AIDS: Some Questions and Answers

**What is HIV?**

HIV or human immunodeficiency virus is a virus that infects humans. A person with HIV is infected for life and can infect others. The virus attacks the immune system and slowly weakens the body’s defence against diseases. An HIV-infected person can look and feel well for a long time without developing AIDS.

**What is AIDS?**

AIDS or acquired immunodeficiency syndrome is a disabling and deadly disease caused by HIV. (“Acquired” means something not inherent in the patient’s body but transmitted from others; “immunodeficiency” refers to the weakened ability of the body’s immune system that helps it ward off infections and diseases; and “syndrome” is the group of signs and symptoms associated with the disease.) AIDS occurs as a collection of infections (called opportunistic infections) that are usually severe, such as pneumonia or tuberculosis, manifest more often during the late stages of HIV infection. An HIV-infected person may not develop AIDS until 8 to 10 years after being infected.

 **How is HIV transmitted?**

The virus is carried from an infected person to a healthy person by blood, semen, vaginal fluids and breast milk.

HIV is transmitted in several ways:

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| http://www.searo.who.int/Image/oth_bullet1.gif | By having unprotected sexual intercourse (vaginal, anal or oral sex); in other words, by having sex without a condom with someone who is HIV-infected. Although most cases of sexual transmission involve men and women, men having sex with men are equally at risk.  |
| http://www.searo.who.int/Image/oth_bullet1.gif | By using (or being injured by) needles, razor blades or other medical/surgical equipment which have been recently contaminated by the blood of a person infected with HIV. |
| http://www.searo.who.int/Image/oth_bullet1.gif | By sharing needles and syringes used by an HIV-infected injecting drug user or by using needles/syringes that have been used in health care settings.  |
| http://www.searo.who.int/Image/oth_bullet1.gif | By receiving blood transfusions, blood products or organ transplants from an HIV-infected person. |
| http://www.searo.who.int/Image/oth_bullet1.gif | By an infected mother to her baby during pregnancy, delivery or breastfeeding. |

 HIV does not spread through ordinary social contact. For example, shaking hands with or traveling in the same bus with an HIV-infected person, or eating from the same plates an infected person has used, or hugging and kissing an HIV-positive individual will not spread the disease. Mosquitoes and insects do not carry the virus nor is the disease water-borne or air-borne.

**Are women at equal risk of being infected with HIV?**

Women are in fact more at risk of getting infected because of their social and economic vulnerability. Often their low social status and lack (or low level) of empowerment within the family further heighten their vulnerability to infection. In countries severely affected by HIV/AIDS, women are becoming increasingly more prone to infection. The number of AIDS cases among women in Thailand doubled between 1995 and 2003. Women in the South-East Asia Region who are engaged in sex work and those who are extremely poor are at increased risk of getting infected. There are two million women in sex work in India alone, and about 5000 to 10000 women are trafficked into India for sex work each year from other countries. Recently, HIV prevalence rate among Nepalese sex workers returning from Mumbai, India, was found to be 50%. It is, therefore, important that women, in particular young women, have access to information about HIV/AIDS to protect themselves.

 **Does the presence of other sexually transmitted infections (STIs) facilitate HIV transmission?**

Yes, many sexually transmitted infections (STIs) increase the risk of acquiring HIV infection as well as the chances of transmitting it to others. For example, the risk of infection increases by as much as 50 to 300 times per each sexual contact with a person who has a genital ulcer.

It is important to keep in mind that HIV transmission is more likely to occur in combination with other sexually transmitted infections for many reasons:

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| http://www.searo.who.int/Image/oth_bullet1.gif | HIV can easily pass through breaks and lacerations in the skin and mucous membranes caused by genital ulcers. |
| http://www.searo.who.int/Image/oth_bullet1.gif | HIV can attach to the white blood cells usually present in genital discharges caused by STIs. |
| http://www.searo.who.int/Image/oth_bullet1.gif | Large amounts of HIV are found in ulcers and genital fluid (semen, secretions from the cervix) of people with infections such as gonorrhoea, genital herpes, syphilis, and chancroid. |

 **Why are early detection and treatment of sexually transmitted infections (STIs) important?**

Early and effective treatment of STIs decreases the amount of HIV in genital secretions and reduces the risk of its spread to other sexual partners. Early treatment also reduces the risk of contracting HIV from infected partners. Furthermore, early diagnosis and treatment of STIs are important because they can prevent serious complications, such as infertility, ectopic pregnancy, genital cancer, blinding eye disease, and major nervous system infections in infants, that can occur as a result of an untreated STI.

 **How is HIV transmitted from a mother to her child?**

Transmission from an infected mother to her baby occurs in about 30% of cases, in the absence of a preventive treatment, during pregnancy, delivery and breastfeeding.

