

# **HIV/AIDS**

# **Continuing Education Course 2 CEU**

# ABOUT HIV - HUMAN IMMUNODEFICIENCY VIRUS

HIV is an acronym for human immunodeficiency virus and it is the disease that often leads to AIDS.

- *Human* This particular *virus* can only infect human beings.
- Immunodeficiency HIV weakens the immune system by destroying important cells.
- Virus A virus can only reproduce itself by taking over a cell in the body of its host.

While there are two strains of HIV: HIV-1 and HIV-2; when most people discuss HIV they are referring to HIV-1. No matter which form of HIV that is contracted, the virus attacks particular white blood cells (T-Cells) which are the foundation for the immune system that allows the body to fight disease

Unlike other viruses, such as the FLU or Common Cold, the human immune system *cannot* get rid of the HIV virus from the body. HIV attacks a key part of the immune system – the T-cells. The body has to have these cells to fight infection and disease. HIV invades these cells, uses them to replicate itself, and then destroys them. Over time the immune system becomes so badly damaged, the body cannot fight off infection or disease. When this happens HIV can lead to AIDS.

# ACQUIRED IMMUNODEFICIENCY SYNDROME

Acquired Immunodeficiency Syndrome is the final stage of HIV infection. People at this stage of HIV disease have badly damaged immune systems, which puts them at risk for opportunistic infections (OIs). There is no cure.

- Acquired AIDS is acquired—it is not inherited.
- *Immuno* The immune system includes all organs and cells that work to fight infection/ disease.
- Deficiency Individuals get AIDS when their immune system is "deficient."
- *Syndrome* A syndrome is a collection of symptoms and signs of disease.

AIDS is a syndrome, rather than a single disease, because it is a complex illness with a wide range of complications and symptoms.

# RISK GROUPS

HIV/AIDS takes a heavy toll on people of all ethnicities, genders, ages, and income levels. However, some populations have been uniquely affected by the epidemic. These populations include men who have sex with men, injecting-drug users, women, and people of color.

Three primary risk groups account for 75% of new HIV infections in the United States:

- Men who have sex with men (MSM)
- Injecting-drug users (IDUs)
- MSM who also use injection drugs

#### A HISTORY OF AIDS

Scientists identified a type of chimpanzee in West Africa as the source of HIV infection in humans. They believe that the chimpanzee version of the immunodeficiency virus (called simian immunodeficiency virus, or SIV) most likely was transmitted to humans and mutated into HIV when humans hunted these chimpanzees for meat and came into contact with their infected blood. Studies show that HIV may have jumped from apes to humans as far back as the late 1800s. Over decades, the virus slowly spread across Africa and later into other parts of the world. We know that the virus has existed in the United States since at least the middle to late 1970's.

The world first became aware of AIDS in the early 1980's. Growing numbers of gay men in New York and California were developing rare types of pneumonia and cancer, and a wasting disease was spreading in Uganda. Doctors reported AIDS symptoms under different names, including "gayrelated immune deficiency" and "slim," but by 1985, they reported them all over the world.

We now know that HIV existed long before it was identified as the cause of AIDS in 1984. Blood analysis reveals instances of the virus as early as the 1940s. While researchers aren't sure exactly when and how HIV developed, the most likely theories posit that HIV-1 (the most common strain of the virus) was transmitted to humans from chimpanzees sometime in the early to mid-20th century. In 2006, the number of AIDS-related deaths and new HIV infections fell for the first time since the epidemic began 25 years before. According to the most recent estimates (2012), about 35.3 million people are living with HIV today.

HIV is an equal opportunity virus. Newborn babies, women, seniors, teens and people of all races or nationalities can have HIV. The prevalence of the virus in different groups varies (as it does for other diseases), but it can affect anyone. Of HIV positive people worldwide, slightly more than half are women. Compared to older adults, sexually active teens and young adults are at higher risk for acquiring Sexually Transmitted Infections, due to a combination of behavioral, biological and cultural factors. Though they make up 25% of the sexually active population, they account for nearly half of new STI cases. Early diagnosis, prompt and continued care, and antiretroviral drug therapy are key to lowering the risk of illness and death among patients, and reducing transmission of HIV.

