

## One Third of MSM PrEP Users in French Analysis Quit in 30 Months

17th European AIDS Conference, November 6-9, 2019, Basel

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One third of Paris-area men who have sex with men (MSM) enrolled in the Prevenir study of preexposure prophylaxis (PrEP) quit PrEP within 30 months [1]. Analysis of the 2699-man study found that younger men, those with less education, and new PrEP users ran a higher risk of stopping PrEP.

PrEP has become a critical--and much-studied--component of HIV prevention strategies. But data remain skimpy on how long people continue PrEP and, if they stop, why they stop. French ANRS investigators analyzed data from the Prevenir study to estimate PrEP persistence and reasons for quitting.

Beginning in May 2017, Prevenir is an open-label prospective cohort study that recruits HIV-negative people at high risk for HIV infection and offers them daily tenofovir/emtricitabine (TDF/FTC) or as-needed PrEP taken only before and after sex. Participants must have an estimated glomerular filtration rate at or above 50 mL/min and must be negative for hepatitis B surface antigen if they choose as-needed PrEP. Participants get tested for HIV and kidney function every 3 months.

To be analyzed in the persistence/discontinuation study, Prevenir participants had to be MSM and have at least one follow-up visit (99% of Prevenir enrollees are MSM). Researchers defined PrEP discontinuation as stopping PrEP or missing the last two follow-up visits. They used univariable and multivariable Cox models to identify factors associated with stopping PrEP.

The analysis included 2699 MSM who met entry criteria. While 8.4% of men were 18 to 25 years old, 19% were 25 to 30, 35.3% were 30 to 40, and 37.3% were older than 40. Most men, 84.4% were born in France, and almost three quarters had more than a 2-year university degree. Half of these men had a sexually transmitted infection in the last 12 months, 45% had a regular sex partner, and 13% had a prior psychiatric condition.

Half of participants were already using PrEP when they enrolled in Prevenir, 51% opted for as-needed PrEP, and 49% preferred daily PrEP. Men had a median of 10 sex partners in the last 3 months and a median of 2 condom-free anal sex encounters in the last 4 weeks. While 37% reported using a condom the last time they had sex, 14% used psychoactive drugs the last time they had sex.

Of the 358 people who discontinued PrEP, 100 clearly stopped PrEP and 258 were lost to follow-up (stopped keeping study visits). Seventy-six men quit because they no longer felt at risk for HIV infection. Only 4 quit because of adverse events: one HCV infection, one grade 3 vomiting, one grade 1 diarrhea, and one grade 1 nausea, headache, and dizziness.

Accounting for staggered entries into the study, Kaplan-Meier analysis estimated a 12-month discontinuation rate of 16% (including 5% stopping PrEP) and a 30-month discontinuation rate of 32% (including 11% stopping PrEP).

Cox proportional hazards modeling determined that younger age, less education, and not already using PrEP when enrolling in Prevenir independently boosted chances of discontinuing PrEP. Compared with men 40 years or older, those 30 to 40 had a 40% higher risk of stopping PrEP (hazard ratio [HR] 1.40, 95% confidence interval [CI] 1.06 to 1.83), those 25 to 30 had a 90% higher risk (HR 1.90, 95% CI 1.41 to 2.57), and those 18 to 25 had more than a doubled risk of quitting (HR 2.46, 95% CI 1.72 to 3.51).

Compared with men who had more than 2 years of college, those with less than a high-school education had a two thirds higher risk of discontinuing PrEP (HR 1.66, 95% CI 1.04 to 2.64). And compared with men already on PrEP when entering Prevenir, those not yet on PrEP had an 85% higher risk of quitting (HR 1.85, 95% CI 1.42 to 2.40).

Prevenir investigators proposed that qualitative research involving young MSM with low education levels could refine the understanding of why they stop PrEP and may help devise interventions aimed at bolstering PrEP persistence.

#### Reference

1. Costagliola D, Ghosn J, Spire B, et al. PrEP persistence and associated factors: an analysis from the ANRS Prevenir study. 17th European AIDS Conference, November 6-9, 2019, Basel. Abstract PS11/1.