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| http://www.searo.who.int/Image/oth_bullet1.gif | Pregnancy: Through the mother’s blood. The baby is more at risk if the mother has been recently infected or is at a later stage of AIDS. |  |
| http://www.searo.who.int/Image/oth_bullet1.gif | Delivery: At the time of birth when the baby is exposed to the infected mother’s blood. |
| http://www.searo.who.int/Image/oth_bullet1.gif | Breastfeeding: The virus has been found in breast milk in low concentrations and studies have shown that children of HIV-infected mothers can get HIV infection through breast milk. |
| Children can be both infected by HIV and affected by AIDS. Over 2.5 million children worldwide are now infected with HIV. If HIV continues to spread across the world, there will be a greater increase in deaths among infants and children. It is also estimated that by the year 2010, 25 million children will be orphans because of AIDS. |

 **How can people prevent themselves from being infected?**

A person can avoid HIV infection by abstaining from sex, by having a mutually faithful monogamous sexual relationship with an uninfected partner or by practising safer sex. Safer sex involves the correct use of a condom during each sexual encounter; it also includes non-penetrative sex.

Both men and women share the responsibility for avoiding behaviour that might lead to HIV infection. They also share the right to refuse sex and assume responsibility for ensuring safe sex. In many societies, however, men have much more control than women do over when, with whom and how they have sex. In such cases, men need to assume greater responsibility for their actions.

Babies born to HIV-infected mothers can be protected against HIV infection if the mother receives antiretroviral drugs during pregnancy and at delivery. While avoiding breastfeeding seems logical when a mother is HIV-infected, the benefits of breastfeeding for the baby cannot be ignored. Exclusive breastfeeding, usually recommended during the first months of life, should be discontinued as soon as it is feasible. Replacement feeding is recommended only where it is acceptable, available, feasible, affordable, sustainable and safe.

**Is there a vaccine for HIV/AIDS?**

While there is no effective vaccine to prevent HIV/AIDS yet, many scientists agree that an AIDS vaccine is possible. Vaccines are used either to protect humans from disease or infection. Most scientific efforts focus on developing an AIDS preventive vaccine for people who are not infected with HIV. The vaccine would prepare the immune system to respond in case of an exposure to the virus.

 In the past few years, AIDS vaccine research has gathered momentum and today it has become a global effort. Clinical trials of different vaccines are continuing as patients, health care workers, scientists, institutions and governments eagerly wait for an AIDS vaccine. In the South-East Asia Region, candidate vaccines are presently undergoing clinical trials in India and Thailand.

**Is there a cure for HIV/AIDS?**

There is no cure for HIV/ AIDS. Since AIDS is a collection of “opportunistic” infections, there are medicines that can prevent and control these infections in persons affected by HIV/AIDS. While opportunistic infections would be either harmless or at least easily managed in healthy people, they can kill people with damaged and impaired immune systems, as for those with HIV/AIDS. The prevention and treatment of opportunistic infections have a beneficial impact on the progression of HIV infection.

With the advent of antiretroviral drugs today, people living with HIV are receiving treatment that can slow the pace at which HIV multiplies in the body. Antiretroviral drugs, along with prevention and treatment of opportunistic infections, have helped make HIV/AIDS a manageable chronic disease. However, taking antiretroviral means following a rigid schedule: they must be taken daily for the rest of the life. If a patient misses even 1 dose in a regimen of 50, the virus can become resistant to the medicines and the drugs lose their effect. A strict adherence to regimen and proper care and treatment has been shown to prolong survival and improve the quality of life of people living with HIV/AIDS.

Antiretroviral therapy is only effective if a combination of three or four antiretroviral drugs is used. Single drugs are used only for the prevention of mother-to-child transmission.

 **Why is HIV testing and counselling important?**

More than 90% of people infected with HIV do not know their HIV status. Voluntary testing and counseling have proved to be an effective public health strategy as they result in reduced risk behaviours and increased condom use. Testing and counselling serve as entry points to HIV/AIDS care and support.