#### **FAST FACTS**

According to the Centers for Disease Control and Prevention (CDC):

- HIV and AIDS are generally concentrated in urban areas in the United States.
- Gay, bisexual, and other men who have sex with men (MSM), particularly young black/African American MSM, are most seriously affected by HIV.
- By race, blacks/African Americans face the highest incidence of HIV. Over 40% of new HIV diagnosis in the US is in the black community.
- The term AIDS applies to the most advanced stages of HIV infection, defined by the occurrence of any of more than 20 opportunistic infections or HIV-related cancers. In addition, the CDC defines AIDS on the basis of a CD4 positive T cell count of less than 200 per mm3 of blood.
- More than 1.2 million people in the United States are living with HIV infection, and almost 1 in 7 (14%) are unaware of their infection

Globally, the number of HIV infections across the world is over 35 million and a significant percentage (close to 10%) of this is children. Close to 2 million new cases are reported every year.

HIV/AIDS IN THE UNITED STATES	
1.2 million people living with HIV/AIDS	• 297,000 of them women
	• 3,992 children
Over 600,000 dead of AIDS since 1981	• 576,000 adults
	• 5,200 children
During the year 2008	• 56,000 people newly infected with HIV
	• 182 of them children
	• 18,000 people died of AIDS-related illnesses

New AIDS Diagnoses – At the end of 2010

- The South accounted for 45% of the estimated 33,015 new AIDS diagnoses in the 50 states and the District of Columbia, followed by the Northeast (24%), the West (19%), and the Midwest (13%).
- The Northeast reported the highest rate of new AIDS diagnoses (14.2/100,000), followed by the South (13.0/100,000), the West (8.8/100,000), and the Midwest (6.3/100,000).

# Living with an AIDS Diagnoses

In 2009, the South accounted for 40% of the estimated 476,732 persons living with an AIDS diagnosis in the 50 states and the District of Columbia, followed by the Northeast (29%), the West (20%), and the Midwest (11%).

# HIV/AIDS – Florida

- 17% of all new HIV infections reported in 2012 were among persons under the age of 25.
- 2010-2012, 637 new HIV infection cases were reported among those ages 13-19 and 2,073 among those ages 20-24.
- There were 104,554 people living with HIV/AIDS in Florida as of January 31, 2014.
- Sex: 71% male & 29% female
- Race/Ethnicity: 29% White, 48% Black, 21% Hispanic, & 1% Multiracial. In fact, 1 in 32 black women will be diagnosed with HIV infection at some point in her lifetime. Approximately 80% of HIV and AIDS cases among women are the result of heterosexual transmission.
- In Florida, of those living with HIV/AIDS, the top transmission rates include Men who have Sex with Men (MSM) at 43% and Heterosexual contact at 34%.
- As of January 31, 2014 Miami-Dade County ranks #1 in the state of Florida for number of new HIV cases and AIDS cases. There are 27,035 people living with HIV/AIDS in Miami-Dade County.
- As of January 31, 2014 Broward County (Ft. Lauderdale) ranks #2 in the state of Florida for number of new HIV cases and AIDS cases. There are 17,632 people living with HIV/AIDS in Broward County.

#### THE FOUR STAGES OF HIV

# Stage 1 – Primary

Short, flu-like illness, fever, and rash - occurs one to six weeks after infection and is your body's natural response to the virus.

