NURSES HEALTH EDUCATION ABOUT LGBT ELDERS
A TEACHING GUIDE

MODULE 6
HIV AND AGING
Intervene

Seek to end the harassment (physical or verbal) immediately.

Create a physical barrier (including standing between) or distance between the harasser and the harassed.

Follow Up

Don’t try to collect information while you try to de-escalate the situation as it will only increase the escalation.

Gather information using open-ended questions.

Provide reality check’s based on what you observed and heard.

References


Check Your Understanding

Prompt participants with questions found in the discussion guide (1-14) and ask them to discuss with 1-2 people sitting near them.
Welcome! Before we begin,

Let’s discuss the packet of papers you have in front of you. You should have one sheet that is a pre-test and post-test. Copies of the slide content and the last page is an evaluation.

I’m going to ask you to take the pre-test NOW. This will tell me what you know now, then after our discussion I will ask you to take it again. This measures how well I am able to teach you.

Then, at the end of the session, I will ask you to fill out the evaluation. This information is very important to us so I want you be honest, tell us what you like and dislike, do you think it was relevant and helpful. We use this information to edit the content as seems necessary. Also, ask any questions that you may be shy about asking in front of your peers. Then I will return next week and answer your question, keeping the person who asked the question confidential. If one person has a question, probably someone else does too!

Our time together is casual, if you have a question, put your hand up and I’ll be happy to answer for you
Describe the grant project.

Started in 2009 and followed these steps...through 2012.

- Curriculum research/development
- Pilot presentations to academic settings, community-based clinics and long-term care facilities
- Evaluation by like minded peers in the field of Geriatrics and Gerontology
- Revision in content
- Creation of online products
- Establishment of website for dissemination
- Presentation of findings

Howard Brown Health Center is the Midwest’s premiere provider of health care and community services to the LGBT community since 1974.

*Howard Brown Health Center exists to eliminate the disparities in health care experienced by lesbian, gay, bisexual and transgendered people through research, education and the provision of services that promote health and wellness.*
We offer this training with no commercial bias, I am not trying to sell you anything, I don’t work for a pharmaceutical company, I don’t even want you to come at work at Howard Brown, even though it’s a great place to work. All nurses will receive 1 continuing education unit for each module you attend.

And, more importantly, I am not here to dissuade anyone from their personal beliefs. I acknowledge that we are all different, I am here to provide you with information that will allow you to be better informed, more sensitive care givers for your LGBT Elders.

I am here to present this information, all 6 hours, in the context that nurses and health care professionals we strive to have as much knowledge as possible, to better serve our patients. I will say for the first time of many, that personal bias has no place in the medical encounter.

We became nurses, providers, to promote the health of our patients and do it in a caring effective way. That is the focus of bringing you this information. So as we go along, always keep in the back of your mind, our ultimate goal is excellent patient care.
This is an overview of the topics we will be covering today:

First we will talk about:

- HIV in older adults: demographics
- Risk factors, transmission and prevention
  - With a focus on the specific unique aspects of this in older population
- Testing and diagnosis
  - There are specific challenges with HIV testing from both providers and patients in this population, and diagnosis of HIV which appears to be fairly standard can actually be quite difficult in this population for a number of reasons.

Treatment for HIV in older adults

- We will discuss HAART-antiretroviral treatment, importance of adherence and response to HIV treatment in older populations and challenges in regards to co-morbid conditions.
At the end of the session participants will be able to:

- Recognize basic principles of HIV transmission and antiretroviral treatment for HIV with a focus on aging populations and demographics
- Describe why it is important to test for HIV in the older population
- List 3 unique challenges in treatment of HIV in older adults

The number of older adults in general is increasing...”The Senior Tsunami”

The population 65 and over has increased from 35 million in 2000 to 40 million in 2010 (a 15% increase) and is projected to increase to 55 million in 2020 (a 36% increase for that decade). By 2030, there will be about 72.1 million older persons, over twice their number in 2000. People 65+ represented 13.1% of the population in the year 2010 but are expected to grow to be 19.3% of the population by 2030. The 85+ population is projected to increase from 5.5 million in 2010 and then to 6.6 million in 2020 (19%) for that decade.

Minority populations have increased from 5.7 million in 2000 (16.3% of the elderly population) to 8.1 million in 2010 (20% of the elderly) and are projected to increase to 13.1 million in 2020 (24% of the elderly). Between 2010 and 2030, the white** population 65+ is projected to increase by 59% compared with 160% for older minorities, including Hispanics (202%), African-Americans** (114%), American Indians, Eskimos, and Aleuts** (145%), and Asians and Pacific Islanders** (145%).
Most people recognize this handsome fellow. Rock Hudson died just days before his 60th birthday.

