

Pre-Exposure Prophylaxis for HIV Infection Transgender and Gender Non-Binary Persons

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Disclosures



- I attended Gilead's 2018
 U.S. Latinx/Hispanic PrEP Advisory Program.
- Only FTC/TDF and now FTC/TAF are approved by the FDA and only for use as daily PrEP in some but not all populations.
- I will do my best to use consistent terminology that respects everyone.



Topics to be covered

- Epidemiology and the problem of misclassification
- Sexual history-taking for transgender (TG) and gender non-binary (GNB) persons
- Efficacy of PrEP in TG/GNB persons
- PrEP-hormone interactions
- Barriers to PrEP uptake



HIV epidemiology in TG/GNB populations

- 2009-2014, 2351 transgender persons dx with HIV in U.S.
 - 84% transgender women
 - 15% transgender men
 - 1% other identity (e.g. genderqueer)
 - >50% Black/African American
- Prevalence of HIV in transgender women 21.7%
 - Black transgender women 56%
- Prevalence of HIV in transgender men
 - All transgender men 0-4%
 - Transgender men who have sex with men? Unknown

Clark et al. AIDS Behav 2017, Herbst et al. AIDS Behav 2008 Reisner & Murchison, Global Public Health, 2016



Misclassification leads to under-estimation of disparities

- NIH collects sex as binary for research participants
- Many states only recently started included the ability to classify persons as transgender in HIV surveillance
- Ideal = 2 question
 - 1) What was your sex at birth?
 - 2) What is your current gender identity?
 - (I was recently asked not to use "other" here)
- In PHSKC STD clinic, going from 1→2 questions ↑% of clients identified as transgender or gender non-conforming from 0.5%→2.4%

Tordoff et al, STD, 2019; Tordoff et al Epidemiology 2019 (BRFSS)



Helpful questions for sexual history taking

- What types of sex do you have?
- Can I ask you a few questions about your sexual partners?
- What do you think about using condoms?
- Have you ever had any gender affirming surgeries such as breast or chest augmentation or masculinization, vaginoplasty, or phalloplasty? (as appropriate)
 - Helps to guide conversation about risk and STI screening



PrEP efficacy in transgender women

- Misclassification!
 - iPrEx originally reported only 29 TG participants
 - Actually 339 (14%)
 - Identify as female or trans (or culturally-appropriate term)
 - Use of feminizing hormones
- HIV infections: PrEP 11 v placebo 10
 - PrEP efficacy = 0%
 - No PrEP detected at infection
 - Transgender women less adherent than cisMSM
 - Truvada FDA-approved for transgender women
- Descovy also now approved for transgender women
 - N=45 in F/TAF and n=29 in F/TDF
 - No infections occurred among TG women
- Need for studies specifically for transgender women







PrEP efficacy in transgender men

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What do we know about PrEP in TG men?

- High risk and low uptake of PrEP in a National Online Sample of Transgender MSM in the US
 - Reisner et al; J Int AIDS Soc 2019; 22(9)
- Underutilization of PrEP among Transgender and Nonbinary Youth
 - Horvath et al; Transgend Health 2019; 4(1) 217-221



PrEP and feminizing hormones Drug interactions and implications

- iFACT: Hiransuthikul et al J Int AIDS Soc 2019
 - ↓ plasma TFV 12% w estradiol/cyproterone acetate (anti-androgen)
 - No impact on hormone levels
- Shieh et al, J Int AIDS Soc 2019
 - \downarrow plasma AUC TFV 27% and FTC 24% in 8 TGW c/w 8 cismen
 - No impact on hormone levels (variety of regimens)
- Implications and study conclusions
 - The magnitude of changes have unclear significance.
 - Probably wise to stress daily adherence for TGW on hormones.
 - 2-1-1 (event-based) dosing may not be appropriate for TGW.
 - Can reassure that PrEP will not have impact on hormones (a significant concern of TGW).



PrEP and masculinizing hormones: Drug interactions?

• i-BrEATHe study (SF) pending...



Barriers to PrEP uptake Transgender women

- Concern about side effects
- Difficulty taking pills
- Stigma
- Mistrust
- Lack of PrEP services within gender-affirming healthcare
- Concern about interactions with hormones
- Exclusion of transgender women in advertising
- Lack of research on transgender women and PrEP



Rael et al AIDS Behav 2018; Lake & Clark AIDS 2019

How to address barriers and disparities?

• Acknowledge disparities and put \$ towards reducing them

- Use data to identify populations at greatest risk and work with communities to implement policies and programs that address highest priority needs.

• Hire people from communities

- Help ensure that prevention strategies are culturally, linguistically, and age appropriate, and that they match people's health literacy skills.

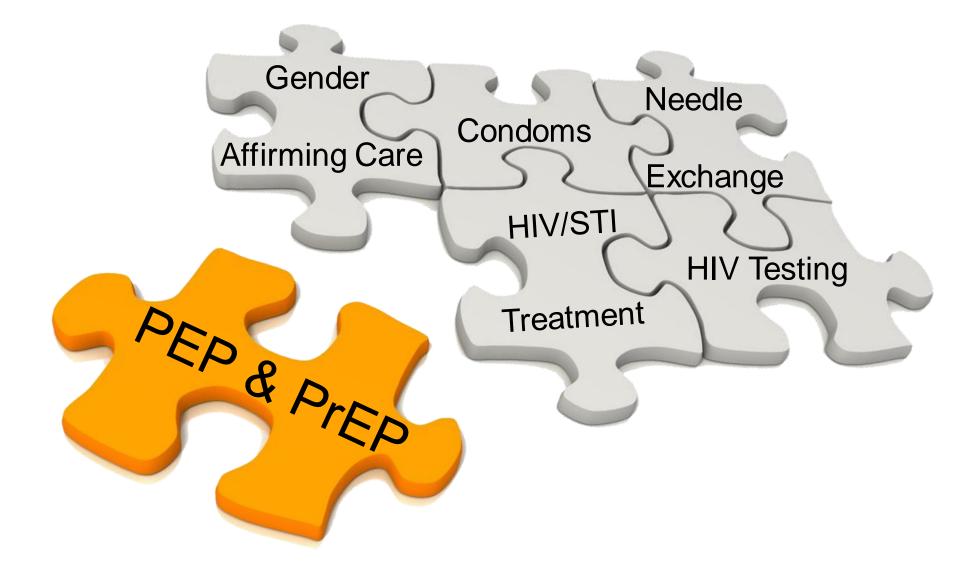
- Train and hire more qualified staff from underrepresented racial/ethnic/sexual minorities and people with disabilities.

- Support organizations doing work in community
 - Improve coordination, collaboration, and opportunities for engaging community leaders and members in prevention
 - Participate in community-led prevention efforts.

• VOTE

https://www.surgeongeneral.gov/priorities/prevention/strategy/elimination-of-health-disparities.html

"Highly active HIV prevention"



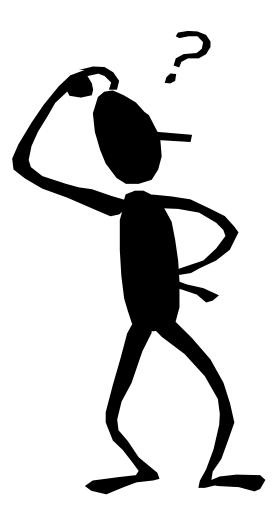


<u>https://www.cdc.gov/hiv/clinicians/transforming-health/index.html</u>

- Webinars
- National LGBT Health Education Center (Fenway)
- https://www.lgbthealtheducation.org/webinar/delivering-hivprevention-care-transgender-people/



Questions?





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