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| **UNAIDS/WHO POLICY STATEMENT ON HIV TESTING, June 2004**UNAIDS/WHO recommends

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| http://www.searo.who.int/Image/oth_bullet1.gif | *Voluntary counselling and testing* to learn HIV status as a critical part of HIV prevention. |
| http://www.searo.who.int/Image/oth_bullet1.gif | *Diagnostic HIV testing*, for a person who shows signs or symptoms consistent with HIV-related disease. |
| http://www.searo.who.int/Image/oth_bullet1.gif | *Routine HIV testing* by health care providers for all patients who are on antiretroviral treatment, in prevention of mother-to-child transmission programmes, or community based settings, such as injecting drug use treatment services, hospital emergencies. |
| http://www.searo.who.int/Image/oth_bullet1.gif | *Mandatory screening* for HIV and other blood borne viruses of all blood that would be used for transfusion or for manufacture of blood products. Mandatory screening of donors is required prior to all procedures involving transfer of bodily fluids or body parts, such as artificial insemination, corneal grafts and organ transplant. |

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**Why is counselling important for treatment adherence?**

Counselling is important for effective antiretroviral treatment, as it is critical that all prescribed medicines are taken regularly and at the same time of the day. Some drugs require special instructions, as they are to be taken before or after a meal and with a certain amount of fluid. The counsellor plays an important role in assessing the patient’s readiness for antiretroviral treatment, treatment literacy and adherence. All antiretroviral medicines have side effects. The counsellor can refer a patient to a physician with antiretroviral treatment experience to determine if a treatment should continue or be interrupted.

 **What is post-exposure prophylaxis for HIV?**

Prophylaxis is the treatment to prevent the onset of a particular disease or the recurrence of symptoms in an existing infection. Post-exposure prophylaxis is a short-term antiretroviral treatment to reduce the likelihood of HIV infection after potential exposure, either occupationally (as in health care settings or workplaces) or through sexual intercourse. The medications used depend on the exposure to HIV, and should be taken ideally within 2-24 hours and no later than 48-72 hours following the possible HIV exposure.

 **How many antiretroviral drugs are prequalified by WHO, and how many (and which ones) are available as generic drugs?**

As of 29 September 2005, the number of antiretroviral drugs on the WHO list of prequalified HIV/AIDS medicines stands at 68. Out of those, 34 are from generic manufacturers and 34 from brand name suppliers.

Antiretroviral products on the list that are exclusively available from originator companies are: abacavir, amprenavir, didanosine, nelfinavir, ritonavir and saquinavir, as well as the following combination products: lamivudine+zidovudine+abacavir and ritonavir+lopinavir. Prequalified antiretroviral drugs that are available from both generic and originator companies are: lamivudine, nevirapine, stavudine and zidovudine, as well as the combination of lamivudine+zidovudine. Meanwhile, the following combination products are exclusively available form generic producers: lamivudine+stavudine and lamivudine+stavudine+nevirapine.

Note: The list of prequalified HIV/AIDS medicines is regularly updated.  Please refer to the WHO website (<http://mednet3.who.int/prequal/documents/prodmanuf/hiv_suppliers.pdf>) for the latest version.

 **Who are the manufacturers of antiretroviral drugs in South-East Asia?**

It is difficult to know the number of manufacturers of HIV/AIDS medicines, since manufacturers do not have to report to WHO which medicines they are producing. However, as of 29 September 2005, five manufacturers in India have products included on the WHO list of prequalified HIV/AIDS medicines. These are: Aurobindo, Cipla, Hetero, Ranbaxy and Strides.

Please note that WHO prequalification is a product and production-site specific listing. In other words, while one product of a certain company may be prequalified, another product of the same company may not. It is advisable to always check the details of products when visiting the WHO website.

 **What is the HIV/AIDS prevention, care, support and treatment continuum?**

The HIV/AIDS prevention, care, support and treatment continuum regards HIV/AIDS as a chronic disease requiring treatment throughout life. Experiences from several countries have demonstrated that a continuum of prevention, care and treatment from hospital to home is the optimum for those affected. WHO South-East Asia Regional Office (SEARO) is promoting a patient-centred approach through a continuum of prevention, care, support and treatment by decentralization of services, which includes an adequate referral and collaborative care network from hospital to the community and home.

Management of opportunistic infections and antiretroviral treatment cannot be seen in isolation. HIV-infected patients, including those with active tuberculosis, should benefit from additional care needs, including clinical and nursing care in particular for the prevention and treatment of opportunistic infections, ongoing psychosocial support and counselling, financial and employment support, assistance for housing and living in enabling environment, legal assistance, and care and support for orphans as promoted by WHO SEARO.

 **What is a patient-centred approach to HIV/AIDS care?**

The public health approach to HIV/AIDS chronic care is patient-centric. As with other chronic illnesses, such as diabetes and hypertension, patients manage their care. Patients need to be educated about the disease so that they can make informed decisions on adherence and management, and be prepared to deal with the challenges of living with a chronic disease. They need to know when and how to interact with the health services available in the community. For example, a person on treatment who may experience diarrhoea should know when to rush to the health facility for medical attention, that is if blood is present or there is associated fever, or when to relieve the symptom with a locally available remedy.