- Not everyone develops symptoms or may feel ill after infection
- The infected person can infect other people

# Stage 2 – Asymptomatic

- Lasts for an average of ten years
- This stage is free from symptoms
- There may be swollen glands
- The level of HIV in the blood drops to very low levels
- HIV antibodies are detectable in the blood

# **Stage 3 – Symptomatic**

- The symptoms are mild, may include unexplained chronic diarrhea, unexplained persistent fever, oral candidiasis leukoplakia, severe bacterial infections, inflammation in the mouth.
- The immune system deteriorates
- Emergence of opportunistic infections and cancers are likely

# Stage 4 - HIV ⇒ AIDS

- The immune system weakens
- The illnesses become more severe leading to an AIDS diagnosis
- Once HIV progresses to AIDS, a person is more likely to die

# OPPORTUNISTIC INFECTIONS ASSOCIATED WITH AIDS

- Bacterial
  - o Tuberculosis (TB)
  - o Strep pneumonia
- Viral
  - o Kaposi Sarcoma (Is a cancer. The abnormal cells of KS form purple, red, or brown blotches or tumors on the skin. These affected areas are called *lesions*. The skin lesions of KS most often appear on the legs or face)
  - Herpes
  - o Influenza (flu)
- Parasitic
  - o Pneumocystis carinii pneumonia (classified as a fungal pneumonia)
- Fungal
  - o Candida
  - o Cryptococcus (potentially fatal fungal disease)

# MODES OF HIV/AIDS TRANSMISSION

Sexual Contact: HIV is most often spread through unsafe sexual contact and practices. This is most often associated with sexual contact with someone who is infected and unprotected sex (not using a latex condom). Those who practice anal sex are more susceptible to infection than those who practice vaginal sex resulting in high rates of HIV infection in the gay male community.

Drug Use: Another source of the spread of HIV has been within the injecting drug user (IDU) community. IDUs who share needles and other drug paraphernalia facilitate blood to blood contact, in turn making it very likely that the disease will spread. Non-injecting drug users have a much lower incidence of HIV infection as there is no infected bodily fluid transmission.

Perinatal Transmission: Children born to a mother who is infected with HIV are likely to become infected themselves either during pregnancy or even breast-feeding. These children do not contract HIV from their genetics.

Other Sources: HIV is also spread through accidental means including accidental injection often in a medical setting, through saliva exchange including kissing or eating an infected persons already chewed food (if blood is present in the saliva) and biting. Rarely HIV is transmitted through wound to wound contact or tattooing and body piercing. We do hear of HIV contraction through receiving tainted blood during a transfusion or organ transplantation. While this is possible, it is relatively uncommon. Most blood banks screen the blood they collect for HIV and organs are almost always screened for HIV.

# You do NOT get HIV from:

- Donating blood
- Mosquito bites or bites from other bugs
- Sneezes or coughs
- Touching, hugging or dry kissing a person with HIV
- The urine or sweat of an infected person
- Public restrooms, saunas, showers or pools
- Sharing towels or clothing
- Sharing eating utensils or drinks
- Being friends with a person who has HIV/AIDS

#### TESTING OPTIONS FOR HIV

An HIV test is a test that reveals whether HIV is present in the body. Commonly-used HIV tests detect the antibodies produced by the immune system in response to HIV, as it is much easier (and cheaper) to detect antibodies than the virus itself. Antibodies are produced by the immune system in response to an infection. For most people, it takes three months for these antibodies to develop. In rare cases, it can take up to six months. During this "window period" of early infection a person is at their most infectious.

Generally, it is recommended that you wait three months after possible exposure before being tested for HIV. Although HIV antibody tests are very sensitive, there is a 'window period' of 3 to 12 weeks, which is the period between infection with HIV and the appearance of detectable antibodies to the virus

# Anonymous Testing

No name is used, test recipient is assigned a unique identifying number and results are only issued to the test recipient.

# Confidential Testing

Person's name is recorded along with HIV results. The name and positive results are reported to the State Department and the CDC. Results issued only to test recipient.

