

Increasing numbers of older persons (defined for our purposes as ages 50 and up) are living with HIV and AIDS. Newer, more effective HIV medications are helping HIV positive people to live longer and infections are occurring later in life. Even the increased sexual activity among men using Viagra has resulted in increased levels of sexual activity in older adults - and increased risk of HIV infection.

Unfortunately, research has been sparse into such issues as medication interactions, aging and HIV, and risk behaviours among older adults. The National Institute on Aging in the US devoted just \$1.8 million to AIDS related research - compared with the National Institutes of Health and their \$174 million budget for pediatric HIV/AIDS research. This is particularly disturbing, as older adults comprise 11% of existing AIDS cases, while pediatric cases account for only 2% of AIDS cases since the 1980s (http://www.thebody.com/poz/features/12_98/ignorance.html).

In addition, prevention measures aimed at older adults are scarce. Many older adults view condoms as birth control and assume that they are not at risk for HIV infection (http://www.thebody.com/poz/features/12_98/ignorance.html).

With this in mind, it is the responsibility of health professionals, researchers, and educators to re-evaluate how they serve older adults regarding HIV and AIDS information, services, and treatment (<http://report.kff.org/aidshiv/>).

Facts and Figures

1. Seven percent of active Southern Alberta Clinic patients are between the ages of 51 and 60. Three percent are over age 60. That means that 10% of people living with HIV and AIDS in southern Alberta are over the age of 50 (<http://www.crha-health.ab.ca/clin/sac/chart6.htm>).
2. From May 1, 1998 to Sept. 30, 1999, 26% of new HIV cases in Alberta were among those aged 40 and over <http://www.crha-health.ab.ca/clin/sac/hivcasesage.htm>. (Unfortunately, distribution of cases in this age group is not clear, as surveillance of this age group is not as precise as it is among younger age groups).
3. Of the 58 new cases of HIV among adults aged 40-59 in Alberta, 16 involved heterosexual transmission, 16 involved men having sex with men, and 22 involved IDU (<http://www.crha-health.ab.ca/clin/sac/hivcasesage.htm>).
4. Between January 1980 and Sept. 1999, 37% of AIDS cases have been among people over age 40 (<http://www.crha-health.ab.ca/clin/sac/casesage.htm>).
5. From 1995 to 1999, just under ten percent of men testing positive for HIV were 50 years of age or older. Approximately 5% of positive tests during the same time period were among women 50 or older (http://www.hc-sc.gc.ca/hpb/lcdc/bah/epi/poshiv_e.html).
6. Persons 50 and over represent 11.2% of the total number of reported AIDS cases in Canada between 1995 and 1999 (http://www.hc-sc.gc.ca/hpb/lcdc/bah/epi/ahcan_e.html).
7. Four to five percent of AIDS cases in the US were diagnosed between ages 50 and 54. Two to three percent were diagnosed between 55 and 59, two percent between 60 and 64, and one to two percent over age 65 (http://www.cdc.gov/nchstp/hiv_aids/stats/hasrlink.htm).
8. From 1991 to 1996, rates of new HIV cases among the 50 plus age group, were stable among men having sex with men but increased among male heterosexuals (up 94%) and IDU (up 53%) and among female heterosexuals (up 106%) and IDU (75%) (http://www.thebody.com/poz/features/12_98/ignorance.html).

Sex and the Single Senior

Contrary to popular belief, sexuality does not disappear at mid-life or menopause. Sixty percent of US men aged 55-59 reported having sex at least a few times per month - that's only slightly lower than the 73% average across all age groups. Women in the same age group were not as active, however 37% (compared with 70% across other age groups) reported sex at least a few times per month.

Unfortunately, denial and misunderstanding (due in part to the abysmal lack of HIV prevention outreach among older persons) result in greatly reduced condom use among older adults. Heterosexuals over 50 who exhibit high risk activities are one-sixth as likely to use condoms during vaginal or anal sex and one-fifth as likely to be tested for HIV as are comparable individuals in their twenties (http://www.thebody.com/poz/features/12_98/ignorance.html).

The nature of sex may shift, however, among older adults. With heart medications, prostate problems, and other 'erection deflators', oral sex becomes more of a focus (http://www.thebody.com/poz/features/12_98/ignorance.html). This may reduce HIV risk, however oral sex is considered a low risk activity (McClure and Grubb 1999:25-26), as opposed to a 'no risk' activity. Outreach and education are still needed to make older adults aware of risks related to different sexual activities.

IV Drug Use among Older Adults

It is often assumed that drug users 'age out' of their addiction, either because they managed to conquer their addiction, or because they died from their drug use. Another stereotype is that older adults would not begin using IV drugs 'at their age'. This is not so, particularly due to the link between sex and drug use encountered by older men dating younger, drug-using women, or vice versa.

Of older adults living with AIDS in the US, 19% became infected through sharing needles (http://www.thebody.com/poz/features/12_98/ignorance.html) In one study based in Puerto Rico, use of injectable drugs was the primary risk factor for 43% of HIV infected men over the age of 50 (<http://www.cdc.gov/hiv/conferences/hiv99/abstracts/137.pdf>).