There are historic reasons that the definition of older adults with HIV is considered to be 50 and above, before the advent of HAART (highly active anti-retroviral therapy) this age was utilized as a cutoff for studies and data collection.

Many people do not consider age 50 to be “old” but it has been used to keep stats on “older people with HIV”. Individuals are living far beyond their 50’s. Why...

There are 3 general categories:

1. People who have been living with HIV for many years.
2. Older people with HIV who are now just learning their HIV status – were infected prior to turning 50, then were tested after they turned 50 and were found to be HIV+.
3. Older people acquiring HIV.

NOTE
Could play Segment from Aging POZitively here (either 0:00 – 1:20 or 9:25 – 11:29)
LET’S LOOK AT STATISTICS. DISCUSS THE ABOVE. CDC HIV/AIDS DATA: IN 2005:

People age 50 and above: 10-15% of the newly diagnosed population
24% of people now living with HIV and AIDS are over 50
19% of all AIDS dx
35% deaths of persons with AIDs. Trending more towards older age with HIV.

The rates of HIV/AIDS in older African Americans is 12 times higher than older whites, 5 times higher in older Hispanics compared with older whites.

Other important data: MSM >50% of all cases, all ages.
50-55% of cases African-American
Women 30-45% of cases
The number one killer of women 25-34 is AIDS!

This is NOT just a gay mans’ disease! The virus affects all demographics!

Above the age of 50 comprises 10-15% of new HIV infections.
In 2008, CDC estimated that approximately 56,300 people were newly infected with HIV in 2006.
Again, we are looking for these numbers to rise.

These indicators show that these numbers will rise even just in terms of quantity, the number of older adults.
Changes in social activities may be as a result of divorce, death of a spouse, or singleness.
"Older adults are not considered a high-risk group because most HIV infections occur between the ages of 25 and 49. However, recent data indicate that 15% of all new HIV infections occur among those 50 and older, and the proportion is increasing. A sizeable minority of HIV-positive older adults continue to engage in unsafe sexual behavior. As the number of older adults living with HIV increases, the likelihood of a non-infected person encountering a HIV-positive age-peer increases. It is also likely that there is an under-reporting of HIV cases in the older population given that HIV testing is not emphasized in this group.

HIV prevention programs and materials rarely target older adults; most focus on adolescents and young adults. A recent survey found that only 15 out of 50 state departments of health in the USA had publications that specifically addressed HIV and older adults. For example, prevention messages should address issues specific to older adults (e.g. greater risk to women after menopause), appear in larger typeface, and rely on personal messages that are resonant in this population.

Illinois is one of the 15 states that have materials created in conjunction with the Illinois Department of Public Health (IDPH) available in English and Spanish.

(6-12A) HIV/AIDS and Older Adults: Fact v. Fiction from National Resource on LGBT and Aging http://www.lgbtagingcenter.org/resources/resource.cfm?r=322

Read questions aloud and wait for participants to respond. Clarify any incorrect answers or misconceptions by reading the answer given.

May not have time to discuss all questions but entire document can be given as a take-away.
This is how an individual can acquire the HIV virus.

HIV is the human immunodeficiency virus. It is the virus that can lead to acquired immune deficiency syndrome, or AIDS. CDC estimates that about 56,000 people in the United States contracted HIV in 2006.

There are two types of HIV, HIV-1 and HIV-2. In the United States, unless otherwise noted, the term “HIV” primarily refers to HIV-1.

Transmission requires direct contact with infected body fluids:

- Blood
- Semen
- Vaginal secretions
- Breast milk

This means that HIV contained in one of these fluids must get into the bloodstream by direct entry into a vein, a break in the skin or through mucous linings, such as the eyes, mouth, nose, vagina, rectum or penis.

PH (SLIDES 6-13) | GO TO PAGE 39
Provide handout to each participant.


IMAGE REFERENCE

IMAGE DESCRIPTION
This scanning electron micrograph revealed the presence of the human immunodeficiency virus (HIV-1), (spherical in appearance), which had been co-cultivated with human lymphocytes. Note the lymphocyte in the lower left, and some of its extended pseudopodia. HIV-1 virions can be seen on the surface of this lymphocyte. See PHIL 1843 for another view of this electron microscopic scenario.

A retrovirus, the Human Immunodeficiency Virus (HIV) was identified in 1983 as the pathogen responsible for the Acquired Immunodeficiency Syndrome (AIDS). AIDS is characterized by changes in the population of T-cell lymphocytes that play a key role in the immune defense system. In the infected individual, the virus causes a depletion of T-cells, called “T-helper cells”, which leaves these patients susceptible to opportunistic infections, and certain malignancies.
HIV cannot reproduce outside the human body. It is not spread by:

- Air or water.
- Insects, including mosquitoes. Studies conducted by CDC researchers and others have shown no evidence of HIV transmission from insects.
- Saliva, tears, or sweat. There is no documented case of HIV being transmitted by spitting.
- Casual contact like shaking hands or sharing dishes.
- Closed-mouth or “social” kissing.

