

**Rapid Response Service** 

# Psychosocial Issues for Older Adults Living with HIV/AIDS



**EVIDENCE INTO ACTION** 

The OHTN Rapid Response

and services in Ontario guick

access to research evidence to help inform decision making, service delivery and advocacy.

In response to a question from

Team reviews the scientific and grey literature, consults with

experts, and prepares a brief fact

sheet summarizing the current

evidence and its implications for

the field, the Rapid Response

Service offers HIV/AIDS programs

## Question

What psychosocial (e.g. cognitive health, social supports, health service needs) issues, concerns or challenges develop for older people with HIV as they age?

# **Key Take-Home Messages**

- Older adults may be at greater risk of HIV-related neurocognitive dysfunction (2) and several stressors are associated with aging with HIV, including ageism, HIV-related stigma, declines in social support, increased feelings of loneliness, declines in health status, financial distress, mitochondrial damage that may contribute to fatigue, and changes in appearance caused by lipodystrophy.(3)
- The cognitive and neurological changes that occur with aging and with HIV may place some individuals at risk for depression and suicidal ideation.(3) Loneliness and HIV-related stigma emerged as significant independent predictors of major depressive symptoms meaning that higher rates of stigma and loneliness place older adults at increased risk for major depressive symptoms.(4)
- A high prevalence of psychiatric and neurocognitive problems among middle-aged and older HIV-infected individuals has been observed. Depressive symptoms appear to decrease with age, but HIV-positive older people are more likely to have depressive symptoms than their HIV-negative counterparts, and the difference in prevalence grows with age.(5)
- Alcohol abuse or dependence is equally common among HIV-positive older people and their HIV-negative counterparts, but older HIVpositive people are more likely to have a diagnosis of alcohol abuse or dependence than their HIV-negative age-matched counterparts. In addition, current drug abuse or dependence is more common among

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policy and practice.

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HIV-positive older people than HIV-negative counterparts, and older HIV-positive people are more likely to report drug use than their agematched counterparts.(5)

- The odds of meeting HIV-associated dementia (HAD) criteria among older individuals is 2.13 times that of the younger age groups.(6) There is also an increased risk of cognitive impairment among older HIV-positive adults. An increased risk of impairment was associated with age and alcohol abuse, and greater education was protective.(7)
- Older age has been found to be associated with significantly better medication adherence. HIV-infected adults aged 50 years or over are three times more likely to achieve a 95% adherence rate than are younger subjects. However, adherence levels have been found to decrease among those with cognitive impairment. (8)
- Older people with HIV often express confusion in trying to understand the cause of their symptoms. This symptom ambiguity is potentially due to the fact that they can attribute symptoms to a variety of other plausible causes such as normal aging, preexisting conditions, or drug side effects in addition to HIV disease. Symptom ambiguity appears to lead to both confusion and psychological distress and may influence subsequent treatment behavior.(9)

## The Issue and Why It's Important

With the introduction of highly active antiretroviral therapy (HAART) in 1996 and due to new infections among older individuals, the number of HIV-positive people who are living to older age continues to increase. Persons aged 50 and over account for 15% of new HIV/AIDS diagnoses, 24% of persons living with HIV/AIDS (increased from 17% in 2001), 19% of all AIDS diagnoses, 29% of persons living with AIDS and 35% of all deaths of persons with AIDS.(1) Natural history and symptom manifestation of HIV infection in the elderly substantially differ from those in younger age groups. The effects of aging on HIV-associated psychosocial issues are largely unknown. This includes neurocognitive disorders and declines in neurocognitive abilities that are associated with both normal aging and HIV disease. Other psychosocial issues such as social support and health service needs in older HIV-positive populations are not fully understood.

### What We Found

We found a number of studies relevant to psychosocial issues related to older adults living with HIV/AIDS. The studies address four broad areas of topics: 1) mental health, addictions, 2) dementia and cognitive impairment and functioning, 3) treatment adherence and 4) treatment, management and supports for older adults living with HIV/AIDS.

#### **Mental Health and Addictions**

A US Veterans cohort study found a higher prevalence of depressive symptoms, alcohol abuse/dependence, and drug abuse/dependence among HIV-positive participants.(5) The prevalence of these decreased with age in HIV-negative participants but persisted with the HIV-positive participants.(5) Moreover, other conditions such as posttraumatic stress disorder, chronic drug use, and

mitochondrial-damage-related fatigue have been found to predispose these adults to the development of further neurological and cognitive problems.(3) A recent study of 914 New York City-based HIV-positive men and women over the age of 50 also suggests that aging adults face added social, psychological, and physical challenges associated with the aging process.(4) In total, 39.1% of participants exhibited symptoms of major depression, which was significantly related to increased HIV-associated stigma, increased loneliness, decreased cognitive functioning, reduced levels of energy, and being younger.(4)

