

Older People With HIV May Be Taking Too Many Meds

So-called polypharmacy can increase the risk for frailty and repeated falls.

February 12, 2024 By [Liz Highleyman](#)

Many older people living with HIV take multiple medications, some of which they may not need, according to study results published in the [Journal of Acquired Immune Deficiency Syndromes](#). Another study found that people taking more meds had a slower gait speed—a sign of frailty—and were more likely to experience recurrent falls. These findings suggest that medications should be reviewed regularly to ensure that older people with HIV are not taking drugs that are unnecessary or inappropriate.

Effective antiretroviral treatment has extended the life expectancy of people with HIV, and more than half of HIV-positive people in the United States [are now ages 50 and older](#). Some research suggests that people with HIV are more likely to develop cardiovascular disease, non-AIDS cancers, kidney disease and other age-related chronic conditions at younger ages. Older individuals often have multiple comorbidities and may take several other medications in addition to antiretrovirals. However, there are no specific tools to identify potentially inappropriate medication use by older people living with HIV.

Manuel Vélez-Díaz-Pallarés, PharmD, PhD, of Hospital Universitario Ramón y Cajal in Madrid, and colleagues conducted a scoping review of five electronic databases to look for studies reporting the use of tools to identify potentially inappropriate medications used by older people with HIV.

After reviewing more than 50,000 records of publications and HIV conference abstracts from 2010 through 2022, the researchers identified 39 relevant studies, most of which were conducted at single centers in Europe. Most used explicit criteria to identify potentially inappropriate medications, mainly the American Geriatrics Society's [Beers Criteria](#) and [STOPP \(Screening Tool of Older Persons' Prescriptions\)](#) and [START \(Screening Tool to Alert to Right Treatment\)](#) criteria.

The authors found that potentially inappropriate prescribing is common among clinicians caring for older people with HIV. Around a third of HIV-positive people may be taking medications that are inappropriate for their current condition or are using them longer than recommended. On the other hand, clinicians were not prescribing certain drugs, such as [statins to prevent cardiovascular disease](#), for some people who could benefit.

Prolonged use of medications for depression and anxiety was a particular concern, the authors noted. These include benzodiazepines and anticholinergic drugs that block acetylcholine, a neurotransmitter that relays signals from nerves to muscles and organs. According to the reviewed studies, some 25% of older people with HIV were taking anticholinergic medications. In addition to psychiatric drugs, this class includes common prescription and over-the-counter medications such as codeine for pain relief and the antihistamine Benadryl (diphenhydramine). Side effects of anticholinergic drugs may include dry mouth and eyes, constipation, decreased mental alertness and poor coordination, and they have been [linked to frailty and falls](#).

The review also included studies that evaluated efforts to optimize prescribing, which found that regularly reviewing and stopping unneeded medications could reduce problems related to polypharmacy. [In one study](#), older people with HIV were taking an average of 12 medications in addition to their antiretrovirals, and assessment led to the discontinuation of two drugs, on average.

“Explicit conventional tools to identify potentially inappropriate medications in older populations may need to be adapted to tackle the needs of people living with HIV,” the study authors concluded. “Implicit tools may be more valid, although their use is more time-consuming, and standardization is complex.”

In the second study, [presented at last year’s IDWeek conference](#) and recently published in [Clinical Infectious Diseases](#), Priya Kosana, an MPH student at the Yale School of Public Health, and colleagues assessed the prevalence and clinical impact of polypharmacy among people with HIV. They focused on gait speed and falls, which can lead to injury—including bone fractures—and are associated with increased morbidity and mortality.

The researchers used data from the AIDS Clinical Trials Group A5322 study [Long-Term Follow-up of Older HIV-Infected Adults: Addressing Issues of Aging, HIV Infection and Inflammation](#). The analysis included 977 people ages 40 and older who were on antiretroviral treatment with viral suppression.

About 20% of study participants were women, half were non-Latino white, the median age was 51 years and 6% were over age 65. They had been on antiretroviral treatment for a median of eight years. The current median CD4 count was high, at 630, but the median lowest-ever count was 197, which qualifies for an AIDS diagnosis. More than half had a history of any comorbidity, and 40% had peripheral neuropathy, which can interfere with walking. The median number of comorbidities was only one, but the analysis was not able to account for mental health diagnoses.

Every six months, participants were asked about falls and their prescription medications, and clinical events were assessed. Gait speed, other frailty measures and lab tests were done annually. A slow gait speed was defined as walking slower than 1 meter per second. Over the course of the study, 7% reported one fall within the past six months, and 5% reported two or more falls. Among those who experienced a fall, 4% reported a fracture.

In addition to their antiretrovirals, 24% of study participants were using five or more prescription

medications (polypharmacy), and 4% were using 10 or more meds (hyperpolypharmacy). When antiretrovirals were included in the total, the corresponding percentages were 44% and 8%. But this increased with age: 36% of people ages 60 and older were taking five or more meds, excluding antiretrovirals, compared with 22% of younger participants.

Polypharmacy was more common among women compared with men (30% versus 23%), even though they had a similar number of comorbidities. In particular, women were more likely to be prescribed opioids. More than 80% of people over age 65 were taking at least one inappropriate medication with a high potential for adverse effects, rising to 94% for older Black participants.

After adjusting for other factors, people taking five or more medications besides antiretrovirals were more likely to have a slow gait speed and had twice the risk of recurrent falls, while those taking 10 or more meds had a fivefold higher risk of repeated falls.

“[P]olypharmacy was associated with slow gait speed and recurrent falls, even after accounting for medical comorbidities, alcohol use, substance use and other factors,” the study authors wrote. “This suggests that the adverse effects of polypharmacy are not simply due to an accumulation of medical conditions but rather may reflect potential toxicities and other effects of numerous simultaneous medications, in addition to the effects of comorbidities.”

“These results highlight the need for increased focus on identifying and managing polypharmacy and hyperpolypharmacy in people with HIV,” particularly among women and older individuals, they concluded.

Click here for more news about [HIV and aging](#).