Gender-Affirming Care Linked to Better HIV Outcomes for Trans People

HIV prevalence went down and viral suppression went up as more people used gender-affirming hormone therapy at two clinics serving LGBTQ+ communities.

May 21, 2025 By Liz Highleyman

Transgender people who receive gender-affirming hormone therapy appear to have better HIV outcomes, according to a new study published in The Lancet HIV. As the proportion of trans and gender-diverse people receiving hormone therapy rose at two primary care clinics, HIV prevalence and the likelihood of not having viral suppression declined.

"Gender-affirming care is important for optimizing HIV outcomes among trans people," the study authors concluded. "Our results underscore the vital role of gender-affirming models of care and access to gender-affirming hormone therapy for trans people."

Transgender, gender-nonconforming and nonbinary people have higher rates of HIV compared with the population at large, as they may be less likely to access prevention services, medical care and antiretroviral treatment. Tailored services have helped close this gap—trans people were a prioritized population in the National HIV/AIDS Strategy for 2022-2025—but political shifts put this progress in jeopardy.

Accurate information about how many trans and gender-diverse people are living with HIV and their prevention and treatment outcomes have been hard to come by. In recent years, the Centers for Disease Control and Prevention's HIV surveillance data and care metrics have included data according to gender identity (after previously counting trans women as "men who have sex with men"), but the Trump administration has changed how trans people are classified, removed relevant data and resources, and reduced funding for targeted research and services. In fact, the researchers noted that some of the referenced sources became inaccessible after this manuscript was accepted.

Prior research suggests that trans people who receive gender-affirming therapy are more likely to be engaged in medical care and may be more inclined to start and stay on antiretroviral treatment. On the other hand, some trans people are concerned that medications used for pre-exposure prophylaxis (PrEP) or HIV treatment could interfere with the effectiveness of hormones—or vice versa—though this has not been observed in numerous studies.

To learn more, Sari Reisner, ScD, of the University of Michigan School of Public Health, Asa Radix, MD, of the Callen-Lorde Community Health Center and Columbia University Mailman School of Public Health, and colleagues assessed gender-affirming hormone therapy delivered in primary care settings as an intervention to improve HIV outcomes for trans people.

LEGACY is a longitudinal cohort of trans adults receiving primary care at two federally qualified health centers primarily serving LGBTQ+ communities: Callen-Lorde in New York City and Fenway Health in Boston. Participants are at least 18 years old and have a gender identity different from their assigned sex at birth.

Among the 8,109 participants in 2019, just over a third (36.5%) were transgender women, nearly a third (31.3%) were transgender men, 12.4% were nonbinary assigned female at birth, 6.2% were nonbinary assigned male and the remaining 13.6% reported another trans or gender-diverse identity. The median age was 29 years, with a majority (57.2%) being age 30 or younger. More than half (54.8%) were white, 20.5% were Latino, 16.3% were Black and 6.1% were multiracial. About half had private insurance, and a third were covered by public insurance (such as Medicaid or the Ryan White HIV/AIDS Program), but 5.6% were uninsured. About 40% had an income below the federal poverty level. Only about 3% had been prescribed PrEP, and about 4% tested positive for other sexually transmitted infections.

Using electronic health records from 2013 through 2019, the researchers analyzed associations between gender-affirming hormone therapy and the likelihood of testing positive for HIV and, among those with an HIV diagnosis, maintaining viral suppression on antiretroviral therapy over the past 12 months (defined here as a viral load below 200). Gender-affirming hormone therapy included puberty blockers, anti-androgen medications, estrogens, progesterone and testosterone.

During the first year of the study period, most of the smaller population of 2,983 participants (85.5%) were prescribed gender-affirming hormone therapy. At that point, 272 people (9.1%) were HIV positive; of these, 61 (22.4%) did not have viral suppression. By 2019, the cohort population had reached 8,109 participants, and the proportion on hormone therapy had risen to 89.4%. A smaller proportion was HIV positive (560 people, or 6.9%); of these, 88 (15.7%) did not have viral suppression.

The overall HIV prevalence in this study is lower than rates previously reported for trans people. The researchers suggested that this might be due to the high proportion of trans men and nonbinary people assigned female, whereas most prior studies mainly looked at transgender women.

However, Black, Latina and multiracial transgender women in this analysis were much more likely to be HIV positive compared with the full cohort, at 29.4%, 18.0% and 17.8%, respectively. HIV prevalence was lower among transgender men; Black trans men had the highest rate, at 5.9%. While HIV seropositivity appeared to be stable for most groups during follow-up, it increased for Black transgender women. Looking at treatment outcomes, younger trans people were less likely to have viral suppression.

Based on these findings the researchers calculated that gender-affirming hormone therapy was associated with a 37% lower rate of HIV seropositivity and a 44% lower likelihood of having uncontrolled HIV compared with trans people not on hormones.

The reasons for the beneficial effects of gender-affirming hormone therapy are unclear, but the researchers noted that hormone therapy has been linked to reduced mental distress and improved quality of life, which could facilitate behaviors such as condom use or adherence to antiretrovirals. Gender-affirming care might also increase trust with providers, reducing barriers to discussing sexual health concerns or adherence difficulties. Unfortunately, federal funding cuts are likely to hamper further research along these lines. Indeed, as STAT reported, Reisner has lost all of his existing grants from the National Institutes of Health.

“Years retained in care predicted increased risk for HIV seropositivity and decreased risk for viral non-suppression, highlighting engagement in care as key to identifying new HIV infections and enhancing viral suppression,” the study authors wrote. “Combination interventions that pair gender-affirming hormone therapy with other services, such as PrEP for HIV prevention and HIV care, might hold promise.”

Click here for more news about HIV and transgender people.
