Chapter 8
HIV Prevention and Screening in Older Adults

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Key Points

- Older adults are the least likely of all age groups to practice safe sex [1, 2].
- Late-life changes in the reproductive tract and immune system may enhance their susceptibility to HIV acquisition [1].
- Physicians are less likely to recommend HIV testing to older patients [2–4].
- Asymptomatic older HIV-infected individuals are less likely to seek out testing and medical care [2, 5].
- Symptomatic older HIV-infected individuals are more likely to attribute symptoms to other illnesses or to aging [6].

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8.1 Age-Related Risk Factors

In the aging population, there are specific risk factors for acquiring HIV. These must be taken into account when designing HIV screening and counselling programs focused to overcome barriers to prevention and testing opportunities.

Several risk factors for HIV acquisition have been identified in the older population:

- Lack of knowledge:
  - As HIV risk factors were unknown before 1980, older adults may have a lack of knowledge regarding modes of transmission. Education on mode of transmission of HIV, sexually transmitted diseases, and risk perception are warranted [7].
- Risky behavior:
  - Many heterosexual and lesbian, gay, bisexual, or transgender (LGBT) adults remain sexually active [8] and they may maintain a certain lifestyle in older age. This includes unprotected sex [9], multiple sexual partners [10], and recreational drug use [11].
  - Reduced condom use may also be associated with other reasons. Older women starting a new sexual relationship, after many years of monogamy, may be embarrassed to talk about condom use. In men, the increasing prevalence of erectile dysfunction with age may make condom use even more challenging.
- Accessibility of erectile dysfunction medications:
  - The availability of medication to treat erectile dysfunction may also allow for increased sexual activity in older men [7], prolonging active sexual life and potential longer exposure to risk factors.
- Biological risk factors:
  - An identified biological risk factor is the vaginal thinning and dryness that occurs in women after menopause

that may increase transmission risk for HIV and other sexually transmitted infections [12]. Also, women who no longer worry about getting pregnant may be less likely to use a condom and to practice safe sex.

8.2 Barriers to Prevention

Providers must reduce barriers to effective prevention and detection of HIV in older adults, as they are more likely to present late, with greater associated mortality [13–15]. Barriers to prevention include:

- Aging stereotypes:
  - One of the main barriers for HIV diagnosis is aging stereotypes, mainly among health care providers. Talking to older patients about their sexual activity, asking questions regarding sexual orientation or knowledge of condom use and recreational drug habits are not yet a routine practice among most doctors, in part due to their own discomfort [16].
- HIV underdiagnosis:
  - Some HIV symptoms, such as asthenia, weight loss, or cognitive decline may mimic the normal aging process, further delaying the HIV diagnosis. This is particularly true in the menopause transition period in women.
  - Health care providers' failure to recommend HIV testing to older adults and their poor awareness of risks of contracting HIV are linked to low HIV testing rates. Most older adults learn of their HIV diagnosis while being hospitalized for other medical issues [17]. As a result, HIV infection is diagnosed at a later stage in older adults, and they are more likely to progress to AIDS [7].
- Discrimination and stigma:
  - Fear, discrimination, and stigma among minority races or ethnicities and older LGBT adults can also represent

an important reason for late diagnosis and treatment, as it may prevent them from seeking HIV care and disclosing their HIV status.

8.3 Screening and Counselling Opportunities

An effort must be made in order to educate both vulnerable populations and health care providers. Reviewing HIV prevention programs targeting older adults with HIV is mandatory. So far, most HIV awareness campaigns have been directed to specific groups, such as younger individuals and gay men, and excluding several other groups, in particular older women. Three major strategies can be implemented:

1. Universal HIV testing should be offered in an opt-out strategy. If it is found that the tested population has a HIV prevalence of ≥0.1 %, HIV screening in individuals between 55 and 75 years of age reaches conventional levels of cost-effectiveness. The cost-effectiveness of screening in patients between 55 and 75 years of age compares favorably to that of other interventions that are accepted as good uses of resources, particularly if providers implement screening with streamlined counselling and if the person being screened has a sexual partner at risk [18].
2. Indicator symptoms testing programs based on HIV symptoms (Table 8.1). HIV testing offered as a differential screening diagnosis process if signs of constitutional HIV symptoms or opportunistic diseases are present.
3. Counselling and testing. Accessible, confidential, and free HIV testing should be offered to any patient who is aware of a risk behavior for HIV. These services should also be provided at easily accessible locations where older adults participate in activities or reside (eg, older adult centres, retirement communities, nursing homes, or health fairs).
   - Clinical staff providing these services should be trained in HIV prevention for older adults.
   - Community leaders, health care professionals, policymakers, and researchers must develop appropriate prevention services that address the unique needs of older adults.

Table 8.1 Signs and symptoms of HIV infection [19]

General	Neurologic	Dermatologic
Fever	Meningitis	Erythematous maculopapular rash
Pharyngitis	Encephalitis	Mucocutaneous ulceration
Lymphadenopathy	Peripheral neuropathy	
Headache/retroorbital pain	Myelopathy	
Arthralgias/myalgias		
Lethargy/malaise		
Anorexia/weight loss		
Nausea/vomiting/diarrhea		

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