HIV Symptoms and the Aging Process

The process of aging seems to be linked closely with the evolution of HIV infection. Symptoms like dementia, lung problems, and unexplained weight loss, are often attributed to the aging process instead of being investigated as HIV related. The numbers are disturbing. Forty percent of primary-care physicians report rarely or never asking patients over 50 about HIV risk factors, while only 7 percent do not ask patients under 30 (http://www.thebody.com/poz/features/12_98/ignorance.html).

A 1997 study published in the Mechanisms of Aging and Development found that older HIV positive adults develop AIDS more rapidly and die more rapidly after this point than do younger people. This rapid progression may be due to the reduced ability of an older person's body to replace T-cells as they are destroyed (http://www.sfaf.org/treatment/beta/b41/b41women_aging.html).

HIV and Mature Women

Pregnancy, vertical transmission, and childcare - issues important to many younger HIV positive women - are not relevant to women over 50 living with HIV or AIDS. Older women are more concerned with menopause, other body changes, and relating to their partners and adult children.

Physical concerns specific to older women centre around symptoms and interactions with menopause. Very little research was found on the interactions of HIV drugs with the medications commonly used by aging women. Package inserts of several antiretroviral medications contained information on interaction between the medication and oral contraceptives, but not hormone replacement therapy. One study was found, however, which indicated that hormone replacement therapy in post menopausal women is beneficial in cases exhibiting HIV dementia.

With regard to sexuality, older women are at greater risk of HIV infection through sexual activity. As women progress through menopause, vaginal lubrication decreases and the vaginal walls become thinner. Both of these factors increase the risk of HIV entering the bloodstream through small tears in the vaginal walls.

Menopause is also linked in many women to weight gain. This is difficult enough for many women to cope with, as perceptions of attractiveness and worth are often tied to body image. The further alteration of body shape due to lipodystrophy (body fat redistribution associated with the use of protease inhibitors) can be damaging to a woman's self image.

Sociologically, women often delay seeking treatment for illnesses, as they have been socialized so strongly to be caregivers. This results in a more rapid progression to AIDS and earlier death than in younger people who may seek treatment earlier in their illness. Indeed, one study reported that when women received medical treatment as early, frequently, and comprehensively as do men, the women lived as long as those men (http://www.sfaf.org/treatment/beta/b41/b41women_aging.html).

HAART and Osteoporosis

Highly active antiretroviral therapy (HAART) has been associated with a number of side effects, such as kidney stones, nausea, and lipodystrophy. However, a more recently discovered side effect may have particularly harmful effects on older adults. Researchers have found clearly increased levels of bone mineral density loss among men aged 26-50 on HAART.

Loss of bone density can lead to osteoporosis, a condition whereby bones become extremely brittle and more easily chip or break. Osteoporosis is predominantly associated with post-menopausal (HIV negative) women, although older men are not immune.

This newly discovered association between HAART and loss of bone mineral density may further aggravate age-related osteoporosis, particularly in post-menopausal, HIV positive women. This may be a deciding factor for older HIV positive men and women who may be considering HAART. If HAART is chosen, calcium and vitamin D supplements which may assist in fending off bone mineral density loss (<http://www.catie.ca/>).

Protease Inhibitors and Viagra

Viagra, a sexual dysfunction treatment used predominantly, though not exclusively by older men, appears to have the potential to interact with protease inhibitors. Viagra is metabolized in the liver by the same enzymes which are inhibited by protease inhibitors. This can result in increased levels of Viagra in the bloodstream which can in turn lead to headaches, flushing, and sudden, severe fall in blood pressure.

Unfortunately for men on HAART, sexual dysfunction may be a side effect of the therapy, although lower testosterone due to HIV infection can also reduced sex drive (<http://www.catie.ca>). In these cases, Viagra may be a desired option. Lower starting doses (25mg) of Viagra are recommended for men on HAART (<http://www.catie.ca/aidsinfo.nsf/>).

B12 Deficiency and HIV

Vitamin B12 deficiency is another area where aging and HIV intersect. B12 levels may drop in older adults as a result of decreased stomach acid levels. The same condition can arise due to HIV infection. Vitamin B12 is required for normal nerve cell activity, DNA replication, and production of the mood affecting substance called SAMe (S-adenosyl-L-methionine) and a deficiency can lead to fatigue, depression, increased risk of heart disease and stroke, and possibly osteoporosis and Alzheimer's disease.

This being the case, the older adults who are potentially at risk for such a deficiency are put at greater risk when they are HIV positive. This is particularly troubling due to the link that may exist at any age between vitamin B12 deficiency and rapid HIV disease progression. In these cases, it may be difficult to absorb enough B12 from the diet, so supplementation by injection is recommended (<http://www.catie.ca>).

References Cited

McClure, Craig and Ian Grubb

1999 HIV Transmission: Guidelines for Assessing Risk, 3rd Ed. Ottawa: Canadian AIDS Society

Centers for Disease Control and Prevention.

1999 HIV Surveillance Supplemental Report, Vol.5 (no.3)