#### **Administration of Tests**

- **Blood Detection Tests** 
  - o Enzyme-Linked Immunosorbent Assay/Enzyme Immunoassay (ELISA/EIA)
  - o Radio Immunoprecipitation Assay/Indirect Fluorescent Antibody Assay (RIP/IFA)
  - o Polymerase Chain Reaction (PCR)
  - Western Blot Confirmatory test

# Urine Testing

- o Urine Western Blot as sensitive as testing blood, safe way to screen for HIV, however can cause false positives in certain people at high risk for HIV.
- Oral Testing
- o Orasure The only FDA approved HIV antibody and is as accurate as blood testing. It draws blood-derived fluids from the gum tissue. It is NOT A SALIVA TEST!

#### COUNSELING

# • Pre-test Counseling

Items that can be discussed during this counseling include transmission, prevention, risk factors, voluntary & confidential, and reportability of positive test results.

# Post-test Counseling

Items that can be discussed during this counseling include clarifying test results, discussing the need for additional testing, how to promote safe behavior and releasing of results.

# **OMNIBUS AIDS ACT**

In 1988, Florida became one of the first states with high rates of HIV infection to enact comprehensive legislation addressing the AIDS epidemic. In 1998, the Omnibus AIDS Act remains consistent with the recommendations of many national organizations that have carefully examined the issues. It is premised on the health policy judgment that this illness can best be controlled through an informed public that knows how to avoid contracting and transmitting the disease and that voluntarily agrees to be tested. (Hartog, 2013)

#### INFORMED CONSENT

In Florida, an HIV test subject must essentially understand (be "informed" about) and then explicitly agree ("consent") to the test. A "general consent" from a patient to draw blood and run unspecified tests on the sample is an insufficient basis for performing an HIV test. Except in the very few situations described below, the patient's informed consent specifically to the HIV test must be obtained. (Hartog, 2013)

#### Minors in Florida

Minors in Florida (unemancipated children under 18) are adults for the purposes of consenting to an HIV test. The general rule that parental consent is required prior to medical diagnosis or treatment of a minor does not apply when sexually transmitted diseases such as HIV infection are involved. Indeed, Florida specifically forbids telling parents the fact of the minor's HIV test or its results either directly or indirectly (such as by billing a parent without the child's permission). Infants and young children are treated as unable to make an informed decision and consent of their parents or legal guardian is required; however, for older children (such as teenagers), the provider must make an individual judgment whether the child has the cognitive and emotional capacity to understand the risks and benefits of the test or treatment to which child is being asked to consent. (Hartog, 2013)

# **Pregnancy**

The Florida's AIDS law in 1996 requires every physician and midwife attending a woman for conditions related to pregnancy to offer HIV testing in conjunction with required blood tests. Florida Administrative Rule 64D-3.042, requires all pregnant women to be tested at their initial prenatal appointment, at 28 to 32 weeks, and at labor and delivery if there has not been an HIV test after 27 weeks gestation. Because these health care providers must take at least one blood sample during pregnancy, this law assures that during pregnancy a woman will be offered an HIV test. In addition, state legislation requires health care providers to counsel the woman, including discussing the availability of treatment if the woman tests HIV positive. Prior to any testing, practitioners are required to notify the woman which tests will be conducted and inform her of the right to refuse testing (opt-out testing). If the woman declines, the provider must take "reasonable steps" to obtain a signed statement from her objecting to the test and place the signed statement in her medical record. If such activity occurs, the provider is immune from liability should the infant contract HIV infection from the mother during pregnancy or at birth. (Hartog, 2013)

# **Exceptions to Informed Consent Requirements**

The statute lists the very limited circumstances in which an HIV test may be performed without the test subject's informed consent. No provision permits testing for evidence of HIV infection in a general medical setting on a routine basis without informed consent. Permitted exceptions are as follows:

- A provider may test without consent in "bona fide medical emergencies," but only if the provider documents in the medical record that the test results are medically necessary in order to provide appropriate emergency care or treatment to the test subject and the test subject is unable to consent. This situation rarely arises. By the time a confirmed HIV test result can be secured (which usually takes in excess of 48 hours) the emergency medical condition would have passed. Because the inability to consent due to physical incapacity by itself does not mean that an HIV test is a medical emergency, the fact that a patient may be unconscious and unable to consent is not a basis for using this exception.
- The Act allows a "therapeutic privilege" to bypass informed consent requirements when the provider's medical record documents that obtaining informed consent would be detrimental to the health of a patient suffering from an acute illness and that the test results are necessary for medical diagnostic purposes to provide appropriate care or treatment to the patient. This same privilege applies to all medical procedures for which informed consent is required. The statute emphasizes that this provision provides no basis for routinely testing patients for HIV without their informed consent.
- State laws permit HIV testing on certain subjects, such as convicted prostitutes, and cadavers over which a medical examiner has asserted authority, without the consent of the test subject; federal laws authorize HIV testing of immigrants without consent in certain situations.
- Victims of criminal offenses that involve transmission of body fluids may require the person charged with or convicted of the offenses to be tested for HIV infection by requesting a court to order the test. Similarly, when a defendant, prosecuted for certain offenses where transmission might have occurred, has been ordered to or has voluntarily given a blood sample, the victim may request the sample be tested for evidence of HIV without the consent of the defendant.
- Other statutory provisions permit testing without informed consent in specifically identified specialty areas: certain blood and tissue donations the Act explicitly exempts from those requirements; autopsies to which consent to perform the autopsy was obtained; corneal removals and eye enucleation that Florida allows by law to be done without consent; and certain kinds of epidemiologic research that ensure test subject anonymity.
- When a licensed physician determines that it is medically indicated that a hospitalized infant have an HIV test, but the infant's parent(s) or legal guardian cannot be located after reasonable attempts, the test may be performed without consent. The reason why consent could not be obtained must be documented in the medical record, and the test result must be provided to the parent(s) or guardian once they are located.

- Under the limited circumstances discussed in Section VI of this booklet, the blood of the source of a significant exposure to medical personnel or others who rendered emergency medical assistance may be tested without informed consent.
- Repeated HIV testing either to monitor the clinical progress of a previously diagnosed HIV positive patient or for conversion from a significant exposure without renewed consents is authorized by the 1998 amendments.
- Finally, a court may order that an HIV test be performed without the individual's consent.

#### CONFIDENTIALITY AND HIV/AIDS

The results of HIV antibody tests are confidential and may not be publicly disclosed except with the resident's written permission or as otherwise provided in Chapter 384, Florida Statues. All agencies are required to establish appropriate procedure to maintain these confidential medical records. including limiting access to persons authorized by statute and administrative rule to review or receive such records. Confidential medical information including HIV antibody test results may only be shared with those listed in section 64D-2.003 (2) F.A.C. This includes but is not limited to the following:

- The person tested
- Any person designated in a legally effective release of information executed by the client
- The Department of Health in accordance with rules for reporting and controlling the spread of disease, as otherwise provided in state law
- Any personnel who experience a significant exposure while performing emergency assistance
- Employees of the department and its authorized representatives who are responsible for the custody, medical care and treatment of persons served and who have a need to know such information.

Need to know is outlined in section 64D-.003 F.A.C. and includes but is not limited to: medical personnel involved with the diagnosis or treatment of the person tested; licensed medical professionals who regularly participate as part of an interdisciplinary team responsible for the care and treatment of the client; staff that handle body fluids or who have the potential of coming into contact with body fluids; personnel involved in utilization review, risk management or peer review activities; financial staff who compile or review medical records as part of routine billing activities.

# **VOLUNTARY PARTNER NOTIFICATION**

The person ordering the HIV test (or that person's designee), although under no liability exposure to the sexual or needle-sharing partners of their HIV-positive patients, is required to advise their patients with HIV positive test results of the importance of notifying partners who may have been exposed. §381.004(2) (c), F.S.

Practitioners are well advised also to tell the patient of the availability of voluntary partner notification services provided by the Department of Health.

Client medical records cannot be marked, coded or distinguished on the outside in any way that identifies HIV test results or that an HIV test was or was not performed. The written informed consent form or documentation of informed consent and HIV test results will be kept in the medical record. When a resident is transferred from one facility to another, the resident's medical records including HIV/AIDS data must be transferred in a sealed envelope marked *confidential*.