As a nurse this tells me I can touch my patient, hold their hand, give them a back rub even kiss them on the cheek, without any worry. We all know to take appropriate precaution when handling blood and blood products.


This scanning electron micrograph revealed the presence of the human immunodeficiency virus (HIV-1), (spherical in appearance), which had been co-cultivated with human lymphocytes. Note the lymphocyte in the lower left, and some of its extended pseudopodia. HIV-1 virions can be seen on the surface of this lymphocyte. See PHIL 1843 for another view of this electron microscopic scenario.

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OLDER ADULTS ARE SEXUALLY ACTIVE

- May resume sexual activity after death of a partner or separation
- Over age 60 92% of men and 70% of women were still sexually active
- Only a small minority of individuals over age 70 stated that they used condoms even though they reported more than 2 partners in the past 5 years

Factors such as age related vaginal thinning can make the risk of transmission higher

MAY HAVE LESS KNOWLEDGE ABOUT HIV/AIDS

- Studies found older people have misconceptions about HIV risks; only 13% of older women in one study said that condoms were effective prevention.
- Older adults do not consider themselves at risk
- Less likely to present for testing

HEALTH PROFESSIONALS UNDERESTIMATE RISK

- Less likely to ask about risk factors or test routinely. One study 38% of men and 25% of women discussed sex with a health care provider after the age of 50.

Tend not to ask about IV drug use with older adults present or past IVDU, which constitutes 16% of transmissions in older adults
**SLIDE 16**

**HIV/AIDS: STIGMA**

- Stigma is defined as a mark of disgrace or infamy, a stain or reproach, or one’s reputation.
- Virus is defined as an ultra-microscopic infectious agent.
- Stigma stems from the HIV virus, based on the manner in which the virus was acquired.
- Older adults will be more reluctant to disclose high-risk behaviors.

**DS**

**Stigma, virus definitions…**

Do we question when a person catches the flu? That’s the influenza virus, very communicable, more easily acquired than HIV. We don’t whisper, “Hey, did you hear? Grandma caught the flu… I wonder how she got it?”

Or when a person gets HIV by way of a transfusion of blood products, “Oh, gosh that’s a shame. It’s not their fault…”

We focus on the manner in which an individual acquires the virus, **NOT on the fact that treatment is available, effective and allows long life.**

**R**


Older persons tend not to be perceived by their physicians as having any risk factors for HIV infection and, consequently, are less likely to be tested for HIV than are younger adults. Misdiagnosis is common, and older patients tend to receive diagnoses later in the course of HIV infection after several other diseases are tested for.

Older adults symptom expression is different in general for many diseases, for example older adults may not mount a fever to infection. Being labeled as “afebrile” as an adult may be meaningful, but being afebrile as an older person you still may have life threatening pneumonia for example. The differential diagnosis for older adults is broader and symptoms may be vague, such as fatigue and weight loss.

Diagnosis by Institutional capture: (more likely to be diagnosed as inpatient, or due to functions of institutions)

- Inpatient diagnosis of HIV infection is significantly more common among women and older patients.

- This paper recommends routine rather than risk-based HIV testing is advocated, because high-risk behaviors are frequently not identified in primary care encounters.

In a retrospective cohort study, compared mortality rates for 253 HIV-infected individuals aged >50 years and for 535 younger HIV-infected patients. Although information on compliance with therapy and the presence of co-morbid conditions was not provided, older HIV-infected individuals who were not receiving HIV antiretrovirals had twice the hazard rate for death than did younger, untreated HIV-infected individuals. These findings suggest that deference of therapy or failure to diagnose HIV infection in older individuals may have a more adverse impact on their survival, compared with younger HIV-infected individuals.

In contrast this what the CDC recommendations are:

“In all health-care settings, screening for HIV infection should be performed routinely for all patients aged 13-64 years. At age 65 and above screening should be initiated based on risk factors identifying risk factors for HIV in older populations.”--CDC, September 2006

The difficulty with that is that people do not identify risk factors in older adults because they typically don’t ask, and older adults don’t tell.
AIDS and HIV diagnosis can be missed because symptoms can mimic those of "geriatric syndromes" or common illnesses associated with advanced age such as fatigue, weight loss, mental confusion/delirium.

This list includes conditions that are commonly found in HIV positive patients.

This list includes conditions that are common geriatric syndromes and diseases of aging in old populations with out HIV.

