Inequities in PrEP Annualized Pill-Day Coverage: United States, 2018-2022

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BACKGROUND

Pre-exposure prophylaxis (PrEP) is highly effective to reduce risk of HIV infection, but the population-level impact of PrEP depends on the proportion of people with PrEP indications who use it and how long they stay on it (persistence).

METHODS

Previously reported methods and commercial pharmacy data identified PrEP users and the duration of PrEP use by calculating number of pills dispensed in a year (pill-days per year). PrEP users include all people who, at any point during the year, filled a prescription for emtricitabine-tenofovir disoproxil fumarate, emtricitabine-tenofovir alafenamide fumarate, and/or cabotegravir, but were not on any other antiretroviral medications. We calculated mean pill-days for the US in 2018 and 2022 overall and by gender, race/ethnicity, and age group. Race/ethnicity was missing for 75% of records. Statistical differences in mean days on PrEP per year were assessed by gender, race/ethnicity, and age. To assess the potential impact of 2-1-1 PrEP dosing on mean days of PrEP use, we compared 2018 and 2022 (pre- and post-US Public Health Service (USPHS) guideline for 2-1-1 dosing).

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RESULTS & CONCLUSION

We evaluated data from 225,180 PrEP users in 2018, and 459,984 PrEP users in 2022. In 2022, the mean number of days covered by dispensed PrEP prescriptions among PrEP users was 187 (SD: 129.8; Figure). Mean days was lower among female (mean 123 days) than male (mean 192 days) users (P<0.01). Among PrEP users with race/ethnicity data, mean days of use were higher for White non-Hispanic (NH) (255 days) than for Hispanic (239 days) or Black NH (231 days) users (p<0.01 for each comparison). Older users had more days covered by PrEP than younger users (<16 years: 126 days; 16-29 years: 159 days; >30 years: 201 days; p<0.01 for comparisons between <16 years and other groups). A comparison of overall data for 2018 (182 days) versus 2022 (187 days) did not suggest that the USPHS 2-1-1 PrEP guideline was associated with fewer days of coverage.

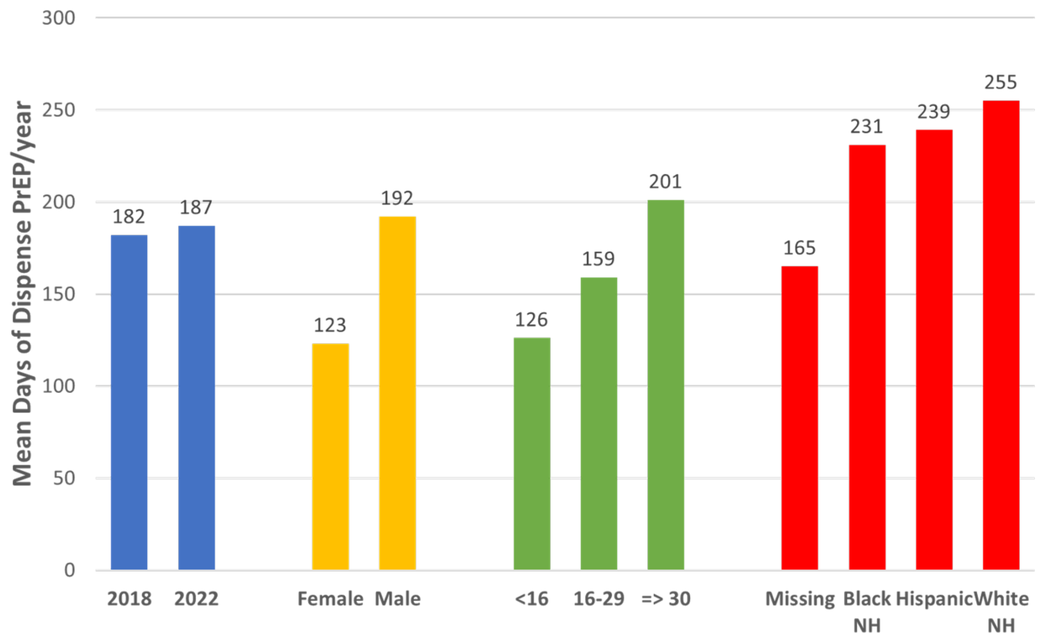


Figure 1. Mean number of days covered on oral pre-exposure prophylaxis, 2018 and 2022; and by sex, age and race/ethnicity, 2022

CONCLUSIONS

* PrEP programs are often evaluated by enumerating people who used PrEP at any time during a year; our data indicate that there are significant differences in PrEP coverage during a year's time, and that an annual use indicator might mask inequities in PrEP protection, among women, in particular.

* Black NH and Hispanic people, and younger people had fewer dispensed days of coverage than White NH and older ages, respectively. Missing data on race/ethnicity may mask larger underlying racial/ethnic disparities .

* Assessments of days of PrEP coverage should be included in assessments potential impact of PrEP and to address and monitor PrEP equity.

* Policy considerations, such as Medicaid Expansion and PrEP Drug Assistance Programs, have been shown to be associated with more equitable PrEP use; their implementation might also mitigate the inequities described here.