#### TREATMENT OPTIONS

# **Antiretroviral Drugs**

- Nucleoside Reverse Transcriptase inhibitors AZT (Zidovudine)
- Non-Nucleoside Transcriptase inhibitors Viramune (Nevirapine)
- Protease inhibitors Norvir (Ritonavir)

# **Opportunistic Infection Treatment**

OIT can be issued in an event where antiretroviral drugs are not available.

# **PROTECTION**

There are four ways to protect yourself from HIV/AIDS:

- Abstinence
- Monogamous Relationship with partners not infected with HIV/AIDS
- Protected Sex
- Sterile needles

#### **Abstinence**

- It is the only 100 % effective method of not acquiring HIV/AIDS.
- Refraining from sexual contact: oral, anal, or vaginal.
- Refraining from intravenous drug use.

# Monogamous relationship

A mutually monogamous (only one sex partner) relationship with a person who is not infected with HIV. HIV testing before intercourse is necessary to prove your partner is not infected (antibodies may not be present in blood for 4-12 weeks, partners need follow-up testing after the necessary time lapse to ensure negative results).

#### **Protected Sex**

- Use condoms (female or male) every time you have sex (vaginal or anal)
- Always use latex or polyurethane condom (not a natural skin condom)
- Always use a latex barrier during oral sex

When using a condom remember to:

- Make sure the package is not expired
- Make sure to check the package for damages
- Do not open the package with your teeth for risk of tearing
- Never use the condom more than once
- Use water-based rather than oil-based condoms

# **Sterile Needles**

If a needle/syringe or cooker is shared, it must be disinfected:

• Fill the syringe with undiluted bleach and wait at least 30 seconds. Thoroughly rinse with water. Do this between each person's use.

# **Needle Exchange Programs**

With Needle Exchange Programs, sterile needles are provided in exchange for contaminated ones.

Legalization of needle exchange programs in Florida would be instituted to decrease transmission of HIV and blood-borne disease, reduce contaminated needles on streets and accidental needle sticks, and reduce taxpayer costs. Chapter 893 of the Florida Statutes currently forbids the transfer of a syringe to a person known to inject illegal drugs. HB 735 and SB 808 would remove this prohibition from law to allow for legal syringe exchange programs in Florida. This legislation is a non-partisan, public health issue.

# PREVENTION STRATEGIES IN THE WORKPLACE

Health care workers should assume that the blood and other body fluids from all patients are potentially infectious. They should therefore follow infection control precautions at all times. These precautions include:

- Routinely using barriers when anticipating contact with blood or body fluids.
- Immediately washing hands and other skin surfaces after contact with blood or body fluids, and carefully handling and disposing of sharp instruments.

# HIV/AIDS - RELATED EMOTIONAL ISSUES

There are many possible emotional issues associated with an HIV diagnoses. Along with the physical illness associated with HIV there are mental health conditions that may come up, such as depression and anxiety. It is important for behavioral health staff to be aware of and sensitive these conditions.

What follows are some of the most common feelings associated with a diagnosis of HIV and suggestions on how to cope with these feelings. Clients may experience some, all, or none of these feelings, and they may experience them at different times.

#### **Denial**

People who find out that they are HIV positive often deal with the news by denying that it is true. You may believe that the HIV test was not accurate or that there was a mix-up with the result, even after confirmatory testing shows that it is a true positive. This is a natural and normal first reaction. At first, this denial may even be helpful, because it can give you time to get used to the idea of infection. However, if not dealt with, denial can be dangerous; you may fail to take certain precautions or reach out for the necessary help and medical support.

It is important that you talk out your feelings with your doctor, a therapist, or someone you trust. It is important to do this so that you can begin to receive the care and support you need.

# Anger

Anger is another common and natural feeling related to being diagnosed with HIV. Many people are upset about how they got the virus or angry that they didn't know they had the virus.