#### **Dementia and Cognitive Functioning and Impairment**

A number of studies have reported higher levels of dementia and cognitive impairment among older adults living with HIV/AIDS. The only study comparing cognitive ability in HIV-positive and negative participants was a small pilot study and found that the HIV-positive group rated their cognitive ability lower than the HIV-negative group.(10) A study including only HIV-positive participants found that HIV-associated dementia (HAD) was more frequent in older individuals (25.2%) compared to younger (13.7%) individuals.(6) After adjusting for relevant variables (education, race, substance dependence, antiretroviral medication status, viral load, CD4 lymphocyte count and severity of depression), the study found that individuals in the older group were 3.26 times as likely to have HAD. (6) A qualitative study also found older people with HIV often express confusion when trying to understand their symptoms, which in some instances appeared to lead to further psychological distress.(9)

While other studies have found cognitive impairments similar to those outlined above (2;7;11;12), Kissel et al. (2005) found that when taking into account normal age-related cognitive changes that older seropositive individuals were not at an increased risk for HIV related cognitive impairment.(13) In addition, the study found no effect between aging and HIV-serostatus when education was controlled.(13) As a result, the consistent conclusion across most studies is that the data suggest but don't conclusively demonstrate that there are higher rates of HAD and cognitive impairment in older seropositive individuals.(12)

#### **Treatment Adherence**

Several studies found better medication adherence among older adults living with HIV/AIDS. A study by Hinkin et al (2004) found that older patients (> 50 years) demonstrated a significantly better adherence rate as compared to younger patients (87.5 versus 78.3%) and that older patients were three times more likely to be classified as good adherers (defined as > 95% adherent).(8) Similarly, Barclay et al (2007) found HIV-infected adults aged 50 years and older were twice as likely to achieve a 95% adherence rate as compared to younger HIV+ participants.(14) However, findings from these studies and from Ettenhofer et al. (2009) suggest that older participants who are cognitively impaired demonstrate disproportionate difficulty in adequately adhering to their medication regimen.(8;14;15) Specifically, Hinkin et al. found that neurocognitive impairment confers a 2.5 times greater risk of poor adherence (8) and Ettenhofer et al. found that both neurocognitive impairment (specifically executive functioning, motor functioning and processing speed) and drug problems increase the risk of suboptimal adherence.(15) As noted by these studies, detecting neurocognitive impairments and conducting thorough assessments for substance abuse are important for optimizing medication adherence and ensuring effect treatment.

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#### **Treatment, Management and Supports**

Addressing cognitive impairment for all age groups living with HIV is important for maximizing the effectiveness of antiretroviral therapy and improving quality of life (16) but some have also provided specific areas to focus on for treatment, management and supports for older adults living with HIV. For instance, it has been noted that successful cognitive aging in adults with HIV includes addressing mediators of cognitive reserve through biopsychosocial preventative and treatment strategies such as reducing alcohol and substance use; improving nutrition; diminishing the effects of comorbidities; increasing social contact; reducing depression and stress levels; engaging in cognitively stimulating activities; applying cognitive remediation therapies; physical activity; and incorporating psychopharmacological interventions.(17;18) In addition, Vance and Struzick (2007) highlight that social workers may have an important role to play in providing/facilitating access to these supports and could act as an advocates for older clients with HIV.(18) Emlet and Poindexter (2004) also highlight the importance of social workers for older adults living with HIV/AIDS and emphasize the importance of social workers having a working understanding of both HIV and aging services (19) as it is important to ensure integrated prevention, care and supportive services.(20)

## Factors that May Impact Local Applicability

All studies reviewed in this rapid response summary have been conducted in the USA. Cognitive health issues experienced by the US study subjects may be identical for those in Canada, whereas health service needs may be substantially different because of the fundamental dissimilarities in health care financing and service delivery systems between the two countries.

## What We Did

We searched the Cochrane Library and the Database of Reviews of Effects for systematic reviews using a combination of text search terms. We also searched the HIV and Acquired Immunodeficiency Syndrome categories on Health-Evidence.ca. We also searched for primary literature in Medline, Embase and PsychInfo using a combination of text and MeSH (Medical Subject Headings) terms. The searches were limited to articles published between 1996 and 2011 (search was conducted on 8 February 2011) and to those published in English.

Text search terms used for systematic reviews: HIV AND (aged OR aging OR old\*) AND (cognition OR cognitive OR social support OR psychosocial OR health service\*)

Text and MeSH terms searched: HIV [text term] AND (aging [MeSH] or older [text term]) AND (cognition [MeSH] OR cognition disorders [MeSH] OR health services for the aged [MeSH]) Hits = 275 after duplicate removal.