

CROI 2019 HIV PREVENTION UPDATE

by Lynda Dee

The 2019 Conference on Retroviruses and Opportunistic Infections (CROI) was held in Seattle from March 4 to March 7, 2019. Seattle is a wonderful city. The weather at CROI 2019 was uneventful without the blizzard we experienced in Boston during CROI 2018.

CROI is the most important and largest HIV Conference in the US. As usual there was a massive amount of data, including lots of important HIV prevention data. What follows are the prevention highlights of CROI 2019.

The results of Gilead's DISCOVER study was the most exciting HIV PrEP (Pre Exposure Prophylaxis) news presented at CROI, at least for transgender women and same gender loving men, referred to by the scientists as men who have sex with men (MSM). Unfortunately, cisgender women were not included in this study. Gilead compared their new drug Descovy (F/TAF) to their old drug Truvada (F/TDF) for HIV prevention. Truvada has been the only approved HIV prevention regimen to date. The results indicated that both drugs had similar virologic suppression rates with low rates of adverse events that resulted in discontinuations. But Descovy had significantly less bone and kidney side effects which may be a Truvada Achilles heel for some patients. The very bad news here is that Descovy was not studied in cisgender women. The overarching question here is whether the FDA will approve Descovy for cisgender women without the safety and efficacy data required for FDA approval. This will no doubt be quite a mess for the FDA to resolve. Meanwhile, women have yet again gotten the very short end of the proverbial stick!

The CDC presented an analysis on new PrEP usage eligibility estimates which indicated that there was an increase from 2014 to 2015 in the number of sexually active MSM who are PrEP eligible. PrEP eligibility estimates across race/ethnicity and age categories in 2015 exceeded 2014 estimates. Nearly 1/3 (32.6%) of adult, sexually active HIV-negative MSM and 13.5% of 15-17 year olds engaged in sexual activity fall within PrEP use FDA indications. Recent condomless anal intercourse was the most common PrEP indication at 88-100%. A recent sexually transmitted infection (STI) indication was far below at 11-31%. As a result of this data, the CDC concluded that more sexually active MSM are likely PrEP candidates than previously estimated. Unfortunately, a lower fraction of PrEP indicated candidates may be receiving PrEP than previously estimated. Moreover, given the rise in HIV case counts in younger and minority MSM, additional age and race/ethnicity-based considerations for PrEP implementation and access in this group may be needed to improve PrEP access according to the CDC. What an understatement!

The CDC also presented an additional analysis on the time to diagnosis and viral suppression after HIV infection. Infection to diagnosis time in women, heterosexual men and MSM across the US fell from 2012 to 2016, but not for men and women who inject drugs. Diagnosis to viral suppression fell significantly in all these groups. Both infection to diagnosis and diagnosis to viral suppression dropped significantly in whites, blacks and Hispanics. Diagnosis to viral suppression fell significantly in all age groups, except 13 to 24 year olds and 35 to 44 year olds.

The CDC stressed that although there has been overall progress in the time when people can transmit HIV, half of all analyzed people with HIV were not diagnosed until three years after they were HIV infected. Straight men at a median of 63 months and Hispanics at a median of 45 months had longer HIV diagnosis delays after infection than other groups.

The next two studies are aimed at developing new methods to identify people who are eligible for PrEP, and new strategies to provide PrEP to eligible people as soon as possible.

PrEP usage has been limited and inequitable. It has also been difficult for providers to identify people at risk for HIV. As a result, researchers at the Harvard Medical School in Boston in conjunction with Harvard Pilgrim Health Institute conducted a very interesting study in patients enrolled in Kaiser Permanente of Northern California which is a large healthcare system in order to determine whether routinely collected existing HIV risk (EHR) prediction data, including demographics, social history, lab results, medications and diagnosis can be used to identify people with high HIV risk who are not yet using PrEP. After comparing full versus simpler EHR models in MSM only, researchers determined that routinely collected EHR data from patients who sought regular medical care can be used to identify people with a high risk for HIV who are not yet using PrEP. The researchers also indicated future steps, including the need to optimize EHR-based HIV risk prediction tools for women and in other clinical settings. Integration of HIV risk prediction tools into EHRs at points of healthcare and evaluation of the impact of PrEP on the rate of new HIV cases (HIV incidence) was also recommended.

Another interesting study conducted by the New York City Sexual Health Clinics (SHCs) looked at whether PrEP can be safely initiated immediately for walk-in patients who agreed to initiate PrEP, based on only their medical history, physical exam and negative rapid HIV test compared to the choice of delayed PrEP (dPrEP). The point here is determine whether immediately initiated PrEP (iPrEP) is safe and effective in reducing HIV transmission without harmful side effects which cause PrEP discontinuation compared to delayed PrEP (dPrEP) initiation. The bottom line was that the NYC researchers determined that iPrEP for walk-ins at SHCs was a promising model and that PrEP was rarely discontinued for medical contraindications. On the other hand, there was a substantial number of patients who delayed PrEP due to side effect concerns, who did not return to the SHCs and were as a result lost to follow-up. Women were 4 times more likely to delay PrEP than men.

Obviously, there is still lots of HIV prevention work to do on many fronts. Stay tuned for future updates and hopefully continued good news on the HIV prevention front.