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ELDER CARE

A Resource for Interprofessional Providers

HIV/AIDS: Implications for Older Adult Patients

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In 2014, an estimated 45% (428,724) of persons infected with HIV in this country were 50 years or older (Figure 1).

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. 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.

Figure 1. Estimated Number of HIV Infection Diagnoses in the United States by Age, 2013-2014 (Source CDC)

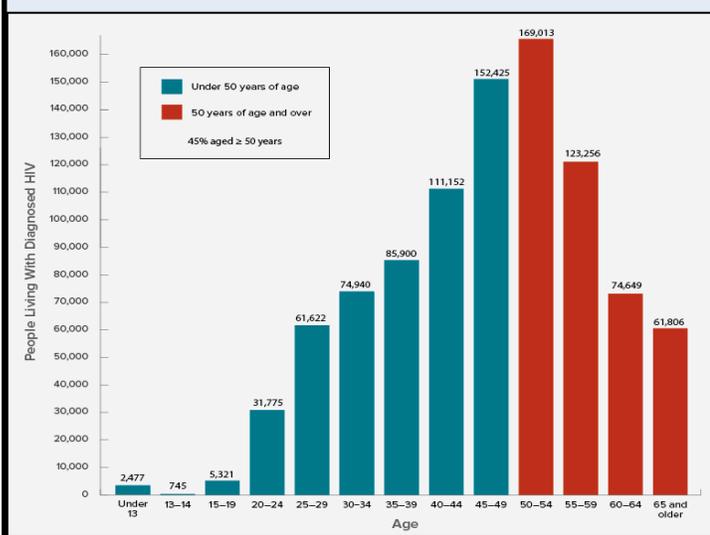


Table 1. Signs and Symptoms of HIV That May Be Overlooked in Older Adults

Dementia	Herpes Zoster	Weakness
Fatigue	Pneumonia	Weight Loss

Higher Rates of 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 toxicity of chronic antiretroviral medications.

TIPS for Dealing with HIV/AIDS in Older Adults

- Don't forget that nearly 1 out of 5 cases of HIV occurs 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.

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Continued from front page

Higher Rates of Drug Side Effects

Older patients are at particular risk of side effects from antiretroviral drugs because of interactions with medications used to treat other chronic illnesses (Table 2), age-associated declines in kidney and liver function, and changing proportions of body fat to muscle mass. Dose adjustments are often needed. Consider consultation with the HIV Management Line (800-933-3413) to review medication profiles of your older HIV-infected patients.

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, in the era of “highly active antiretroviral therapy,” 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.

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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"> Atazanavir + ritonavir or atazanavir/cobicistat Darunavir + ritonavir or darunavir/cobicistat <p>Non-nucleoside Reverse Transcriptase Inhibitors (NNRTIs)</p> <ul style="list-style-type: none"> Efavirenz Etravirine Rilpivirine <p>Integrase Strand-Transfer Inhibitors (INSTIs)</p> <ul style="list-style-type: none"> 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 novel oral agents Anticonvulsants Antihyperglycemics metformin, certain SGLT2 inhibitors or DPP4 enzyme inhibitors Antiplatelets vorapaxar and ticagrelor Antidepressants (most) 	<ul style="list-style-type: none"> Azole antifungals Calcium Channel Blockers Clarithromycin Corticosteroids inhaled and systemic some options may be contraindicated Erectile dysfunction agents adhere to dose limits if given with PIs and elvitegravir/cobicistat Hepatitis C medications direct-acting agents (some) Rifamycins rifampin, rifabutin 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://aidsetc.org/topic/drug-interactions>
- Guidelines for the Use of Antiretroviral Agents in Adults and Adolescents. <https://aidsinfo.nih.gov/guidelines/html/1/adult-and-adolescent-treatment-guidelines/0>
- Brooks JT, et al. HIV infection and older Americans: the public health perspective. Am J Pub Health. 2012; 102:1516-1526
- CDC: HIV among people aged 50 and over. <https://www.cdc.gov/hiv/group/age/olderamericans/index.html>
- CDC: Revised Recommendations for HIV Testing of Adults, Adolescents,, and Pregnant Women: <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5514a1.htm>
- Nguyen N, Holodniy M. HIV infection in the elderly. Clin Interv Aging. 2008; 3:453-472
- Telephone Call-In Information Lines
- 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 Clinicians' Post-Exposure 24-hour hotline. 888-448-4911—for information on managing occupational exposures

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

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