

HIV/AIDS transmission In the sub-Saharan region

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Origins and Recognition of HIV/AIDS

HIV/AIDS is one of the modern emerging infectious diseases that emerged a century ago when the virus got transmitted from one primate to another and, later on, found its way into the human population due to social and demographic factors. This disease was not well recognized until 1981 when it was noticed among certain risk groups such as gay people, donors of infected blood, and drug users who shared injection equipment. It was later noticed that this disease was not only common to this risk group, but its transmission was heterosexual in nature, especially in developing the world. In the sub-Saharan region, a number of factors were responsible for its transmission, such as commercial sex work, poor healthcare, poverty, and inequality in the social structure of the society (Seckinelgin, 2005).

HIV/AIDS Burden in Sub-Saharan Africa

Although HIV/AIDS is a global pandemic, it is largely concentrated in sub-Saharan Africa. According to UNAIDS, by late 2001, there were 40 million people living with the disease in the region, and almost 9 percent of the population between the age group of 15 and 49 were living with HIV/AIDs. The circumstances of the HIV/AIDS pandemic are different in other parts of the world, such as Russia and Asia, where, according to statistics, more than 7 million people by 2001 were living with HIV/AIDS. The spread of the HIV/AIDS pandemic is very fast in sub-Saharan Africa (Eberstadt, 2002).

Aging Populations Living with HIV/AIDS

According to the Centers for Disease Control and Prevention, by 2017, more than half of those who will be living with HIV/AIDS will be above the age of 50, as seen in the United States and Canada, where the majority of adults living with HIV/AIDs are long-term survivors (Roger, Mignone and Kirkland, 2013).

Sexual and Bodily Fluid Transmission

HIV/AIDS is transmitted in many ways among persons. It can be transmitted from one infected person to another either through direct contact or through other means, as outlined below. The body fluids of

an infected person contain the highest concentration of the virus, and direct contact with fluids such as semen, vaginal fluids, and breast milk can lead to the uninfected person contracting HIV/AIDS. Sexual contact is one of the riskiest activities that can put one at risk of contracting the disease. During sexual intercourse, fluids such as semen and vaginal fluids come in contact between the partners, and it is very likely that an infected partner can infect the other person. Having unprotected sex is a major cause of transmission among adults (Sia et al., 2016).

Bloodborne and Mother-to-Child Transmission

Transmission of HIV/AIDS can also occur through blood transfusions in cases such as accidents. Although these cases are nowadays rare, blood transfusion during organ and tissue transplants may lead to HIV/AIDS transmission. Sharing needles and surgical equipment can also predispose one to HIV/AIDS. This equipment can transmit infected blood from one person to another if they are shared. A person with HIV/AIDS can transmit it to a person without HIV/AIDS if they share the same needle, and such cases are common among drug users and addicts. Transmission can also occur from mother to child, especially through breastfeeding or during birth. It is very likely for an infected mother to transmit HIV/AIDS to the unborn child during childbirth or through breastfeeding because breast milk contains HIV (Sia et al., 2016).

Incubation Period and Disease Progression

The incubation period is the time of infection to the time the symptoms of the disease start to manifest in a person (Alcabes, 1993). The incubation period of HIV/AIDS varies according to the type, and for HIV type 1, the incubation periods are two: the first period and the second period. The first period, usually referred to as the window period, is the period from the acquisition of the disease to the time the antibody of HIV/AIDS is present in the serum of an infected person. The second period is where the signs and symptoms of HIV/AIDS start to show in a person. The exact date of the first window period is not well known but is usually estimated to be between two weeks and three months. The first window period varies according to the age and immune status of the person at the time of infection. This period is usually short compared to the second period of incubation. During the second period of incubation, chronic HIV occurs, and the following symptoms start to appear in a person: high fever, diarrhea, weight loss, and coughing. In some rare cases, people with chronic HIV/AIDS might have no symptoms of the disease, and this condition can last up to 10 years. This is called the latent function. Later on, the disease becomes full-blown, and the CD4 level of the patients starts to drop. During this stage, an HIV/AIDS patient experiences memory loss, pneumonia, and severe fatigue, among other symptoms.

Antiretroviral Treatment and Prevention

Treatment given to HIV/AIDS patients is meant to better their health and prolong their lives, not to cure the disease. Usually, treatment is administered by the use of three drugs called combination therapy or anti-retroviral Therapy, which contains an HIV regimen. HIV/AIDS-positive people should seek the advice of a clinician on when to start taking these drugs. These medicines are taken daily to reduce the risk of further transmission. These medicines prevent HIV from multiplying in the body and give the body an immune system for recovery and the fight off infections.

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