



January 2023

ELDER CARE

A Resource for Interprofessional Providers

HIV/AIDS: Implications for Older Adult Patients

Cristina Gruta, PharmD and Ronald H. Goldschmidt, MD, University of California, San Francisco

In 2020, an estimated 53% of about 1.1 million persons living with HIV in this country were 50 years or older. (CDC: HIV Surveillance Report, 2020; vol.33).

Missed opportunities for preventing and detecting HIV infection in older adults occur because the older population has traditionally not been identified as an at-risk group. At-risk behaviors that carry risk of HIV transmission, however, occur in older adults as well as in the traditional younger high-risk groups. In addition, some older adults have undiagnosed HIV infection based on risks incurred at an earlier age, including men who have had unprotected sex with men, men and women having unprotected heterosexual intercourse, and injection drug use. HIV is also more coming among older persons in underserved minority populations.

The Centers for Disease Control and Prevention (CDC) recommends screening all adults up to age 64 at least once, regardless of risk factors. Beyond that, annual screening is recommended for all adults, including those 65 and older, if they have ongoing risk factors. To make testing more accessible and feasible in busy health care settings, “opt-out testing” is the recommended approach to routine screening. This means HIV testing is a part of routine care unless a patient declines (“opts-out of”) testing.

Delayed Diagnosis

When older Americans are diagnosed with HIV infection it is often later in the course of the infection. Late diagnosis places patients at significant risk of opportunistic infections, other complications of HIV infection, and death. Common reasons for delayed diagnosis include difficulty recognizing symptoms and signs of chronic HIV/AIDS, which can mimic those of illnesses typically associated with aging: fatigue,

dementia, herpes zoster, pneumonia, weight loss, and weakness (Table 1). Keeping HIV in the differential diagnosis when older adults have these symptoms is important for timely diagnosis and will remain critical to improving outcomes by facilitating earlier treatment.

Higher Rates of Chronic Disease

Recent research also highlights that older HIV patients, as compared with their non-infected peers, suffer higher rates of chronic diseases traditionally associated with older age, such as cardiovascular disease, cancers of all types, renal insufficiency, hepatic disease, cognitive deficits, and metabolic disorders such as diabetes and dyslipidemia. This may be due partly to the chronic inflammatory state caused by HIV infection, as well as possible toxicity of chronic antiretroviral medications.

Table 1. Signs and Symptoms of HIV That May Be Overlooked in Older Adults

Dementia	Herpes Zoster	Weakness
Fatigue	Pneumonia	Weight Loss

Higher Rates of Drug Adverse Effects

Because polypharmacy is more common in older patients, they are at particular risk of poor medication outcomes, including enhanced adverse effects and potential drug-drug interactions between antiretroviral agents and medications used to treat other chronic illnesses (Table 2). Also, as patients age, there are age- or disease-associated alterations in kidney and liver functions which may require dose adjustments.

Consider consultation with the HIV Management Line (800-933-3413) to review medication profiles of your older HIV-infected patients.

TIPS for Dealing with HIV/AIDS in Older Adults

- Screen all adults for HIV, regardless of age, on an annual basis if they have HIV risk factors.
- Be alert for signs and symptoms of HIV, which can be similar to those that occur in older individuals without HIV infection: fatigue, dementia, herpes zoster, pneumonia, weight loss, and weakness.
- When starting new medications in patients taking anti-retroviral (ARV) therapy for HIV, be sure to check for potential drug interactions. You can do this by calling the HIV Management Line at 800-933-3413.
- For guidance on preventive measures you can call the National Clinical Consultation Center PEPLine at 888-448-4911 and PrEPLine at 855-448-7737.

ELDER CARE

Continued from front page

Treatment Implications for Older Adults

When the HIV epidemic was recognized in the 1980s, its first decade marked devastation for patients diagnosed with HIV. At initial diagnosis, patients had already suffered years of immunocompromise, presented with late-stage complications, and succumbed to the disease a relatively short time after diagnosis. We have come a long way since those days, and now, with effective antiretroviral treatment HIV has become a manageable and treatable chronic illness with near-normal life expectancy. With more widespread awareness and earlier diagnosis, older

patients can lead healthy lives with a life expectancy that closely approaches that of their un-infected peers.

Prevention among Older Adults

Older adults with risk factors for HIV acquisition should be screened for sexually transmitted diseases and hepatitis B and C. In addition, post-exposure prophylaxis (PEP) after acute risky exposures and pre-exposure prophylaxis (PrEP) for persons with ongoing exposures are extremely effective in preventing HIV transmission.