 **What is treatment preparedness?**

Treatment preparedness stems from the concept of a patient-centric approach and applies to building up of adequate resources and actions at the level of the individual as well as the community. It involves preparation of the community to the disease by effective messaging using mass media, effective use of community resources, ensuring inputs of people living with HIV/AIDS. At the level of the individual, it involves building of skills to enable people on treatment and their supporters to contribute to the patient-centric approach to prevention, care and treatment and to support their peers. Treatment preparedness provides a platform for enhancing the ability of civil society to deal with the disease.

 **What role does the community/civil society play in HIV/AIDS control?**

Community participation is required for every aspect of HIV prevention and control, and includes advocacy, delivery of services and support to patients. A strong community leadership or an effective civil society involvement in policy/decision-making will lead to better and more sustainable health outcomes. This is because HIV/AIDS is not only a medical issue. People with HIV/AIDS face other psycho-social challenges, such as stigma and discrimination, which are best addressed through strong community support. In partnership with the health sector, civil society groups (including faith-based groups) can offer a wide range of support services, education, home-based care, training in income-generating activities and treatment adherence counselling.

 **What role do nongovernmental organizations (NGOs) play in HIV/AIDS control?**

The close interpersonal interaction that nongovernmental organizations (NGOs) have with people in the communities they work in is extremely useful for implementing the behavioural interventions necessary for HIV/AIDS prevention and care. NGOs are also not under the same political constraints as government programmes are. They, therefore, have greater flexibility and the capacity to accommodate changing programmes and public needs, and can innovate and implement new initiatives more easily.

 **What role do people living with HIV/AIDS play in alleviating the impact of HIV/AIDS?**

People living with HIV/AIDS can promote a positive image of people affected by the disease in order to eliminate prejudice, isolation, stigmatization and discrimination associated with AIDS. In addition, the community of people living with HIV/AIDS should be supported for building capacity to contribute effectively as equal partners to the response. They can help with peer counselling, education and treatment. They can be meaningfully included in all national and international HIV/AIDS policy-making bodies. There is a need to inform, mobilize, and sensitize communities to produce actions that can strengthen the lives of persons living with HIV/AIDS, in addition to providing unrestricted protection to their human rights.

 **What are the rules of HIV/AIDS at the workplace?**

HIV/AIDS is a workplace issue because it affects labour and productivity due of loss of skills, costs of hiring and retraining, health and death benefits, and the potential of workplace conflict.

 **If a worker has HIV infection, should he or she be allowed to continue work?**

Workers with HIV infection who are still healthy and those with AIDS or AIDS-related illnesses should be treated in the same way as any other worker who is ill. It is not a reason in itself for termination of employment.

 **Is it safe to work in the same office/place with someone infected with HIV?**

Yes. Most workers face no risk of getting the virus while doing their work. If they have the virus themselves, they are not a risk to others during the course of their work. This is because the virus is mainly transmitted through the transfer of blood or sexual fluids. Since contact with blood or sexual fluids is not part of most people’s work, most workers are safe.

 **What about working in close contact with an infected person?**

There are no risks involved. You may share the same telephone with other people in your office or work side by side in a crowded factory with other HIV-infected persons. You may even share the same cup of tea, without any risk of infection. You cannot be infected by dirt and sweat of an infected person.

 **How can HIV transmission be prevented in health-care settings?**

Risk of HIV transmission in the health-care setting occurs in the following ways:

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| http://www.searo.who.int/Image/oth_bullet1.gif | *To Patients* - Through contaminated instruments that are re-used without adequate disinfection and sterilization; transfusion of HIV-infected blood, skin grafts, organ transplants; HIV-infected donated semen; and contact with blood or other body fluids from an HIV-infected health care worker. |
| http://www.searo.who.int/Image/oth_bullet1.gif | *To health care workers* - By piercing the skin with a needle or any other sharp instrument which has been contaminated with blood or other body fluids from an HIV infected person; exposure of broken skin, open cuts or wounds to blood or other body fluids from an HIV infected person; and splashes from infected blood or body fluids onto the mucous membranes (mouth or eyes). |

The risk of HIV transmission from infected health care personnel, such as surgeons, is considered low. As a general practice, limiting the practice of HIV-infected care professional is not necessary unless there is evidence of transmitting infection through inability to meet basic infection control standards, or unless they are functionally unable to care for patients.

 Health care workers in medical or dental settings where HIV may be present should practise "universal standard precautions" for protecting themselves and patients from HIV and all other blood-borne infections. Universal standard precautions require the consistent use of sterile techniques and garments, whenever and wherever blood or body fluids may be present. Creating a safe work environment by practising universal standard precautions in care of patients at all times can reduce the risk of transmission of blood-borne infections.