Ways to deal with feelings of anger include the following:

- Talk about your feelings with others, such as people in a support group, or with a counselor, friend, or social worker.
- Try to get some exercise (i.e. gardening, walking, or dancing) to relieve some of the tension and angry feelings you may be experiencing.
- Avoid situations involving certain people, places, and events that cause you to feel angry or stressed out. Using drugs or alcohol when you feel angry can be dangerous for you and lead to conflict or violence that might otherwise have been avoidable.

# Sadness or depression

It is also normal to feel sad when you learn you have HIV. If, over time, you find that the sadness doesn't go away or is getting worse, talk with your doctor or someone else you trust. You may be depressed.

Symptoms of depression can include the following, especially if they last for more than 2 weeks:

- Feeling sad, anxious, irritable or hopeless
- Gaining or losing weight
- Sleeping more or less than usual
- Moving slower than usual or finding it hard to sit still
- Losing interest in the things you usually enjoy
- Feeling tired all the time
- Feeling worthless or guilty
- Having a hard time concentrating
- Thinking about death or giving up
- Persistent loss of libido or interest in sex

To deal with these symptoms, you may want to:

- Talk with your doctor about treatments for depression, such as therapy or medications
- Get involved with a support group
- Spend time with supportive people, such as family members and friends

If your mood swings or depression get very severe, or if you ever think about suicide, call your doctor right away. Your doctor can help you.

# Fear and anxiety

Fear and anxiety may be caused by not knowing what to expect after you've been diagnosed with HIV, or by not knowing how others will treat you if they find out you have HIV. You also may be afraid of telling people (friends, family members, and others) that you are HIV positive.

Fear can make your heart beat faster or make it hard for you to sleep. Anxiety also can make you feel nervous or agitated. Fear and anxiety might make you sweat, feel dizzy, or feel short of breath. Ways to control your feelings of fear and anxiety include the following:

- Learn as much as you can about HIV. HIV infection is now a very treatable disease and most HIV-infected people can live long, healthy lives if they seek medical care and have healthy lifestyles. Current HIV medications can be very well tolerated and in general do not lead to the body changes that were seen with older treatments.
- Have your questions answered by your doctor.
- Talk with your friends, family members, and health care providers.
- Join a support group.
- Help others who are in the same situation, such as by volunteering at an HIV service organization. This may empower you and lessen your feelings of fear.
- Talk to your doctor about medication if the feelings don't lessen with time or increase.

#### Stress

If you are HIV infected, you and your loved ones constantly have to deal with stress. Stress is unique and personal to each of us. When stress does occur, it is important to recognize the fact and deal with it. Some ways to handle stress are discussed below. As you gain more understanding about how stress affects you, you will come up with your own ideas for coping with stress.

- Try physical activity. When you are nervous, angry, or upset, try exercise or some other kind of
  physical activity. Walking, yoga, and gardening are just some of the activities you might try to
  release your tension.
- Take care of yourself. Be sure you get enough rest and eat well. If you are irritable from lack of sleep or if you are not eating right, you will have less energy to deal with stressful situations. If stress keeps you from sleeping, you should ask your doctor for help.

#### AIDS dementia

HIV/AIDS and some medications for treating HIV may affect brain functioning. When HIV itself infects the brain, it can cause a condition known as AIDS Dementia Complex (ADC). Symptoms can include the following:

- Forgetfulness
- Confusion
- Difficulty paying attention
- Slurred speech
- Sudden shifts in mood or behavior
- Muscle weakness
- Clumsiness

If you think you may have ADC:

- Don't be afraid to tell your doctor that you think something is wrong. These symptoms can be subtle in the beginning, and telling your care providers about your concerns can help them to diagnose and treat you early.
- Keep a notepad with you and write down details about your symptoms whenever they occur. This information can help your doctor to help you
- Build as much support as possible, including friends, family, and health care providers. Although it's possible to treat ADC successfully, it may take a while for some symptoms to away.

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