There are many common diseases between HIV and age related diseases.

This is likely due to a common mechanism of cellular/biological aging process and the process of HIV infection, supposed to associated with chronic inflammatory states/mitochondrial toxicity. Some propose that HIV actually causes more rapid cellular aging/"accelerated aging" with HIV.
Geriatric diseases/syndromes and HIV related diseases:

HIV and aging may look alike.

This brown-purple cutaneous nodule represents a Kaposi’s sarcoma lesion commonly found in patients with AIDS. Can be on the skin, in the mouth, in the GI tract and the lungs, very dangerous.

Kaposi’s was discovered in 1800’s as a rare “elderly disease”.

In the early 1980s, doctors in Los Angeles, New York City, and San Francisco began seeing young men with Kaposi’s Sarcoma, a cancer usually associated with elderly men of Mediterranean ethnicity. Eventually these men died. These men were gay, or at least had sex with other men. As the realization that men who had sex with men were dying of an otherwise rare cancer began to spread throughout the medical communities, the syndrome began to be called by the colloquialism “gay cancer”.

Before the onset of the AIDS pandemic, Kaposi’s sarcoma was an uncommon malignancy found mainly amongst elderly Mediterranean men, African children and Ashkenazi Jews, but became the most common neoplasm found in those with AIDS. (HIV/AIDS in the United States, n.d.)


**IMAGE REFERENCE**


**IMAGE DESCRIPTION**

This brown cutaneous nodule represents a Kaposi’s sarcoma lesion commonly found in patients with AIDS. Before the onset of the AIDS pandemic, Kaposi’s sarcoma was an uncommon malignancy found mainly amongst Mediterranean men, African children and Ashkenazi Jews, but became the most common neoplasm found in those with AIDS.
“Immunosenescence refers to the gradual deterioration of the immune system brought on by natural age advancement. It involves both the host’s capacity to respond to infections and the development of long-term immune memory, especially by vaccination. This age-associated immune deficiency is ubiquitous and found in both long- and short-living species as a function of their age relative to life expectancy rather than chronological time. It is considered a major contributory factor to the increased frequency of morbidity and mortality among the elderly.

Immunosenescence is not a random deteriorative phenomenon, rather it appears to inversely repeat an evolutionary pattern and most of the parameters affected by immunosenescence appear to be under genetic control. Immunosenescence can also be sometimes envisaged as the result of the continuous challenge of the unavoidable exposure to a variety of antigens such as viruses and bacteria” (Immunosenescence, n.d.).

“The prospect that immune activation or inflammation may be directly related to the increased incidence in HIV infected donors of manifestations that are reminiscent of the human aging process (i.e. cardiovascular disease, malignancies, osteoporosis, cognitive impairment, depression and frailty) is raising increasing concerns. On the immunological side, in addition to promoting viral replication as well as CD4+ T cell apoptosis, HIV associated immune activation may also lead to an accelerated decline of immune competence resembling the phenomenon of immunosenescence. Our aim is to explore further the potential relationship between immune activation HIV disease progression and immunosenescence”.

These topics will be discussed in more detail in the upcoming slides.
The Human Immuno-Virus (HIV) is a retrovirus that compromises the immune system. It does this by its manner of replicating. Let’s simplify this process and look at it more closely.

The HIV virus enters the blood stream and begins to search for CD4 cells, a specific white blood cell that fights specific infectious agents and diseases. The virus searches by way of a chemical attraction, a chemical key, and it will only bond with these specific cells. After binding with the surface of the cell membrane it is absorbed into the cell body. That’s the insertion site, point 1. Next the RNA of the virus goes through a chemical machine, reverse transcriptase, that replicates the other half of itself creating a small piece of DNA. That’s point 2. Next the newly formed piece of DNA enters the nucleus of the cell and through another chemical machine integrase, inserts itself into our chromosomal DNA and it is in our system for the rest of our lives. That’s point 3. Next the DNA moves out of the nucleus to another chemical machine, protease, picks up protein and energy, that’s point 4, and pops out into the blood stream.

If that happened once, no problem. It happens hundreds of thousands of times and eventually the CD4 cell loses all its energy and dies. So as the virus is replicating, the CD4 cells are dying. This is always an inverse proportion. If one goes up, the other goes down.

**DS**

**DISCUSS SLIDE NORMS**

Start treatment earlier, test and treat. If we wait until the CD4 count is lower, the patient will never regain the normal level they had before.