Acknowledgement: The authors gratefully acknowledge the contributions of Mina Matin, MD on earlier versions of this Elder Care.

Table 2. Commonly Prescribed Antiretroviral Drugs (ARVs) and Common Medications that Interact with ARVs

Note: For questions about drug interactions, call the HIV Management Line at 800-933-3413

Commonly Prescribed ARVs	Red Flag Drug Classes - Can Interact with ARVs	
<p>Protease Inhibitors (PIs)</p> <ul style="list-style-type: none"> Darunavir + ritonavir or darunavir/cobicistat <p>Non-nucleoside Reverse Transcriptase Inhibitors (NNRTIs)</p> <ul style="list-style-type: none"> Rilpivirine Doravirine <p>Integrase Strand-Transfer Inhibitors (INSTIs)</p> <ul style="list-style-type: none"> Cabotegravir Bictegravir (co-formulated with cobicistat/tenofovir/emtricitabine) Dolutegravir Elvitegravir (co-formulated with cobicistat/tenofovir/emtricitabine) Raltegravir 	<ul style="list-style-type: none"> Acid reducing agents antacids, H2 receptor antagonists, proton pump inhibitors may be contraindicated or have dose limits when given with certain ARVs Anti-arrhythmics Anticoagulants including DOACs Anticonvulsants Antihyperglycemics metformin, certain SGLT2 inhibitors or DPP4 enzyme inhibitors Antiplatelets vorapaxar and ticagrelor Antidepressants (most) Antipsychotics Azole antifungals 	<ul style="list-style-type: none"> BPH medications (some) alpha adrenergic agents Calcium Channel Blockers Clarithromycin Corticosteroids inhaled and systemic some options may be contraindicated Covid medications nirmatrelvir/ritonavir Erectile dysfunction agents adhere to dose limits if given with PIs and elvitegravir/cobicistat Hepatitis C medications direct-acting agents (some) Rifamycins rifampin, rifabutin, rifapentine Statins simvastatin, and lovastatin are CONTRAINDICATED with PIs and elvitegravir/cobicistat

References and Resources

Publications and Websites:

AIDS Education and Training Center: Drug-Drug Interactions with HIV-Related Medications: <https://aidsctc.org/topic/drug-interactions>

CDC: HIV among people aged 50 and over. <https://www.cdc.gov/hiv/group/age/olderamericans/index.html>

Gandhi RT, et al. Antiretroviral drugs for treatment and prevention of HIV infection in adults: 2022 recommendations of the International Antiviral Society-USA Panel. JAMA. 2022; doi:10.1001/jama.2022.22246. <https://jamanetwork.com/journals/jama/fullarticle/2799240>

Guidelines for the Use of Antiretroviral Agents in Adults and Adolescents with HIV. <https://clinicalinfo.hiv.gov/en/guidelines/hiv-clinical-guidelines-adult-and-adolescent-arv/whats-new-guidelines>

<https://www.cdc.gov/hiv/pdf/library/reports/surveillance/cdc-hiv-surveillance-report-2020-updated-vol-33.pdf>

Telephone Call-In Information Lines

National Clinicians' Post-Exposure Hotline (PEpline). 888-448-4911—for information on managing occupational exposures

National HIV/AIDS Telephone Consultation Service. 800-933-3413 - for information on HIV testing, antiretroviral treatment, resistance testing, drug interactions, management of opportunistic infections, and primary care of persons with HIV/AIDS.

National Pre-Exposure Prophylaxis Line (PrEPline). 855-448-7377

Interprofessional care improves the outcomes of older adults with complex health problems.

Editors: Mindy Fain, MD; Jane Mohler, NP-c, MPH, PhD; and Barry D. Weiss, MD

Interprofessional Associate Editors: Tracy Carroll, PT, CHT, MPH; David Coon, PhD; Marilyn Gilbert, MS, CHES;

Jeannie Lee, PharmD, BCPS; Linnea Nagel, PA-C, MPAS, Marisa Menchola, PhD; Francisco Moreno, MD; Lisa O'Neill, DBH, MPH; Floribella Redondo; Laura Vitkus, MPH

The University of Arizona, PO Box 245027, Tucson, AZ 85724-50627 | (520) 626-5800 | <http://aging.arizona.edu>

Supported by: Donald W. Reynolds Foundation, Arizona Geriatrics Workforce Enhancement Program and the University of Arizona Center on Aging

This project was supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) under grant number U1QHP28721, Arizona Geriatrics Workforce Enhancement Program. This information or content and conclusions are those of the author and should not be construed as the official position or policy of, nor should any endorsements be inferred by HRSA, HHS or the U.S. Government.