



AIDS: The Dreadful Breach in the Immune System

(World AIDS Day Guest Comment)

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I feel privileged to write this editorial for the International Healthcare Research Journal (IHRJ). I congratulate whole IHRJ team for their sincere efforts and making a commendable contribution towards Health research with their work.

According to World Health Organisation, since the epidemics have started, more than 70 million people have been infected with HIV and about 35 million people have died due to the same. At the end of 2016, around an average of 36.7 million people were living with HIV. An estimated 0.8% of adults aged between 15-49 years are living with HIV worldwide, although the burden continues to vary considerably between various countries and regions. Sub-Saharan Africa remains most severely affected, with nearly 1 in every 25 adults (4.2%) living with HIV and accounting for nearly two-thirds of the people living with HIV worldwide.¹

In India, scenario is even more dreading, with 2.1 million people living with HIV, out of which only 50% adults and 33% children are on antiretroviral treatment.² In short, India has the third largest HIV epidemic in the world.³

First thing I would like to clear to all, which I feel is the biggest confusion for most common / non medico individuals. HIV is a retrovirus & AIDS is a medical condition. AIDS (acquired immune deficiency syndrome) is caused by a virus called HIV (human immunodeficiency virus). This virus attacks the T-cells (CD-4 cells) resulting in alteration of the immune system, making patients much more vulnerable to countless diseases. This susceptibility worsens with the progression of the disease which varies widely between individuals and depends on many factors like age of the patient, the body's ability to defend

against HIV, access to healthcare facilities, co-existence of concomitant infections, person's genetic make up, resistance to certain strains of HIV and many more.

How is HIV transmitted?

The HIV virus can be transmitted via blood and is even sexually or perinatally transmissible. Blood transmission happens on contact with infected sexual fluids (rectal, genital, or oral), to child via mother during birth, sharing and reusing injections and syringes contaminated with HIV-infected blood that is more common in IV drug abusers.⁴

HIV symptoms

Many people infected with HIV don't present with any symptoms for several months to even years. Others may develop flu-like symptoms, usually in a few weeks after getting infected. These may include fever, chills, pain in joints, myalgia, sore throat, sweats, gland enlargement, rashes, asthenia, generalised body weakness and drop in weight.⁵

In major, the symptoms of AIDS result from various opportunistic infections caused by bacteria, viruses, fungi, or parasites which normally do not develop in individuals with healthy immune systems.⁶

In the long run, untreated AIDS weakens the ability to fight against any kind of infection and can lead to countless life-threatening or fatal complications.

AIDS Treatment

Antiretroviral therapy, if started at an earlier stage can help in slowing down the course of the condition, reducing the transmission risk, and allowing most of the infected people an opportunity to live a long, happy and relatively healthy life.

Emergency HIV pills (post-exposure prophylaxis): If an individual is doubtful about exposure to the HIV virus within the last 72 hours, anti-HIV medications, called PEP (post-exposure prophylaxis) should be taken as soon as possible. PEP is a very demanding treatment lasting for a duration 4 weeks.⁷

After a diagnosis regarding a positive HIV has been made, regular blood tests are mandatory to monitor the viral progress in the subject. Antiretroviral therapy fights the HIV infection and slows down the spread of the virus in the body. Patients are advised to take combined therapy called HAART (highly active antiretroviral therapy) or cART (combination antiretroviral therapy).⁸

HIV treatment is usually lifelong and is based on routine dosage and is to be taken on a regular schedule.

HIV prevention

Prevention is better than cure is best suited tag line for HIV infections. In case of HIV positive, one should take the counselling, help and guidance from experts regarding the matter. Health education is an important

factor in reducing risky behaviour and creating awareness among common individuals.

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