**IMAGE REFERENCE**


**IMAGE DESCRIPTION:**

ID#:10614

Description: This trichrome-stained photomicrograph revealed a numbers of white blood cells (WBCs), otherwise known as leukocytes. These blood cell are not oxygen-carriers like the red blood cells (RBCs), but act as members of the body’s defense mechanism, fighting the constant onslaught of pathogenic invaders such as bacteria, and foreign debris. When compared to their cousins the erythrocytes, or RBCs, the leukocytes are larger in size, and much fewer in numbers, i.e., 8000/mm3. Leukocytes are categorized into two main groups, granular leukocytes, i.e., neutrophils, eosinophils and basophils, and the nongranular leukocytes, i.e., lymphocytes and monocytes.
DS

Testing for viral dependent on the sensitivity of the test. Historically, tests used to measure <10,000 viral copies meant undetectable. Now tests can be as sensitive as to less than 20 viral copies.

Undetectable does not mean the virus is gone. It will always be multiplying so the treatment must be continuous.

The higher the viral load, the more contagious the individual is and the lower the CD4 cell count will be. After treatment is started and the viral load begins to go down, the CD4 cells now have the opportunity to recover. When the viral load is high, CD4 cells are low, the immune system is less able to ward off infection. So, as the immune system recovers and the CD4 cells increase, so does the body’s ability to fight infection.


IMAGE REFERENCE

IMAGE DESCRIPTION
ID# 10039

Description: Depicted in this 2007 photograph was CDC Service Fellow, Dr. Sharmila Talekar, who was in the process of loading “Detection cups” (D-cups), in order to perform the ordered tests for the day. The instrument in this picture is the COBAS AMPLICOR Analyzer, which is an automated clinical analyzer used in qualitative and quantitative in-vitro diagnostic testing. A member of the National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP), Dr. Talekar is on the staff of this Center’s Lab Branch (LB) inside the Division of Viral Hepatitis (DVH).
Remember the 4 points we discussed when describing the replication process of viral RNA? A combination of drugs that specifically target these important sites, provide the 1-2-3-4 punch needed to suppress replication of the virus. The medications are now effective to suppress the virus. The drug “cocktail” is effective because, unlike AZT, can attack 3 points or more to suppress the replicating virus.

This suppresses the virus and allows the CD4 cells to recover.
The course of HIV infection.

Primary infection, 2-6 weeks will experience a really bad flu-like symptoms which may resolve on their own.

Asymptomatic phase, 1 year to 15 years, CD4 cells decreasing all along this course, May get infections more often but still resolve themselves.

Early HIV symptoms begin to show, thrush, herpes/shingles, bronchitis, sinusitis, pneumonia.

Advanced HIV opportunistic infections become more serious and prevalent.


AIDS and HIV diagnosis can be missed because symptoms can mimic those of “geriatric syndromes” or common illnesses associated with advanced age such as fatigue, weight loss, mental confusion/delirium.

This list includes conditions that are commonly found in HIV positive patients.

This list includes conditions that are common geriatric syndromes and diseases of aging in old populations without HIV.

There are many common diseases between HIV and age-related diseases.

This is likely due to a common mechanism of cellular/biological aging process and the process of HIV infection, supposed to associated with chronic inflammatory states/mitochondrial toxicity. Some propose that HIV actually causes more rapid cellular aging/“accelerated aging” with HIV.

Chronic inflammation contributes to the pathogenesis of many chronic medical illnesses, including cardiovascular and cerebrovascular disease (CVD), diabetes, chronic kidney disease, osteoporosis and cancer. These same illnesses now account for most morbidity and mortality in persons with HIV receiving virologically suppressive antiretroviral therapy (ART). Mounting evidence suggests these illnesses occur more often and/or at a younger age in HIV due at least in part to chronic inflammation and accompanying changes in immunologic phenotype and function that suggest accelerated aging. Untreated HIV induces a state of immune activation and resulting chronic inflammation that is only partially corrected by ART. The pathogenesis of HIV-related chronic inflammation is complex and incompletely understood, and no treatment beyond standard ART has been established.
Adherence is important for short and long-term reasons. In order to get the maximal effect of the therapy, certain levels of the drug must be maintained in the blood. Non-adherence could allow for drug resistance, which could limit your therapeutic options later.

Today’s potent combination therapy has brought new hope and new challenges to people living with HIV. However, if therapy is not used properly (like skipping doses, taking lower than prescribed doses or not taking them on time), drug resistance will probably develop faster. In this case, the potential benefits of therapy can be lost.

In order to prevent drug resistance, it’s important to keep enough drug in your bloodstream 24 hours a day. Each time you miss a dose, the drug blood level falls below the minimum necessary level for several hours. This creates an opportunity for HIV to develop resistance to the drug(s).

Moreover, resistance to one drug may result in resistance to other drugs of the same class, called cross-resistance. This is particularly true of non-nucleoside reverse transcriptase inhibitors (NNRTIs). High level resistance to one of the protease inhibitors (PIs) almost certainly passes on some degree of resistance to almost all the others.

