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## MODERN METHODS OF HIV TREATMENT AS A GUARANTEE OF A FULL-QUALITY LIFE

The aim of the study is to investigate the problem of HIV transmission among the population of reproductive age and the most effective ways of its treatment. HIV is a virus that attacks cells in the immune system (the body's natural defense against illness). The virus destroys a type of white blood cell in the immune system called a Thelper cell – also referred to as a CD4 cell – and uses these cells to make copies of itself.

As HIV destroys more CD4 cells and makes more copies of itself, it gradually weakens a person's immune system. This means that someone who has HIV, and isn't taking treatment for it, will find it harder and harder to fight off infections and diseases.

If HIV is left untreated, it may take up to 10 or 15 years for the immune system to be so severely damaged that it can no longer defend itself. However, the rate at which HIV progresses varies depending on age, general health and background. HIV can be passed from one person to another via the following bodily fluids: blood, semen (including pre-cum), vaginal fluid, anal mucous, breastmilk. [3]

Finding out you have HIV can be tough. But with treatment and support, people with HIV can live long, healthy, fulfilling lives. Millions of people have HIV. Most people get at least one STD in their lifetime, and having HIV or another STD is nothing to feel ashamed of or embarrassed about.

Finding out that you have HIV can be really upsetting. You might feel mad, embarrassed, scared, or ashamed at first. But you'll probably feel better as time goes by — having a good support system and getting counseling really helps.

Although there's no cure for HIV, there are medicines that help people with HIV live longer, healthier lives. HIV treatment called antiretroviral therapy (ART) lowers the amount of virus in your body (called your viral load).

Some people feel like their love lives are over when they find out they have HIV, but it's just not true. People with HIV can have fulfilling romantic and sexual relationships. People living with HIV can have relationships with partners who don't have HIV (called serodiscordant) or with partners that are also living with HIV (called seroconcordant). HIV treatment helps keep you healthy and helps you avoid passing HIV to someone else. If your partner does not have HIV, they can also take a medicine called PrEP that can help protect them from getting HIV.

It's important to tell your sexual partners about your HIV status. That way, you and your partners can make more informed decisions about testing, and treatment that are right for the both of you.

It's normal to be worried about how your partner's going to react. And there's no way around it: some people might get freaked out. If that happens, try to stay calm and talk about your plan to stay healthy and how they can stay HIV negative. It might help to give your partner a little time and space to process. You could also suggest they talk with your HIV doctor about ways to protect themselves from HIV.

If you tell someone you have HIV and they hurt you, shame you, or make you feel bad, it's not ok. You deserve to be with someone who respects and cares about you, and there are plenty of people out there who will.

Babies can get infected with HIV during pregnancy, birth, or breastfeeding — that's why it's recommended that everyone get tested early in pregnancy. If you have HIV, antiretroviral medications greatly lower your chances of giving HIV to your baby. With treatment, less than 2 out of 100 babies born to women with HIV will be infected. Without treatment, about 25 out of 100 babies will be infected. [1]

Antiretroviral medications can help to slow damage caused by HIV infection and prevent it from developing into stage 3 HIV, or AIDS.

A healthcare provider will recommend undergoing antiretroviral therapy. This treatment requires taking three or more antiretroviral medications daily. The combination helps suppress the amount of HIV in the body (the viral load).

Though the outlook has gotten much better for those with HIV, there are still some long-term effects that they might experience. People living with HIV may begin to develop certain side effects of treatment or HIV itself. These may include: accelerated aging, cognitive impairment, inflammation-related complications, effects on lipid levels, cancer. The body may also undergo a shift in how it processes sugars and fats. This can lead to having more fat in certain areas of the body, which can change the body's shape. However, these physical symptoms are more common with older HIV medications. Newer treatments have far fewer, if any, of these symptoms affecting physical appearance.

If treated poorly or left untreated, HIV infection can develop into stage 3 HIV, or AIDS. A person develops stage 3 HIV when their immune system is too weak to defend their body against infections. A healthcare provider will likely diagnose stage 3 HIV if the number of certain white blood cells (CD4 cells) in an HIV-positive person's immune system drops below 200 cells per mL of blood.

Life expectancy is different for every person living with stage 3 HIV. Some people may die within months of this diagnosis, but the majority can live fairly healthy lives with regular antiretroviral therapy. [2]

## REFERENCES

1. Living with HIV [Електронний ресурс] - Режим доступу: College.nuph.edu.ua/wp-content/uploads/2014/10/ВМП-Підручник-Пасько.pdf

2. Facts about HIV: life expectancy and long-term outlook [Електронний pecypc] - Режим доступу: https://www.healthline.com/health/hiv-aids/life-expectancy

3. What are HIV? [Електронний ресурс] - Режим доступу: https://www.avert.org/about-hiv-aids/what-hiv-aids