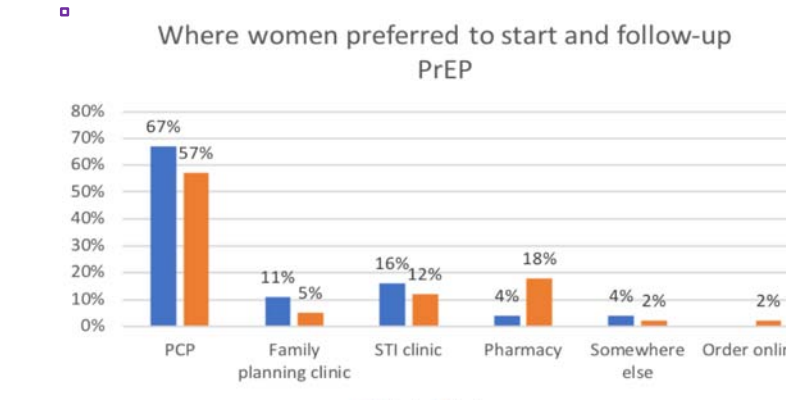


Figure 4a and b

Qualitative Results

Focus Groups: Themes generally aligned with survey results. Majority of women were unaware of PrEP yet perceived it as beneficial and expressed an openness to taking PrEP to prevent HIV. There was differing understandings of HIV risk/vulnerability based on age, relationship status, and lived experiences Women underscored the importance of having a trusted health provider introduce PrEP **Key Informant Interviews:** While all women decided to take PrEP to prevent HIV, the pathways to PrEP were different. The majority of women decided to start PrEP after a possible exposure to HIV that had frightened them: within the context of ongoing relationships (i.e., partner infidelity, condom failure), casual relationships and possibility of being exposed to HIV through sexual assault. For some women, it was based on a desire to empower themselves. Women heard of PrEP from their PCPs or with other services, such as HIV testing and birth control. Similar to the survey, after starting PrEP, women identified side effects as barriers to staying on the medication. **Open communication and trust with their provider** were key during the PrEP decision-making process.

In both KII and FGD, Many women reported seeing PrEP advertisements or pamphlets but these marketing efforts were not seen as impactful (disconnected) because not targeted for women and their community. They identified social networks, support groups, pamphlets, billboards, posters, community festivals, and other events as effective methods to advertise PrEP.

"I heard of PrEP, but I never knew what I was. I think I understand what she's saying, she's talking about the presentation of it, like the advertising of PrEP...images of maybe some people have misconceptions"
"Still, like I said, we're go see the gynecologist...they should be able to show it, even with pamphlets. We shouldn't have to come to a research group...to find this out." FGD
"if you gonna lie to me and ain't going tell the truth about what you out here messing around with these different women - and you catch something, I'm trying to protect myself..." KII

"basically, you're gonna have to get a lot of more African-American women to get out here and advocate for you all. Because if it's coming from you all, only thing they're - gonna take a look at is the dollar sign behind it. I'm gonna be honest with you, but - that's what you all need to get some more African-American women that are actually from the street - and have them advocate for you all." KII

Conclusions

- Despite significant PrEP work in Chicago, only 29% of women in our study had heard of PrEP. However, PrEP attitudes were positive, and once made aware of PrEP, one third considered starting in the near future with higher rates if potentially eligible.
- Qualitative findings suggest that healthcare providers, particularly those with relational continuity, social networks, and more tailored social messaging may be key avenues for increasing PrEP awareness, access, and uptake.
- Translating these results into interventions which reflect women's preferences and acknowledge barriers are critical to increase PrEP uptake by cisgender women in Chicago.