There’s little debate about it being difficult to always adhere to today’s complex regimens. It is somewhat less clear how much non-adherence is tolerable before resistance becomes a threat. There are no data telling us exactly when resistance begins. There is, however, plenty of evidence that people who are adherent have better and more sustained anti-HIV responses. While no single episode of a skipped or late dose is likely — by itself — to trigger resistance, the more often they occur, the more likely it is to develop drug resistance.

Adapted from www.projectinform.org

**SLIDE 29**

Who tries to take a vitamin every day?


**SLIDE 30**

Vital nursing interventions for helping with adherence!
If pharmacokinetic parameters are significantly different in the elderly population, additional studies need to be performed to either make age-dependent modifications in dosing recommendations or to develop other strategic approaches for this unique population.

In the Sustiva medication insert: Section 8.5 Clinical Studies of Sustiva did not include sufficient # of aged subjects 65 yo and older to determine whether they responded differently from younger subjects. In general, dose selection for an elderly pt. should be cautious reflecting a greater frequency of decreased hepatic (liver), renal (kidney) or cardiac (heart) function and of concomitant disease or other therapy (comorbidity and polypharmacy).

Look for significant signs of osteoporosis as a result of chronic inflammation, the HIV infection itself and HAART.

What do we do for our older patients who are experiencing osteoporotic changes?


IMAGE REFERENCE
Similar changes in neuro-cognitive function specific due to the affect of chronic inflammation, the HIV infection itself and HAART on the brain and nervous system.

Changes are similar to Parkinson’s Disease and Alzheimer’s.

What do we do for our older patients who are experiencing neuro-cognitive changes?


Watch for increased prevalence of heart disease risks, due to both HIV changes and HAART meds affecting cholesterol.

**SUMMARY**

- We recognize that the risk and incidence of HIV is increasing with geriatric age patients.
- We understand clearly that misdiagnosis of HIV is more common.
- We now understand the critical importance of adherence to HAART.
- The clinical areas we need to assess are osteoporosis, osteonecrotic and cardiovascular changes.

**SLIDE 39**

**ACTION PLAN**

- Provide cultural competency training.
- Maintain appropriate screening and risk assessment for Geriatric patients.
- Establish nursing care plans specific to identified risk factors, HAART and long term treatments.

**SLIDE 40**

- **PRA**
  
  Ask participants to complete their Action Plan on the Module 6 Summary and Action Plan handout.

**SLIDE 41**

**HOWARD BROWN HEALTH CENTER GERIATRIC SERVICES**

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Too many myths and misconceptions surround HIV and AIDS, particularly for people over 50 living with the disease. Learn the facts about HIV/AIDS and older adults.

HIV and AIDS have long been subject to many myths and misconceptions, many of which concern older adults. Thanks to recent advancements in HIV/AIDS treatments, particularly highly active antiretroviral therapies (HAART), many people living with HIV/AIDS are living long, healthy lives, transforming HIV into a chronic but manageable illness. Therefore, it is no surprise that research shows that adults age 50 and over comprise a significant—and growing—number of people living with HIV/AIDS (PLWHA), as well as those newly diagnosed with HIV and AIDS each year. What are some of the myths—and the facts—when it comes to older adults and HIV/AIDS?

Older adults—those age 50 and older—are not at risk for HIV or AIDS. False. The rates of HIV/AIDS among older adults 50 and over have increased more than 61% from 2001 to 2007.[i] Research shows that those age 50 and older now comprise 27% of the overall population of people living with HIV/AIDS, and by 2015 will become the majority of all people living with HIV/AIDS. In addition, the latest national data show that adults 50 and older account for:

- 15% of all new HIV/AIDS diagnoses
- 29% of all persons living with AIDS[ii]

Despite these sharp increases in HIV/AIDS among older adults, this population is still marginalized and generally overlooked in data collection instruments, treatment studies, and education and prevention programs, to name a few.

HIV/AIDS only affects those who are gay, lesbian, transgender, and/or have same-sex contact. False. While many of these populations are disproportionately affected by HIV/AIDS, HIV and AIDS can infect anyone, regardless of age, race, ethnicity, religion, sexual orientation or gender identity. HIV and AIDS are not the products of orientations or identities, but experiences and behaviors, and are most commonly transmitted through unprotected sex or sharing needles.

Older adults are not sexually active. False. Research shows heterosexual and LGBT older adults are sexually active well into their mid-80s, with a 2007 national study showing 53% of adults age 65-74 and 26% of adults age 75-85 as being active with one or more partners.[iii]

Older adults are less likely to be tested for HIV/AIDS than other age groups. True. Older adults are less likely to be tested because they are not perceived to be at risk, including being sexually active and/or intravenous drug users.[iv] In addition, doctors are less likely to ask older patients about sexual activity—including numbers of sexual partners, using protection and their risk for HIV/AIDS—due to discomfort as well as a common, but mistaken, belief that older adults are...
not sexually active.[v] One study found that only 19% of adults age 50 and older reported talking to their medical provider about HIV/AIDS.[vi]

**Women are not at risk for HIV.**
False. Women account for 25% of all people living with HIV and 27% of all new HIV infections per year, with heterosexual sex cited as the main mode of transmission across all racial and ethnic groups. [vii] In addition, women of color are particularly affected by HIV/AIDS, with African American women having an HIV infection rate nearly 15 times higher than white women, and four times higher than Latina/Hispanic women.[viii]

**The level of knowledge about HIV/AIDS transmission, risk and its effects is uniform across age groups.**
False. A 2009 national study found that older adults ages 50-65+ had the most misinformation about how HIV can be transmitted, thinking that transmission can occur by sharing a drinking glass, touching a toilet seat and swimming in a pool with someone who is HIV-positive.[ix]

**Lesbians, bisexual women, and women who have sex with women (WSW) are not at risk for HIV/AIDS.**
False. According to the Lesbian AIDS Project report, some lesbians, bisexual women and WSW engage in high-risk behaviors for HIV transmission, including having oral sex without a protective barrier, sharing sex toys without a protective barrier and/or disinfecting them after use, and sexual play that involves the potential exchange of vaginal fluids. In addition, some lesbians, bisexual women and WSW have sexual histories with HIV-positive men or intravenous drug users, and have self-reported participating in sex work for money or drugs—behaviors and experiences that pose great risk for HIV/AIDS infection.[x] While there are no documented cases of HIV/AIDS transmission between women, this may be due to the general lack of studies on lesbians, bisexual women and WSW because they are not perceived to be at risk.

**An older adult who recently contracted HIV has the same health needs and concerns as someone who has been aging with the disease.**
False. Research and self-reported surveys show that newly diagnosed and/or infected people with HIV/AIDS report needing or seeking a case manager to navigate HIV/AIDS services and programs, as well as Medicaid Part D and understanding true out-of-pocket (TROOP) costs. In addition, newly diagnosed/infected people are also more likely to report feelings of stigma and “blame” for their disease, as well as needing help adjusting to their medication regimen. Those who have been aging with HIV/AIDS have reported wanting or seeking help for depression, anxiety and other dual-infections, including arthritis, hepatitis, and hypertension.[xi]

**Transgender people’s risk for HIV/AIDS is heightened because of stigma, transphobia and discrimination.**
True. Studies show that transgender people experience high rates of discrimination and stigma, leading to lower self-esteem, higher rates of depression, and loneliness. This may make them more likely to engage in risky behaviors, including having unprotected sex with multiple partners, having sex while under the influence of alcohol or other substances, or using intravenous drugs with others.[xii]

**Older adults do not use intravenous drugs.**
False. Intravenous drug use is the second most prevalent method of HIV transmission and infection among those 45 years and older, at a transmission rate of 28% for women and 50% for men.[xiii]
Rates of HIV and AIDS infection are uniform across racial and ethnic populations.
False. Research has shown that the African American population is disproportionately affected by HIV/AIDS. African Americans account for nearly half of all new HIV infections and AIDS diagnoses—nine times greater than their white counterparts—while the Latino population accounted for 17% of all new HIV infections in 2006 and 21% of new AIDS diagnoses in 2009. [xiv] These higher rates of HIV/AIDS infections in the African American and Latino populations are thought to be the result of compounding factors, including overall higher rates of contracting sexually transmitted diseases (STDs), less access to health care, less HIV prevention education and unstable housing, to name a few.

The homeless population has a higher rate of HIV infection than the general population.
True. The U.S. homeless population has an HIV-infection rate up to nine times greater than the general population. This higher rate has been largely attributed to lack of stable housing, higher rates of chronic diseases, drug use and unprotected sex.[xv]

Medical professionals, such as doctors, dentists, nurses, and home aides, must possess special HIV/AIDS training and knowledge in order to treat HIV/AIDS positive patients.
False. According to the U.S. Department of Justice, “Health care providers are required to treat all persons as if they are infectious for HIV and other blood borne pathogens, and must use universal precautions (gloves, mask, gown, etc.) to protect themselves from the transmission of infectious diseases.” All medical professionals can treat PLWHA, and rarely will they refer them to a medical specialist. [xvi]

The symptoms of being HIV-positive or having AIDS are distinct and easily identifiable.
False. In fact, diagnosing HIV/AIDS in older adults can be especially difficult because the symptoms are often mistaken for normal signs of aging, including:

- Headaches, fevers
- Persistent coughs
- Swollen glands
- Lethargy and loss of appetite
- Diarrhea and abdominal cramps
- Weight loss
- Rashes, and oral and body sores[xvii]

The only effective way to know if you have HIV or AIDS is to get tested.

Once infected with HIV, the person will immediately look and feel sick.
False. A person can be HIV-positive but remain asymptomatic for months, even years, after contracting the virus, and can unwillingly pass on the virus to others. The best way to protect yourself and your loved ones is to get tested.[xviii]

After 30 years, the stigma of having HIV/AIDS has mostly disappeared.
False. According to the Center for HIV Law & Policy 36 states have laws that criminalize HIV exposure, such as protected sexual contact between two consenting adults. Unfortunately—despite national and community-based organizations’ prevention, education and training programs and federal, state and local laws protecting their rights—PLWHA are still discriminated against in employment, hous-
Older adults living with HIV/AIDS are thought to experience a “double stigma” of being both old and HIV/AIDS positive.

True. Research shows that ageism—the discrimination or stereotyping of people based on age—as well as the discomfort surrounding HIV/AIDS is especially heightened among older adults. Older adults are more likely to be blamed for “getting themselves infected,” and HIV-positive older adults report higher rates of self-blame, and are less likely to disclose their HIV/AIDS status out of fear it will negatively impact the lives of their friends and family.[xx] For older adults with HIV who are also LGBT, the stigma and discrimination is often even more magnified because of homophobia and transphobia.

**HIV/AIDS AND OLDER ADULTS: FACT VERSUS FICTION - SOURCES**


[xii] “HIV/AIDS among Transgender...


[xviii] Ibid.


### BASIC PRINCIPLES OF HIV

**The Basic Principles of HIV**

<table>
<thead>
<tr>
<th>HIV IS SPREAD FROM PERSON TO PERSON BY DIRECT CONTACT WITH THE FOLLOWING INFECTED BODY FLUIDS:</th>
<th>HIV IS NOT SPREAD THROUGH:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Blood</td>
<td>• Air or Water</td>
</tr>
<tr>
<td>• Semen</td>
<td>• Visual contact such as shaking hands or hugging</td>
</tr>
<tr>
<td>• Vaginal fluids and secretions</td>
<td>• Saliva, sweat or tears</td>
</tr>
<tr>
<td>• Breast Milk</td>
<td>• Insects</td>
</tr>
</tbody>
</table>

- Normal range of CD4 “helper” T cells ranges between 500 and 1600; An AIDS diagnosis occurs when an individual’s CD4 count is less than 200.
- Most patients should start HAART when the CD4 count is below 350, however many providers recommend HAART regardless of CD4 count.

### HIV OF AGING

- Stigma of HIV/AIDS may be more severe in older adults, which may prevent them from knowing their status or seeking out support if they become HIV positive.
- Factors such as age related vaginal wall thinning and dryness can increase the risk of HIV transmission.
- Older adults may be taking medications for illnesses or complications associated with aging (e.g., high blood pressure, high cholesterol). This plays an important role in considering drug-drug interactions between HAART and other medications.
- Older adults may have decreased functioning of their kidneys and liver. This is another important consideration when treating with HAART.
- HIV, HAART and aging can greatly reduce bone mineral density. It is important to encourage physical activity.
- Consider additional therapies, e.g., counseling, exercise, massage, that may be helpful for older adults living with HIV.
### NURSING IMPLICATIONS FOR PROVIDING CARE TO ELDERS WITH HIV

#### ADHERENCE

- ✓ Make sure your patient does not miss doses of HAART
  - Wake your patient up for a scheduled dose if necessary!
- ✓ Educate your patient about the importance of adherence
- ✓ Help them to develop tools to achieve adherence
  - Pill organizers
  - Alarms (on cell phone, watch, etc.)
- ✓ Help them to develop tools to achieve adherence
  - Take the dose if within 12 hours of scheduled time
  - Skip the dose if more than 12 hours late

#### TO HELP MAINTAIN NEUROCOGNITIVE FUNCTION

- ✓ Promote:
  - Physical and mental exercise
  - Proper nutrition
  - Adequate sleep
  - Intellectually stimulating activities
  - Cognitive remediation, if necessary
- ✓ Discourage:
  - Alcohol and drug abuse
  - Sedentary Behavior
  - Depression, Anxiety
  - Social Isolation

#### TO REDUCE OR MANAGE RISK OF OSTEOPOROSIS

- ✓ Physical activity should be encouraged

#### TO REDUCE OR MANAGE RISK OF CARdiovascular DISEASE

- ✓ Use the same nursing interventions that you do with patients without HIV or with unknown status